



ALLFORD
HALL
MONAGHAN
MORRIS

FUTURE OFFICE

PHILIP TURNER
29TH JANUARY 2014



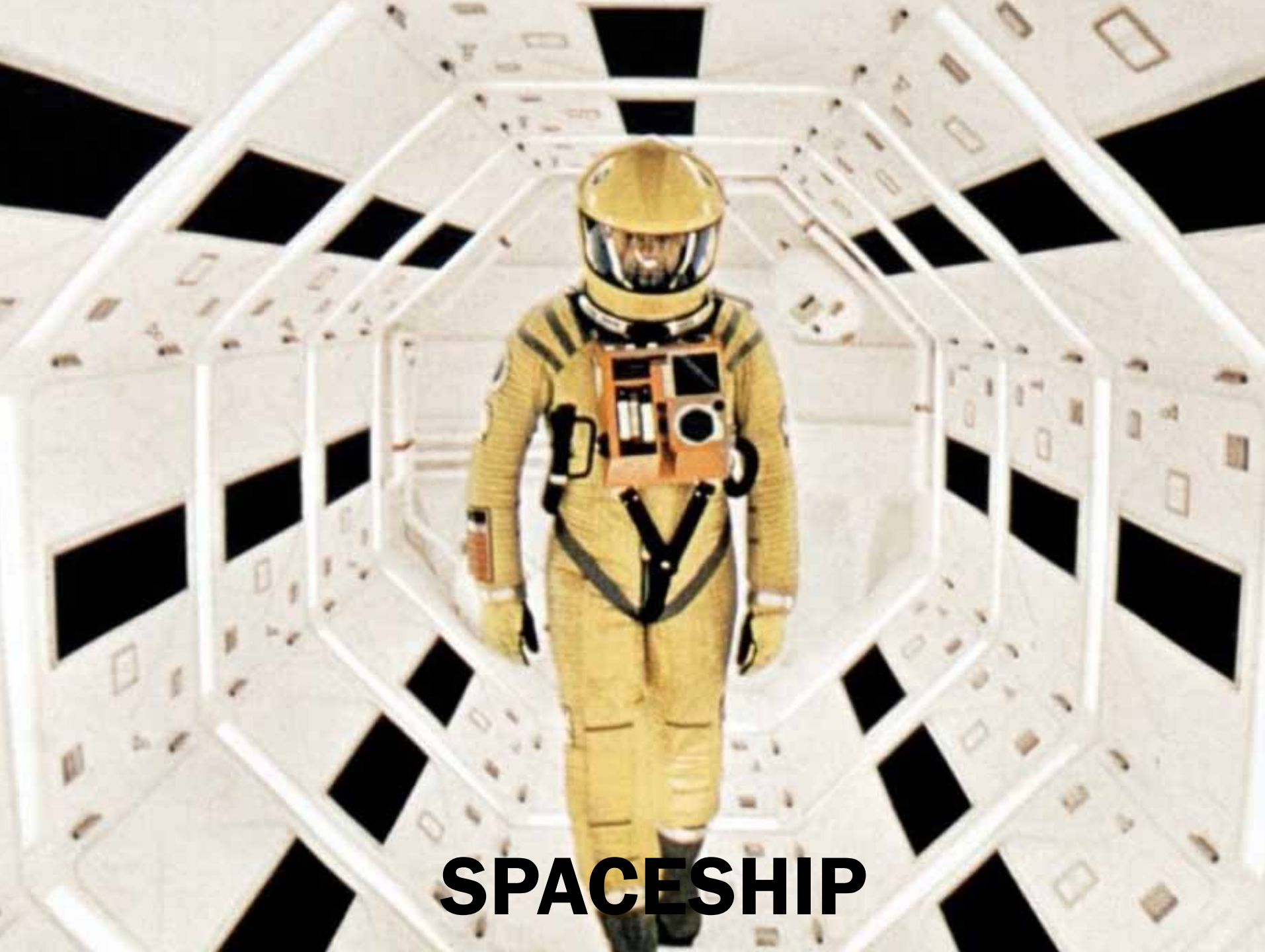
CATALOGUE



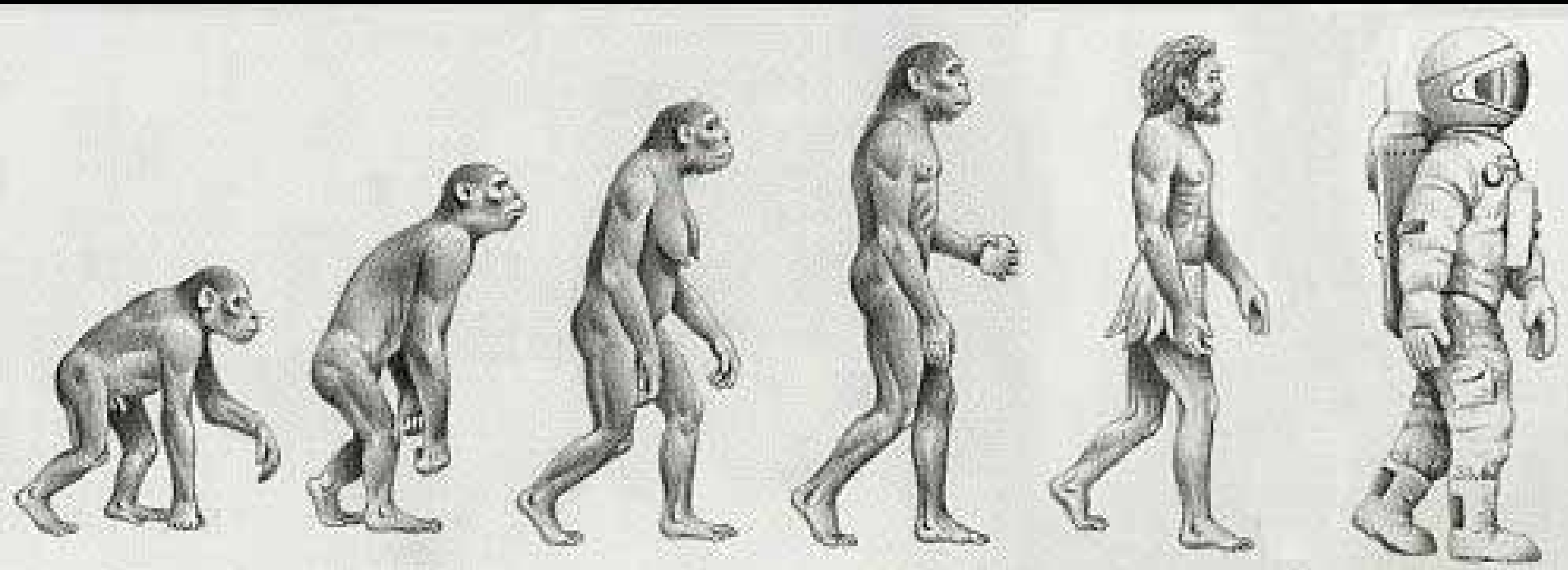
**FUTURE OFFICE :
CAVE *or* SPACESHIP ?**



