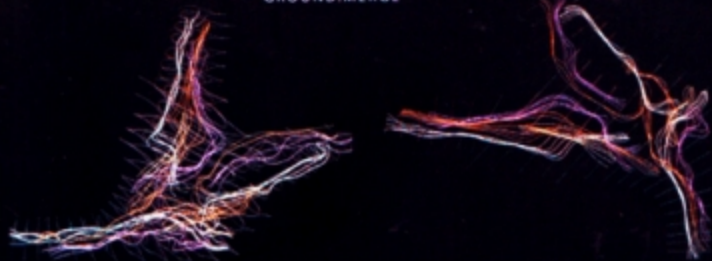


SPATIAL ARTERIES. Diagrams studying the connections created within the distended building volume.

INFRASTRUCTURAL INFLUENCE (below). Aerial view of the main office floors, showing connections between programmes.



_INVOLUTES_STRATA_FUSE_ **14.GROUND.MERGE** Networking an Artificial Office Gr

EXCAVATING INTER-ACTIVITY. A multi-tenant office in London's Docklands, on an undeveloped site adjacent to the city's tallest high-rises. The project is designed as a nearly invisible underground office cavern that also provides public access to nearby offices and transportation hubs.

Project Multi-Tenant Office Platform
Date 10.96 - 01.00 AA DRG v. 2.2
Location Canary Wharf, London
Team Elie Abi, Thomas Heidingsfelder,
Nate Kolbe, Antonio Ramirez

For centuries the service port for London was the Isle of Dogs, where a deep bend in the River Thames creates a peninsula crisscrossed by a series of man-made canals and channels used by cargo and container ships to deliver goods to the city. As the traditional shipping industries declined, the area became a post-industrial wasteland – and remained so until it was transformed by one of the largest private redevelopment projects undertaken in Europe in recent decades. In its new incarnation as Canary Wharf, it now houses the headquarters of several of the world's leading finance and banking companies.

This proposal for a multi-tenant office structure is located at the intersection of several unused parcels of land on the Isle of Dogs. The design strategy adopted here is anti-architectural in its organisation of built space. In contrast to the tall towers that form the centrepiece of Canary Wharf, it consists of a nearly invisible below-ground office envelope containing five main tenant spaces linked by a series of



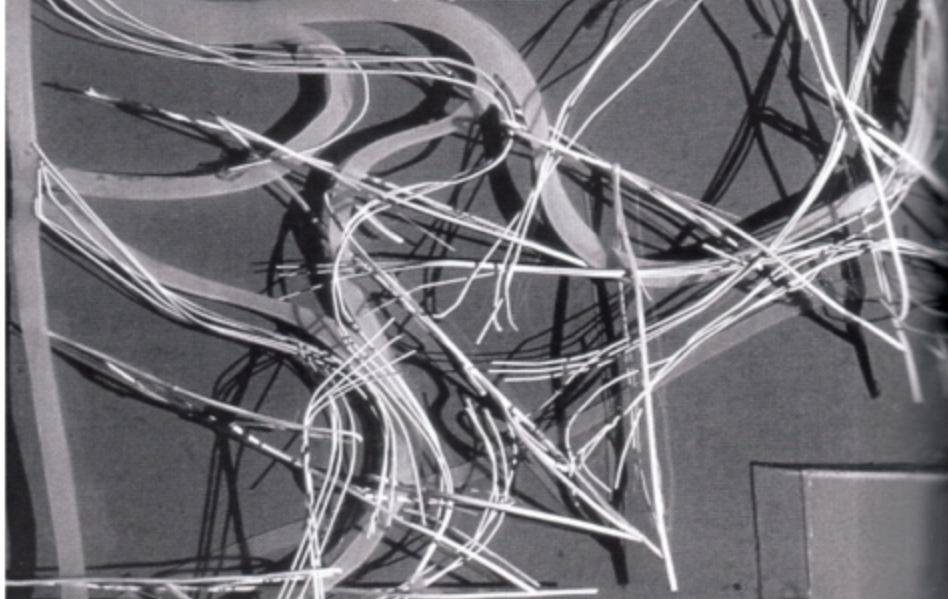
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OFFICE CAVERN. The roof shell for the new structure merges with the surrounding ground level.



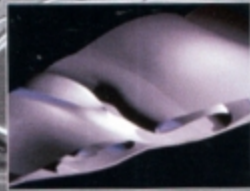
WORKSTATION WIRING. Client workspaces distributed along horizontal service cores running the length of the site.



INFRASTRUCTURAL NETWORK (above). Structural frames lofted along the main circulation paths of the building.

overlapping, translucent building envelopes. These are fused together to create self-supporting structural layers which are merged with the ground. A soft network of spaces are seamlessly connected with their surroundings; the project oozes out of the ground, spreading over the entire site. The flexible low-level working environments lead directly to a ground-level rooftop of public terraces and open spaces. Pedestrians can walk over or through the building to reach the neighbouring towers.