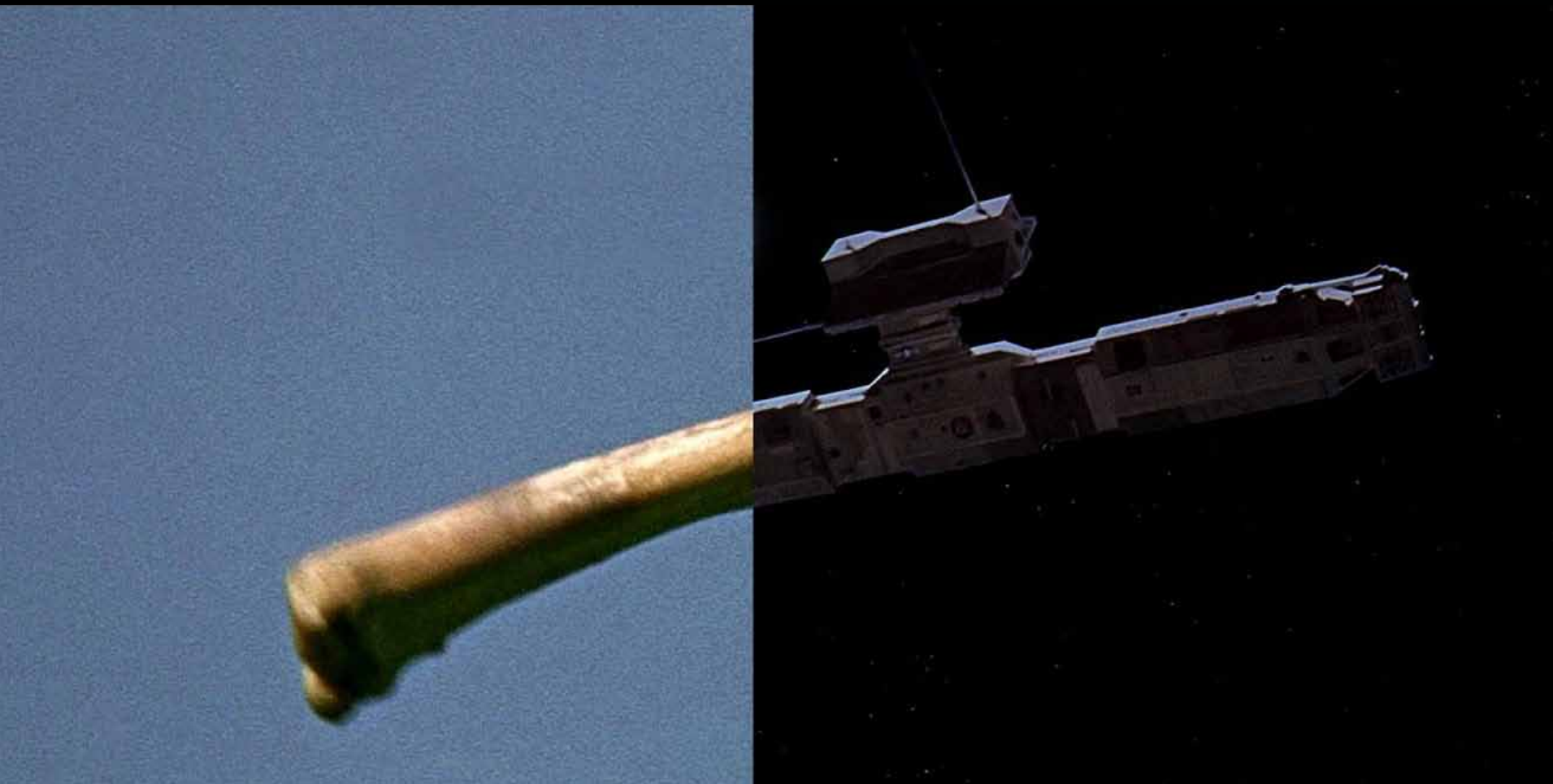
CAVE



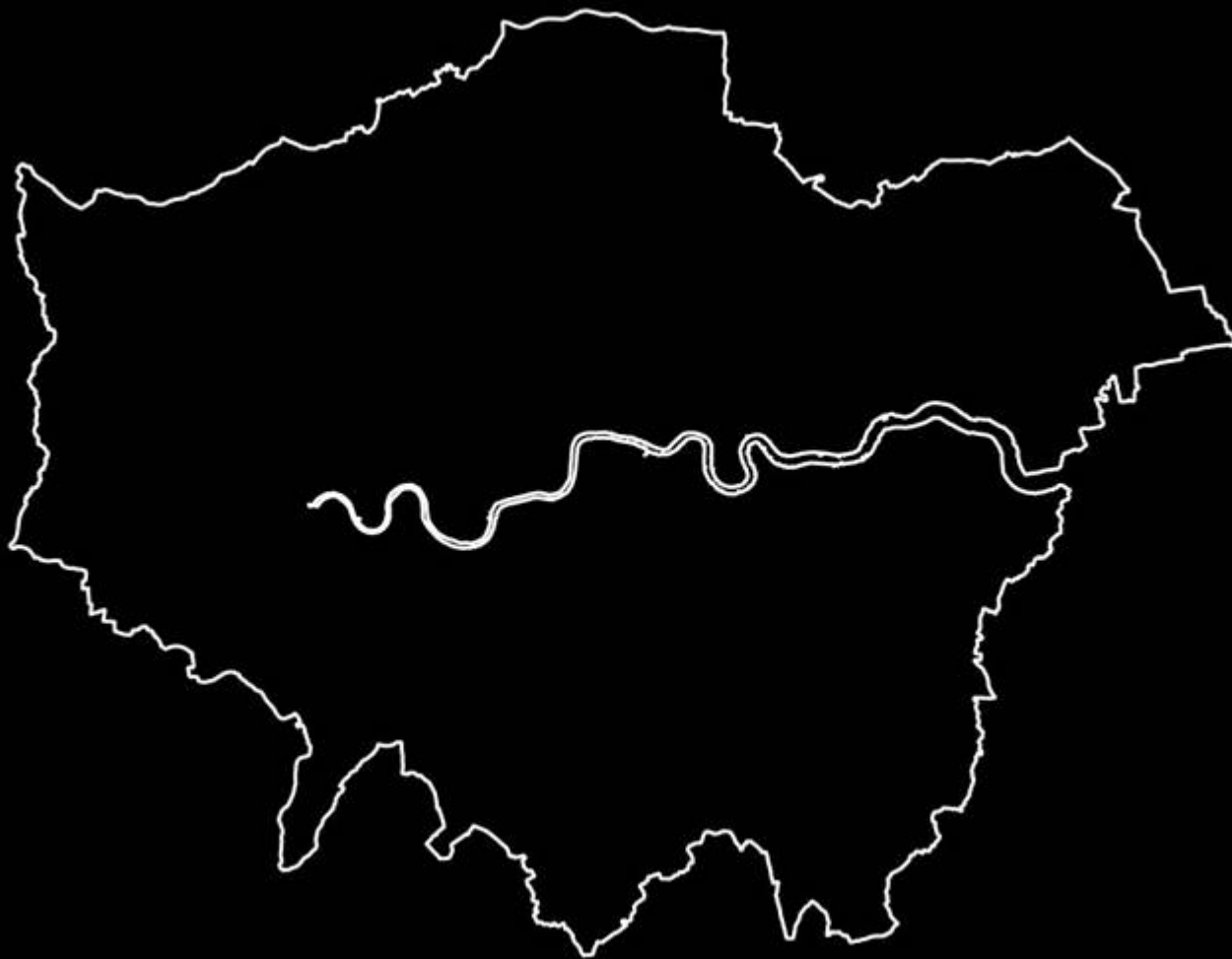
SPACESHIP



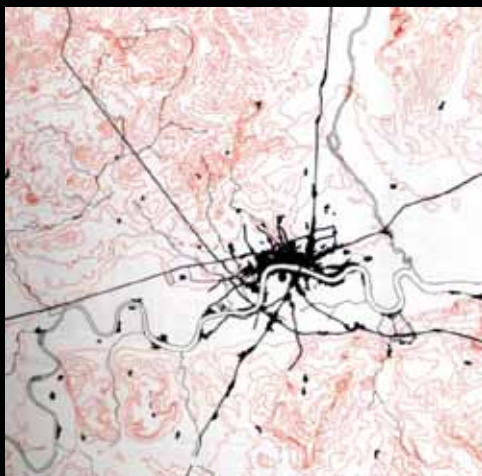
EVOLUTION ?



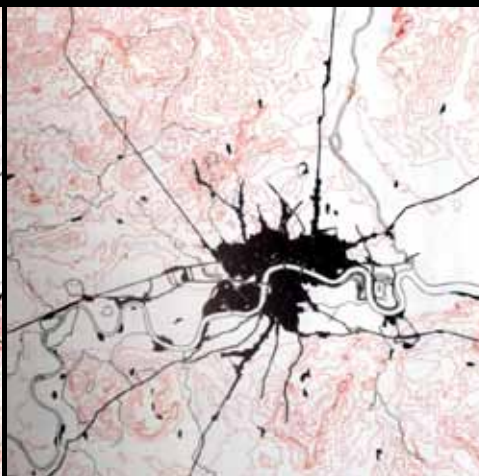
or PARALLEL MODELS ?



CONTEXT



C.17



C.18

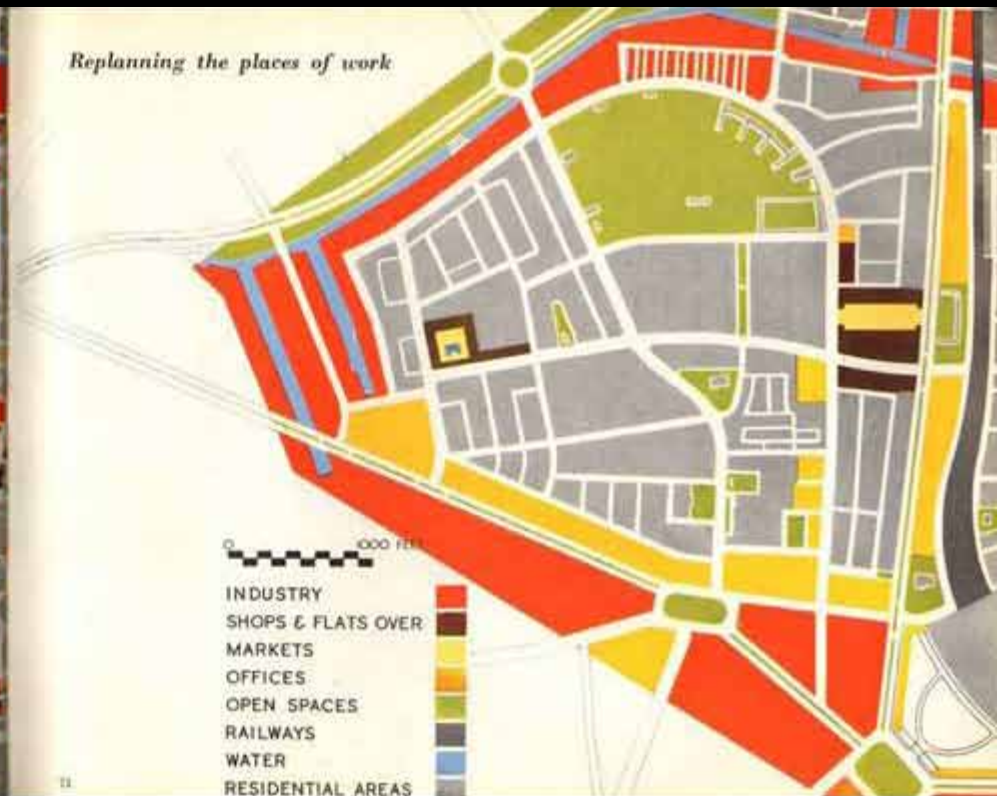
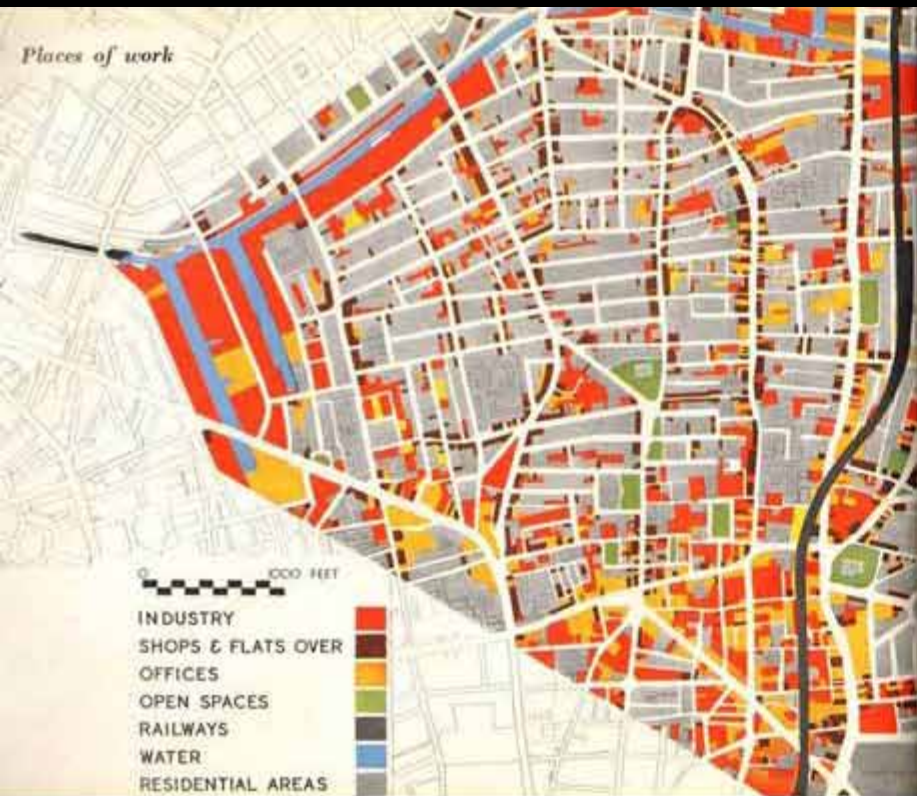


C.19

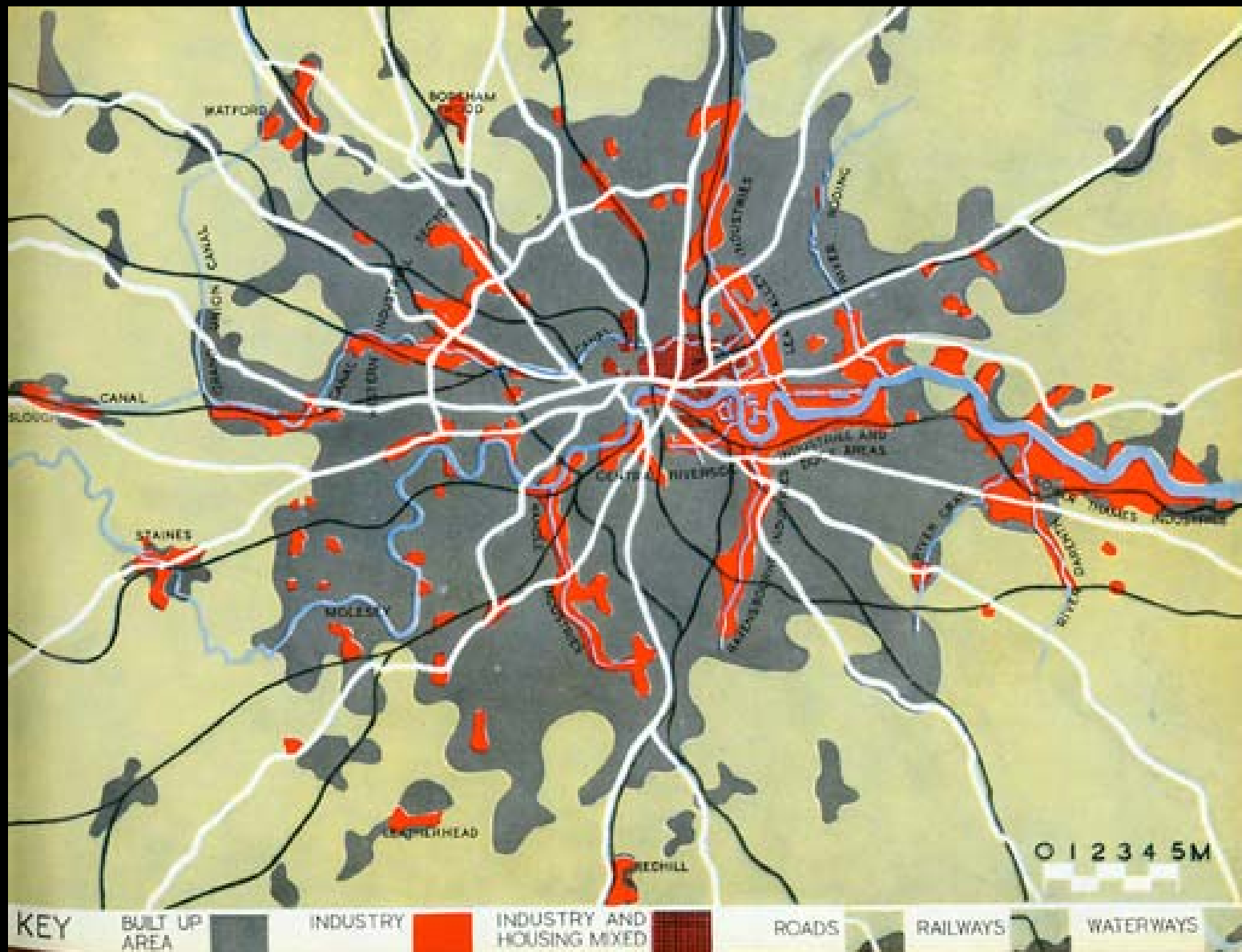


C.20

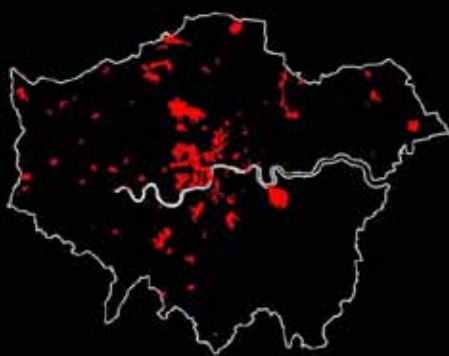
EVOLVING CITY



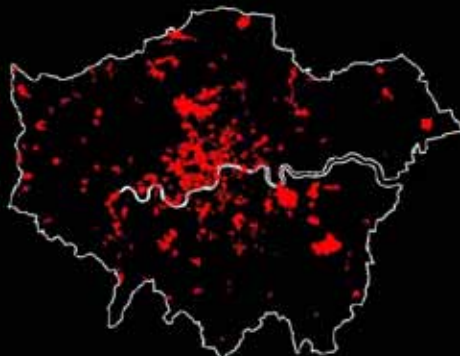
UNPLANNED CITY ?



REGULATED CITY



C.17



C.18



C.19

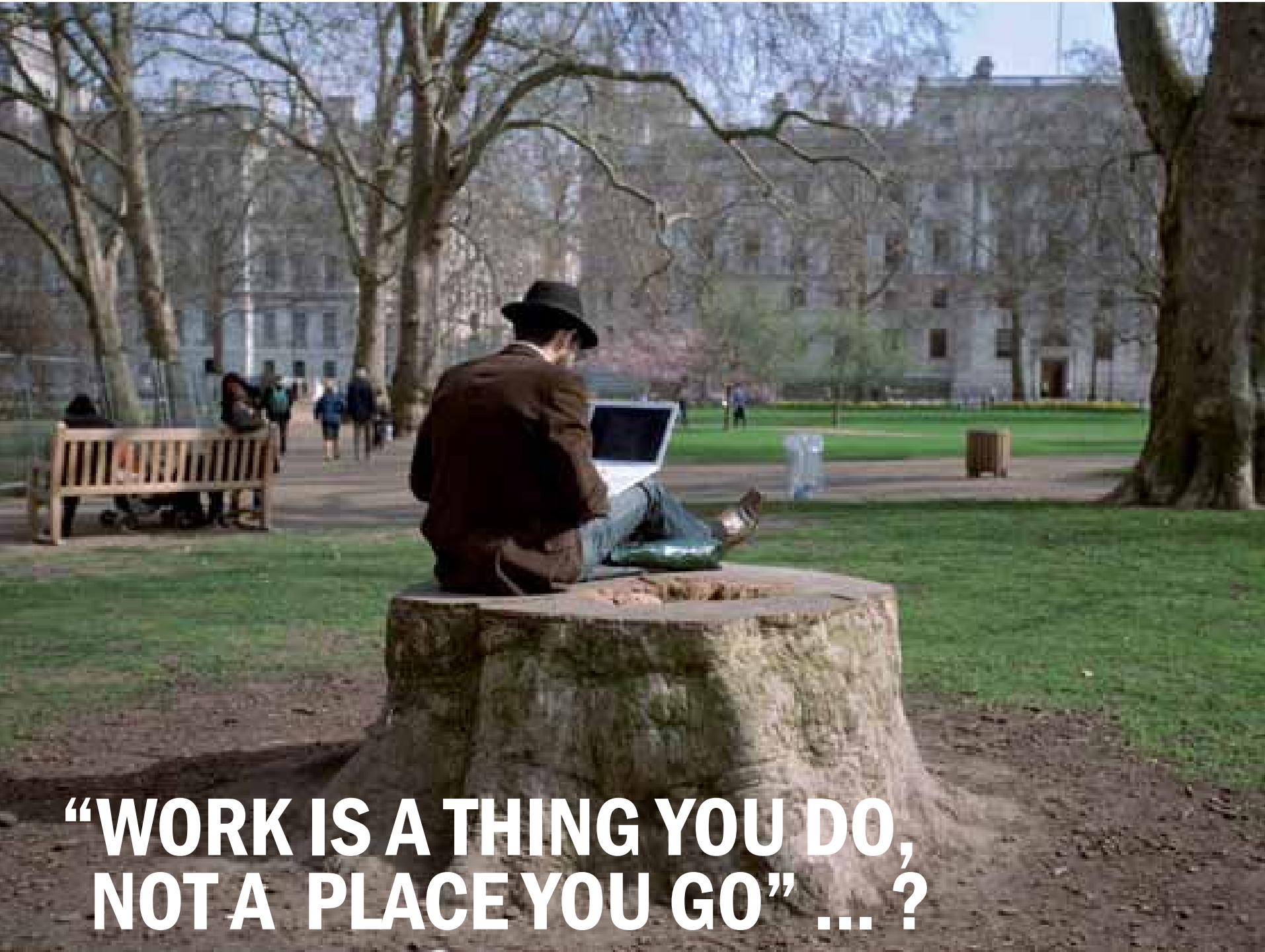


C.20

REGULATED CITY



DE-REGULATED CITY



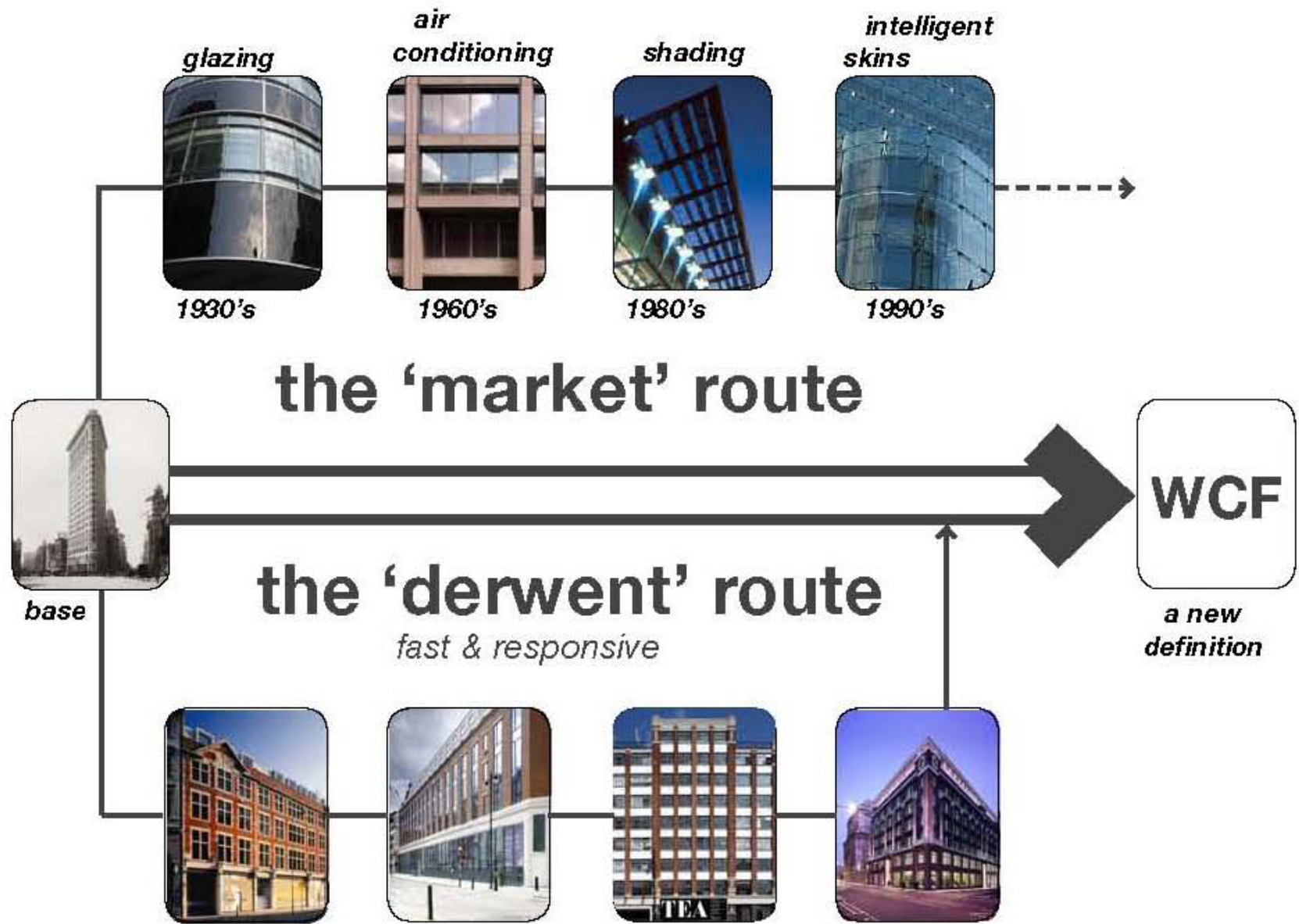
**“WORK IS A THING YOU DO,
NOT A PLACE YOU GO” ... ?**

THE JOURNEY OF AN IDEA
THE WHITE COLLAR FACTORY

**WHITE
COLLAR
FACTORY**

**WHITE
COLLAR
FACTORY**
CITY ROAD





PARALLEL MODELS

WORKING WITH DERWENT LONDON
MORELANDS '99



WORKING WITH DERWENT LONDON
HORSEFERRY HOUSE



WORKING WITH DERWENT LONDON JOHNSON BUILDING



WORKING WITH DERWENT LONDON
ANGEL BUILDING



WORKING WITH DERWENT LONDON TEA BUILDING







WAREHOUSE *to* **OFFICE**



WAREHOUSE *to* DINING



WAREHOUSE *to* **PLEASURE**

INDUSTRIAL INSPIRATION

WCF PRECEDENTS





5

**WHITE
COLLAR
FACTORY
PRINCIPLES**

THE PRINCIPLE OF THE WHITE COLLAR FACTORY IS TO OPTIMISE THE CLIMATE CONTROL BENEFITS OF THE BUILDING'S PASSIVE DESIGN (TALL CEILING, WELL INSULATED FAÇADE, EXPOSED MASS) TO REDUCE THE LEVEL OF MECHANICAL AIR CONDITIONING REQUIRED. THE BUILDING IS NATURALLY VENTILATED AT THE PERIMETER WITH RADIANT SLABS PROVIDING BACKGROUND COOLING AND HEATING.

1

TALL CEILINGS



Increased flexibility of use:
volume provides for future
market lead upgrades.



Increased natural daylight
penetration



Improved temperature
comfort levels



Efficient & even distribution
of artificial lighting



Beneficial +5% on
travel distances (smoke
reservoir); provides
for deeper floorplates



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2

SMART SERVICING



Minimal provision i.e. no excessive 'fit'



Maximum use of passive systems i.e. natural daylighting & ventilation



Radiant slab providing cooling & heating



On floor plant above w.c. area to maximise benefit of tall ceilings



Optional 'up-grader' add-ons by tenant



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On floor plate above w.c. area to maximise benefit of hot ceilings



Optional 'up-grader' add-ons by tenant

3

SIMPLE PASSIVE FAÇADE



Glazing where it counts i.e. above desk height



Shading where necessary i.e. to south/west & east elevations depending on context



Openable windows controlled by users



% of glazing varies to suit orientation i.e. more to the north, less to the south



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SMART SERVICING

- Minimal provision i.e. no excessive 'X'.
- Maximum use of passive systems i.e. natural daylighting & ventilation.
- Radiant slab providing cooling & heating.
- On floor plate above wet area to maximise benefit of tall ceilings.
- Optional 'up-grader' add-ons by tenant.

3

SIMPLE PASSIVE FACADE

- Glazing where it counts i.e. above desk height.
- Shading where necessary i.e. to south-west & west elevations depending on context.
- Operable windows controlled by users.
- % of glazing varies to suit orientation i.e. more to the north, less to the south.

4

FLEXIBLE FLOOR-PLATES

- Generous scale provides best opportunity for greatest market share.
- Potential for 2-way split tenancy per floor.
- Potential for optional voids between floors to connect tenancies.
- Compact central core provides good net to gross floor ratio and wait to floor ratio.



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5

THERMAL-MASS STRUCTURE

- Exposed concrete for thermal mass and night-time cooling.
- Exposed concrete minimises decorating. Exposed concrete a durable & pleasing contemporary aesthetic.
- Minimise carbon footprint through use of GG&S concrete etc.
- Use of concrete perimeter upstand (i.e. the 'spanrel zone') & 'junched' windows increases structural spans & eliminates perimeter columns.



FIVE PRINCIPLES

HIGH CEILINGS

High ceilings look and feel great; they allow for greater flexibility of fit-out, and improve comfort levels by enabling better ventilation and more daylight.

- 3.5m floor to ceiling height
- Excellent daylight penetration
- Exposed services – easy to maintain and adapt for a variety of uses

CONCRETE CORE COOLING

The innovative approach to environmental control exploits natural daylight and ventilation, while Concrete Core Cooling uses simple chilled water to transform the structure itself into a radiant cooling source.

- Radiant slab cooling
- Mechanical fresh air ventilation and extract to central core

WINDOWS THAT OPEN

Openable windows put people in charge of their environment. The common-sense façades minimise solar gain by ensuring that south-facing walls have a lower percentage of glazing than north-facing walls.

- Façades adapt to suit solar conditions i.e. small openings to the south, larger openings to the north
- A connection to the outside world

FLEXIBLE OCCUPATION

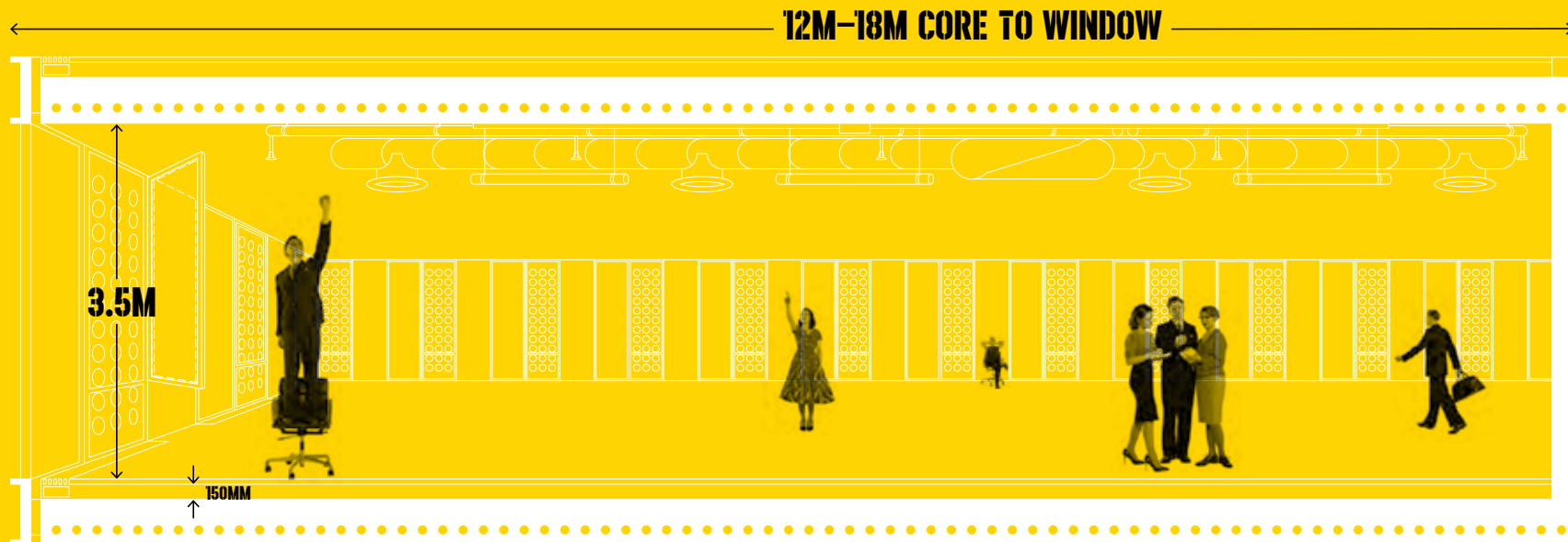
The well-designed floor-plates futureproof the building for occupiers' changing needs, allowing easy and quick sub-division of space and high density occupation.

- Generous scale provides maximum flexibility to suit a wide range of users
- Large floorplates
- Designed for high density (1 person per 8 sq m occupation)
- Raised floor for power and data

STAYS COOL STAYS WARM

Using exposed, fair-faced, concrete minimises our carbon footprint. Concrete thermal mass efficiently absorbs and releases heat to regulate the building's temperature naturally.

- Natural concrete soffit
- Perimeter blade columns integrated in the façade to de-clutter space and provide additional exposed thermal mass
- Concrete thermal mass is utilised





White Collar Factory at Old Street Yard has been carefully designed to meet a progressive energy efficiency and carbon reduction strategy.

**WHITE COLLAR FACTORY
PRODUCES:**

**25% LESS
CARBON* =
'162 TONNES
CO2 SAVING
EVERY YEAR**

**THAT'S '162 x '10 M
BEACH BALLS**

SUSTAINABILITY

*White Collar Factory achieves 25% improvement in carbon emissions over current Building Regulations

Source: Arup

**SAVINGS
EQUIVALENT TO:**

**RUNNING 32
AVERAGE HOMES
FOR A YEAR**



**650,000 MILES
IN A LONDON TAXI**
(THAT'S OVER 25 TIMES AROUND THE WORLD)

**1,800,000 MILES
TRAVEL BY
COMMUTER TRAIN**



Source: Arup



A NEW OFFICE TYPOLOGY

A SECTION OF THE CITY





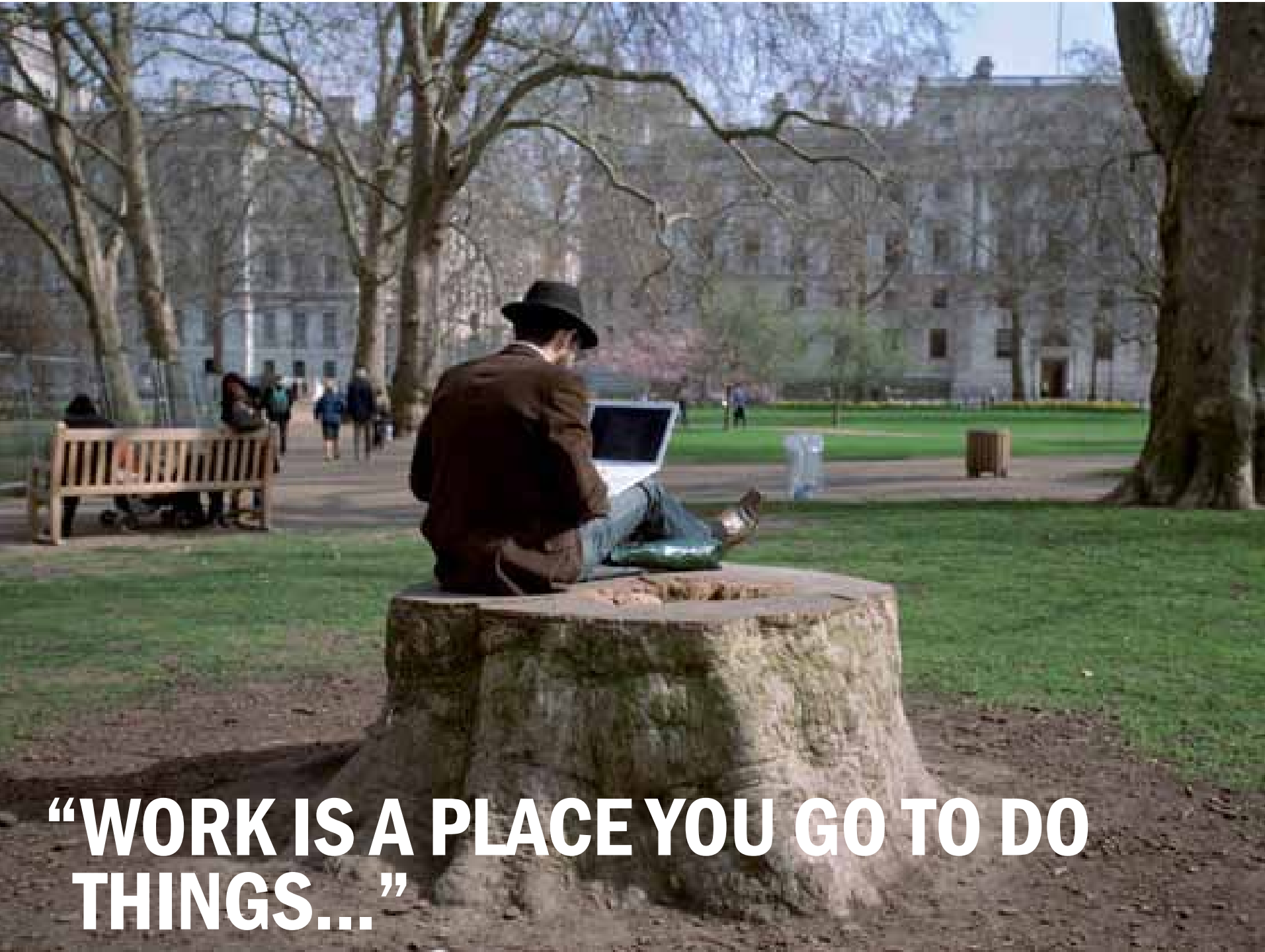












“WORK IS A PLACE YOU GO TO DO THINGS...”

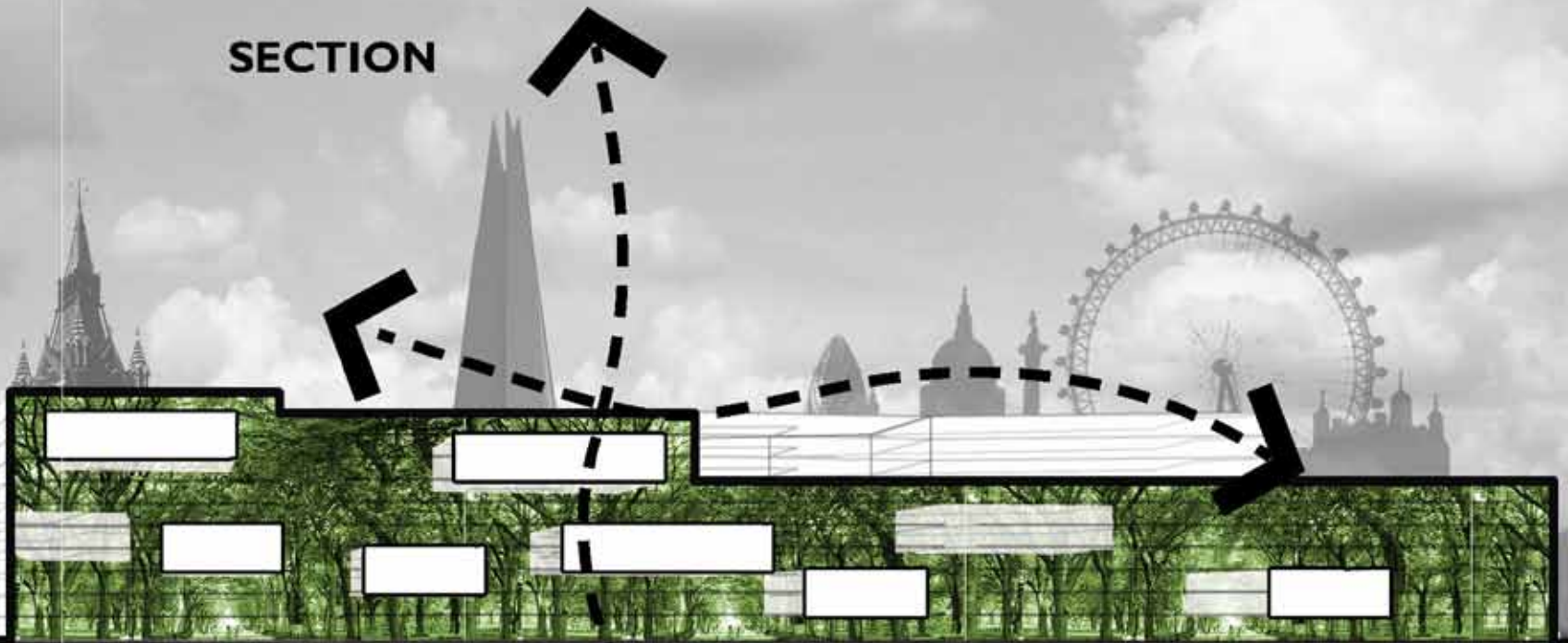


**“... A PLACE WHERE YOU CAN LIVE,
WORK AND PLAY”**

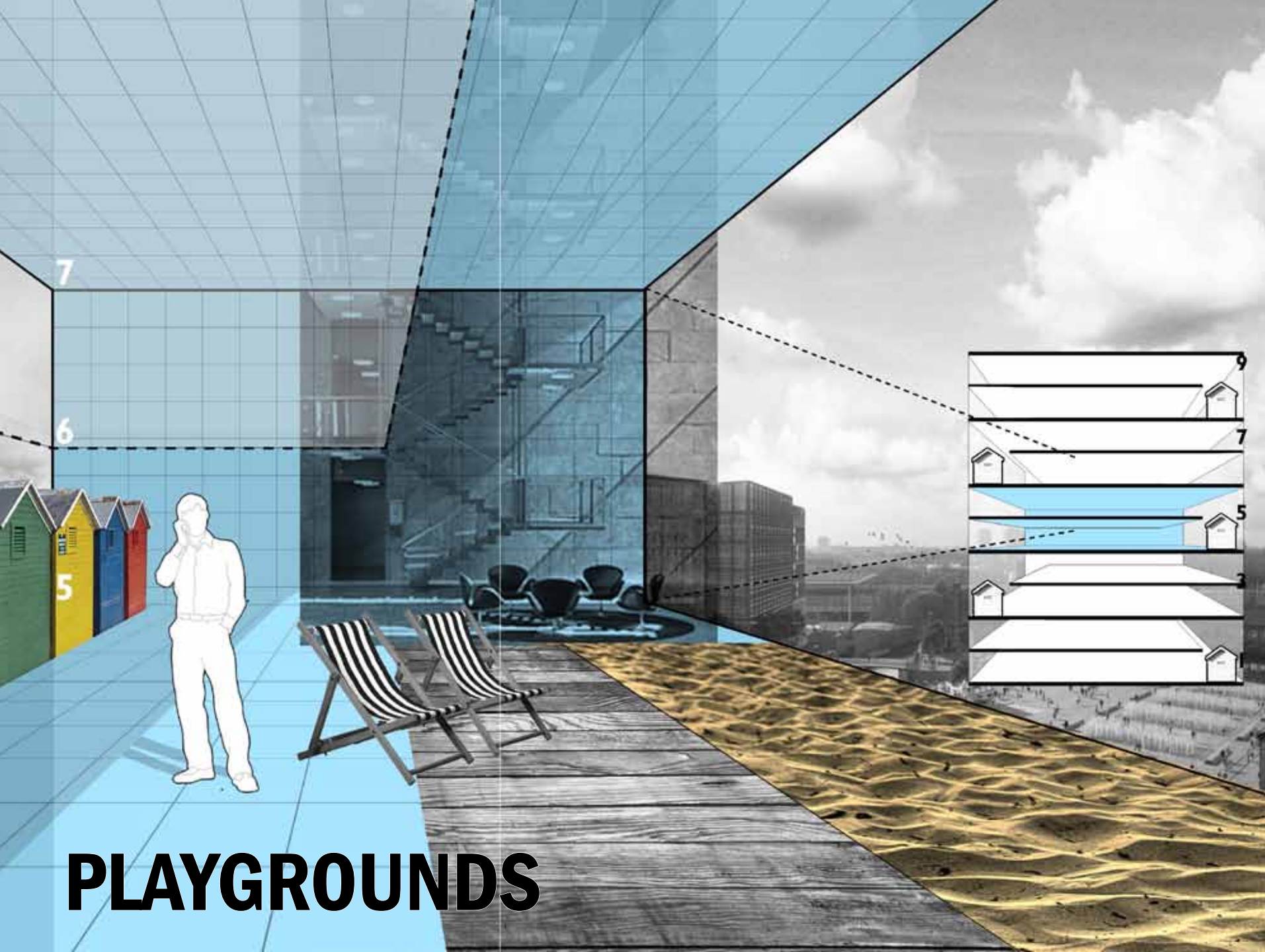


GOOGLE HQ

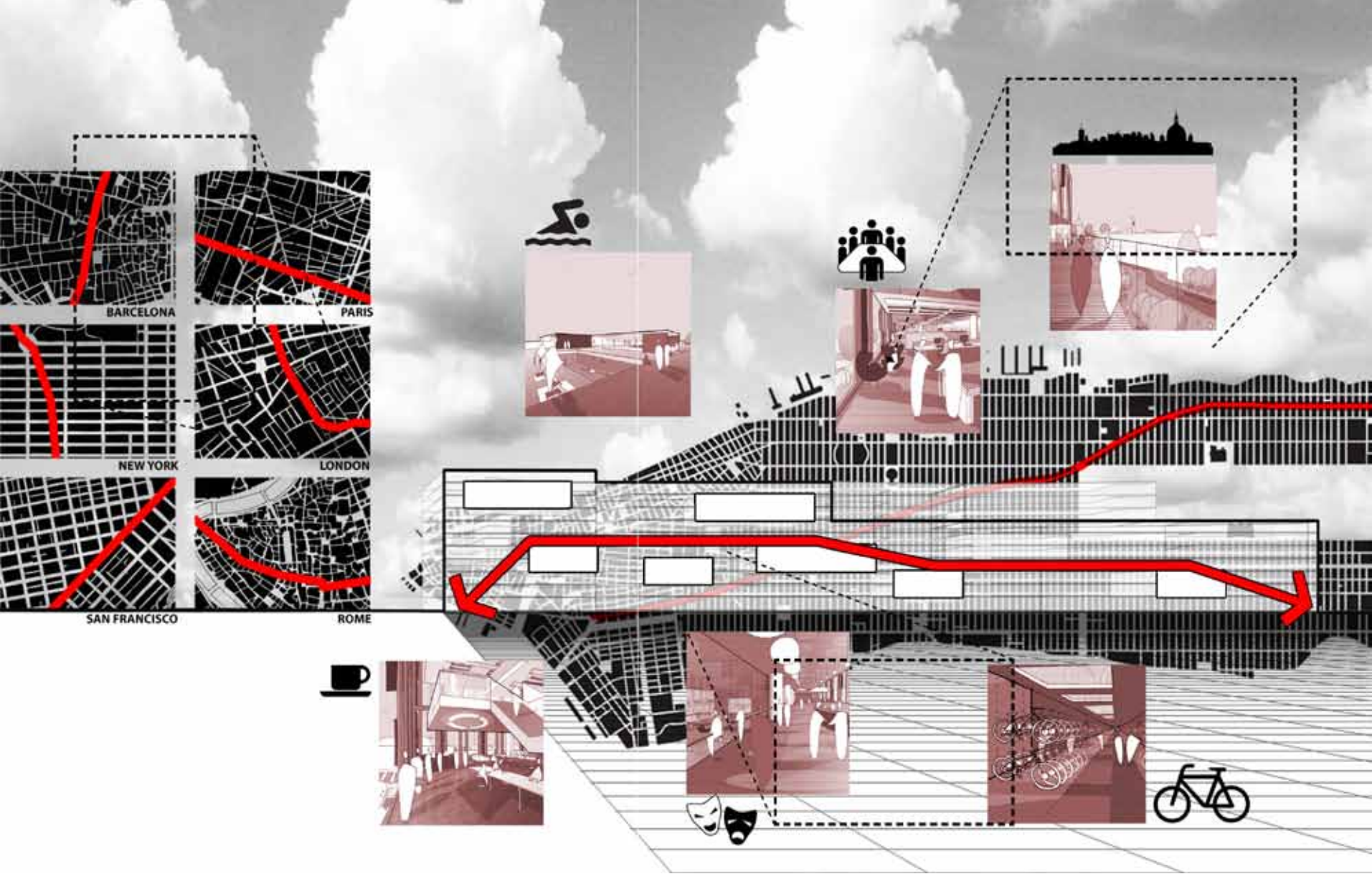
SECTION



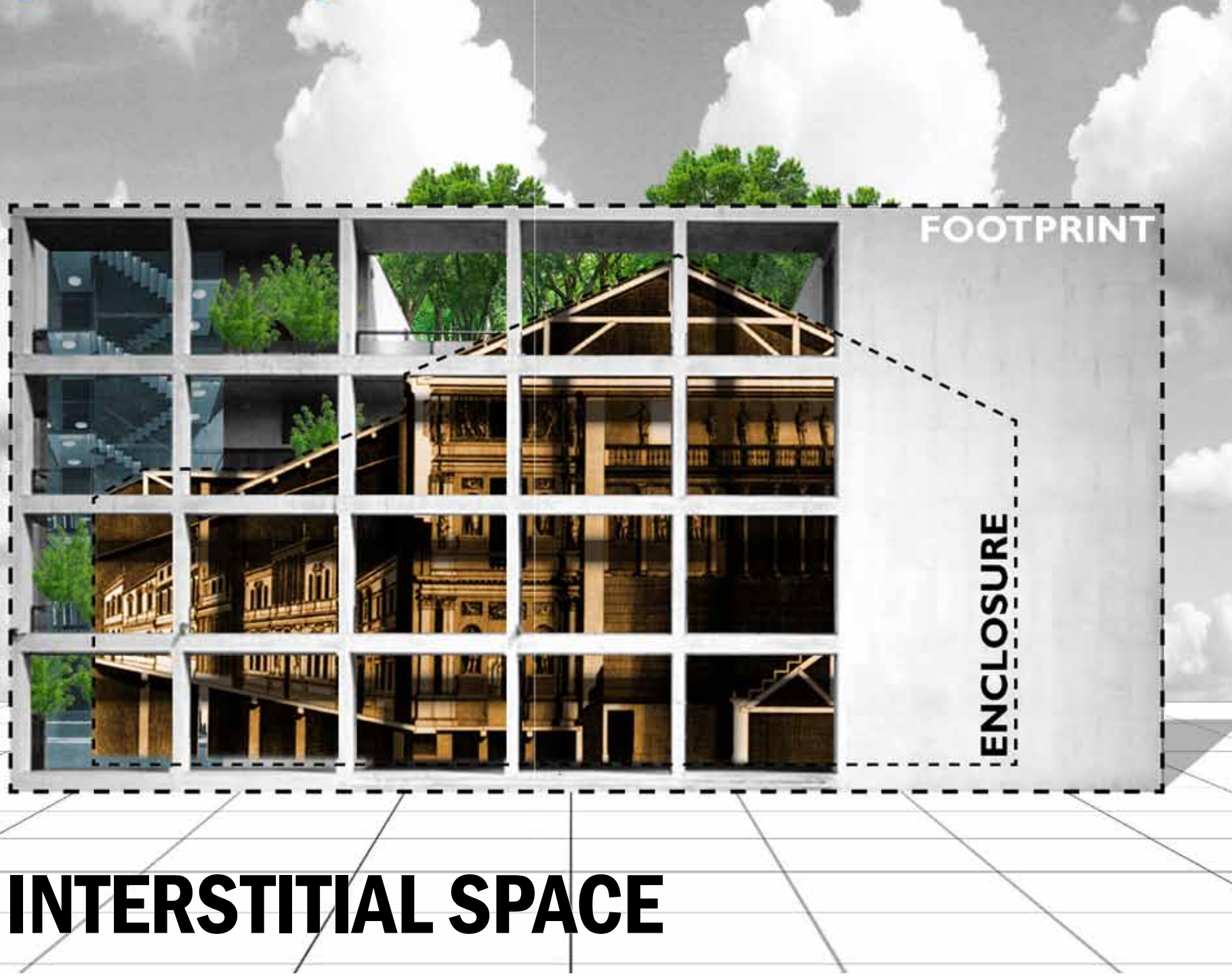
BUILDING AS A CAMPUS



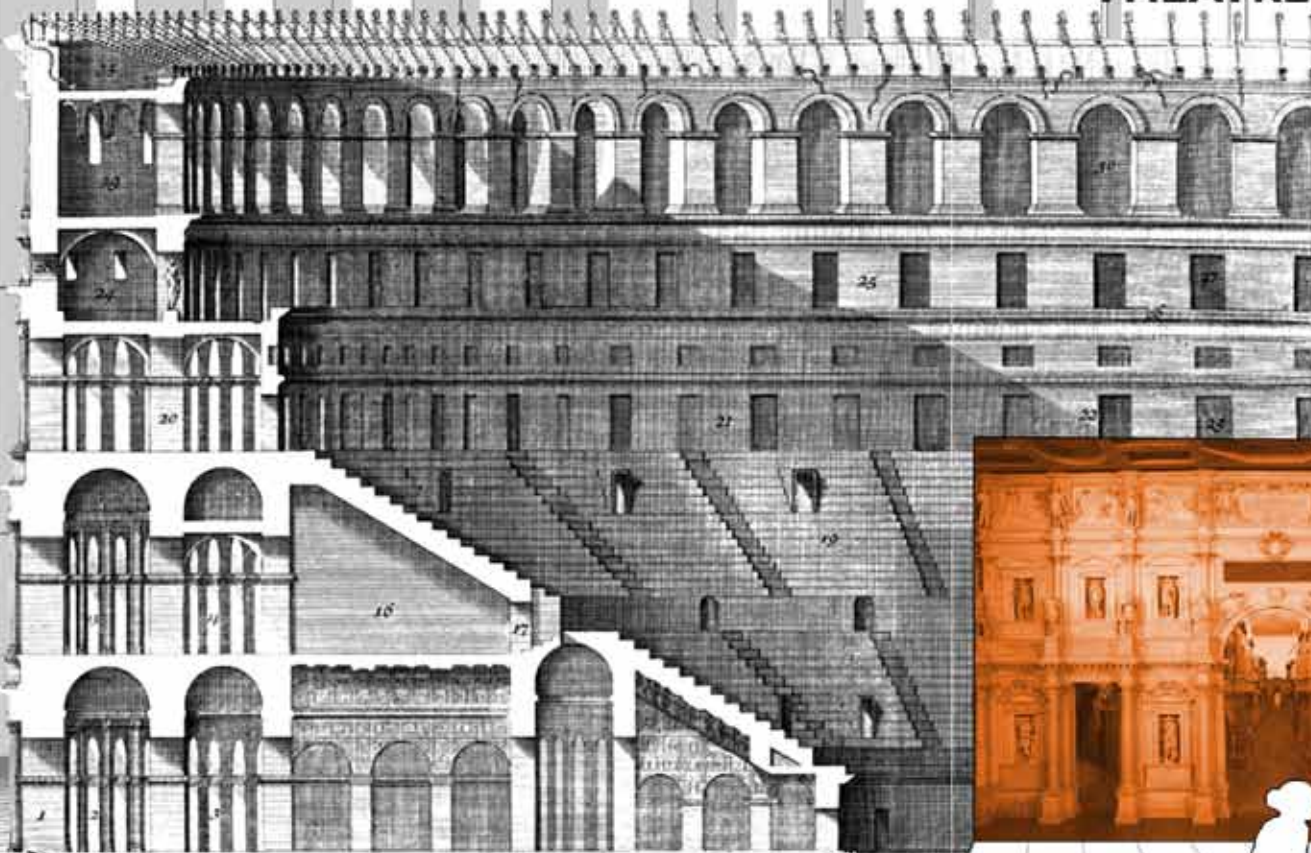
PLAYGROUNDS



PROMENADE



THEATRE



STAGE SET



PROPS

A LEAN BUILDING



STRUCTURE

CURTAIN WALL

COLONNADE

CONVERGENCE:
TWICE AS MUCH WITH HALF AS MUCH





JOHN ATANASOFF
CHARLES BABBAGE
JOHN BACKUS
ALAN TURING
GEORGE BOOLE

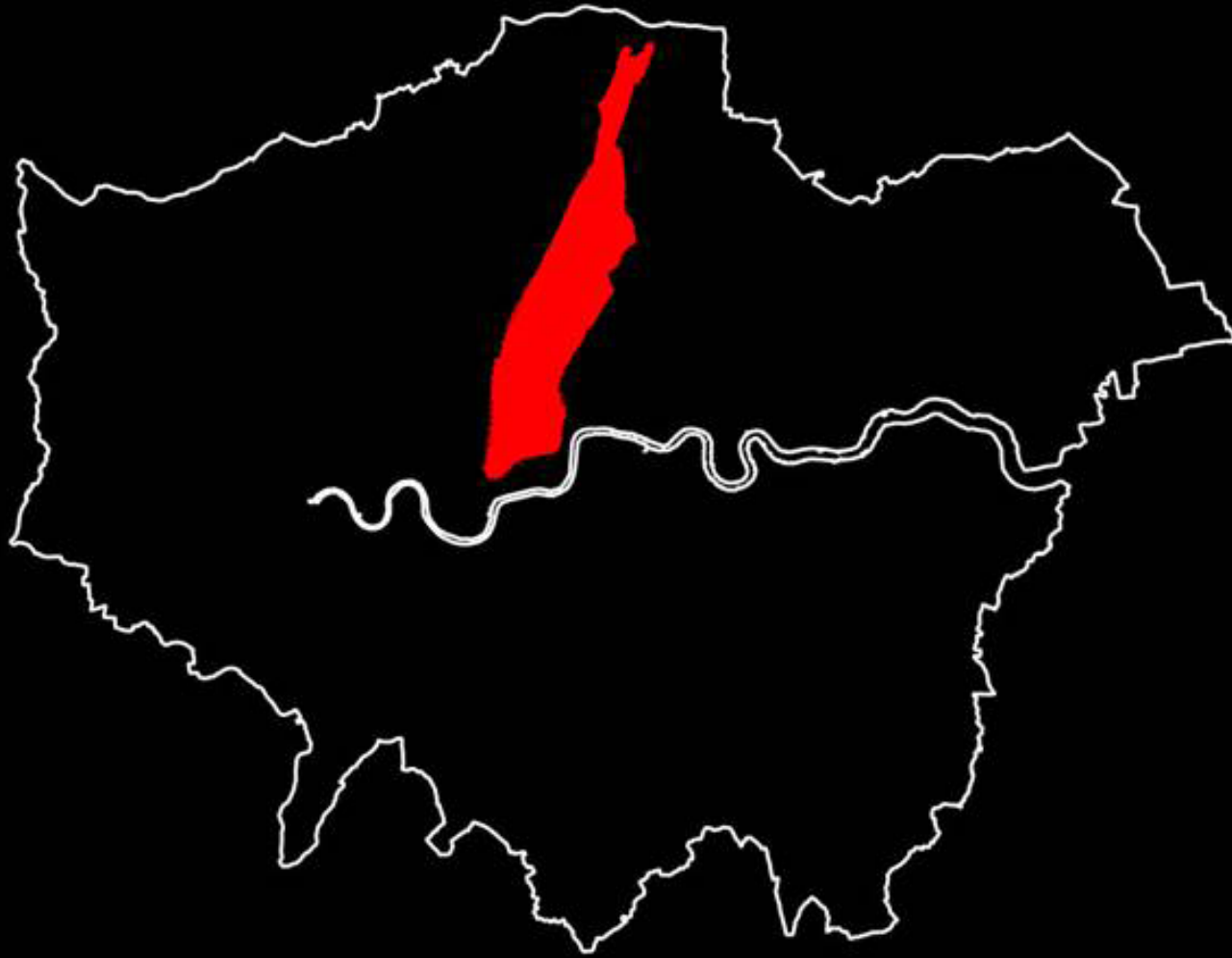
NIKOLAY BRUSENTSOV
JANHEVA RUSH
TIM BERNERS-LEE
AND BOB KAHN
ALONZO CHURCH
R. LARR
M. CLARKE
EDGAR
JAMES COOLEY
E. DIKSTRA
J. PRESSER COURT
S. ENGBERG
TOMMY FLOWERS
J. MOORE
K. I. MOORE
BY ARROW



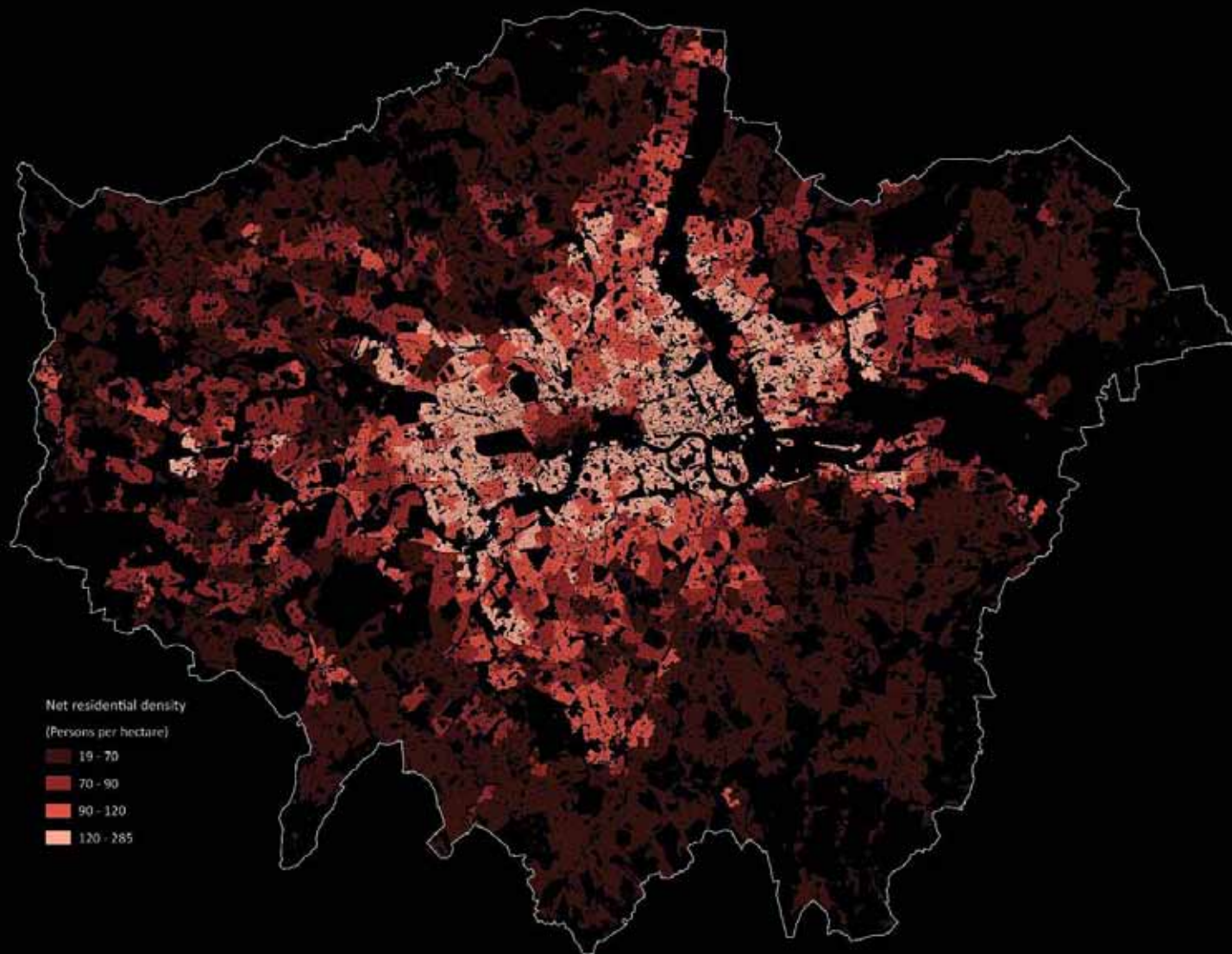




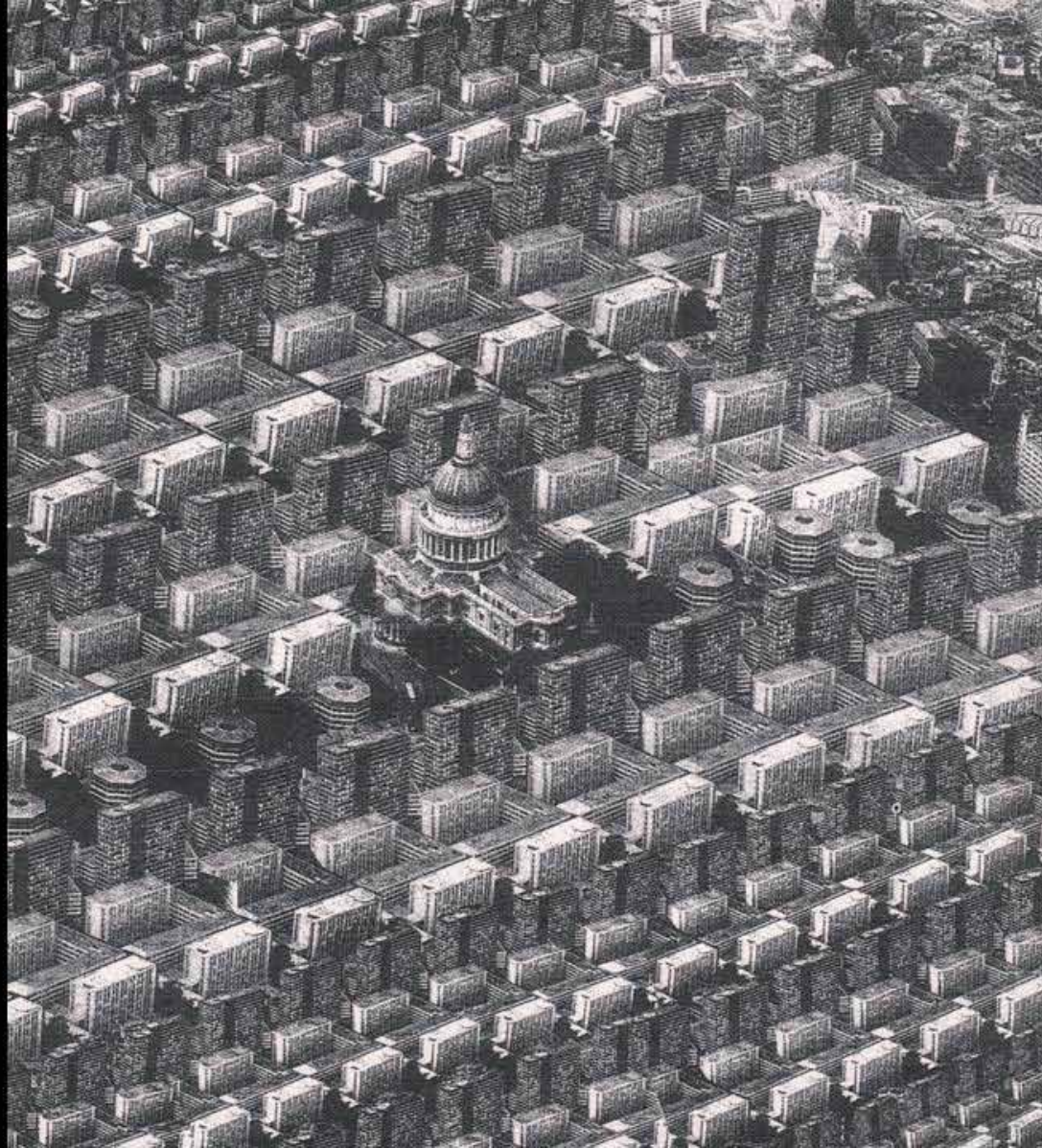




LONDON : GLOBAL CITY?



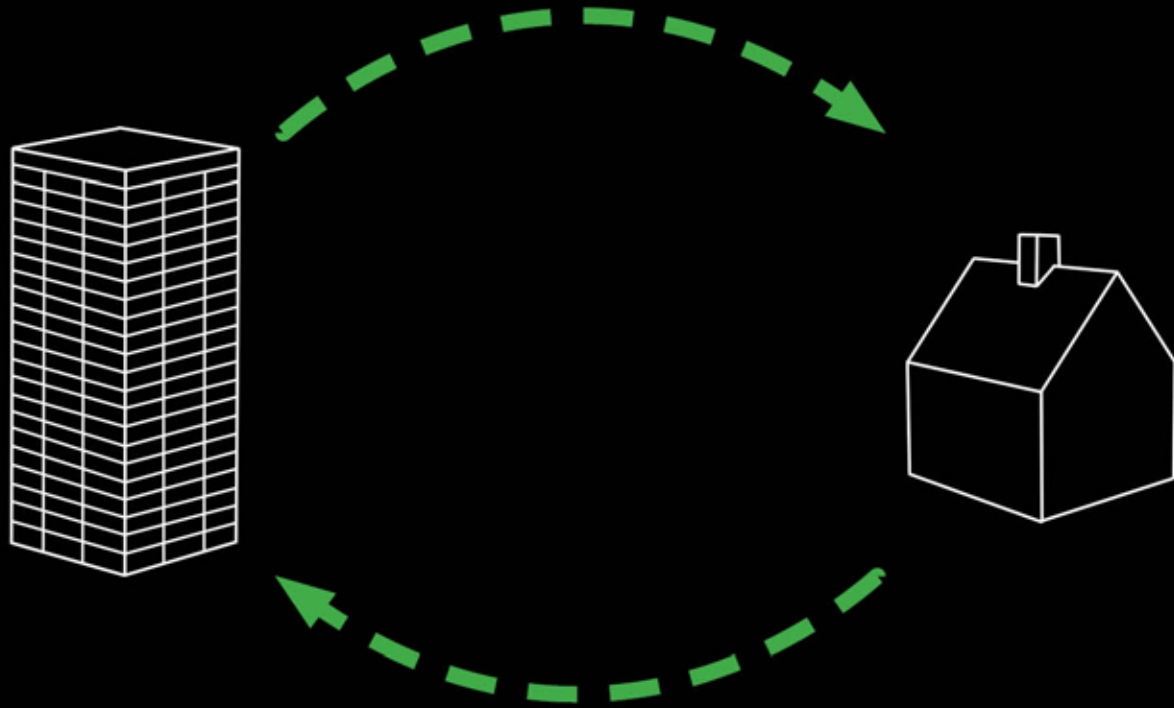
DENSITY



DENSIFY ?



DENSIFY USE



CREATING A LOOP



**Town and Country
Planning Act 2014**

Universal Use Class Orders
*with supplementary
Building Licences*

HER MAJESTY'S STATIONARY OFFICE 2013

DE-REGULATE



CAVE *and* SPACESHIP ?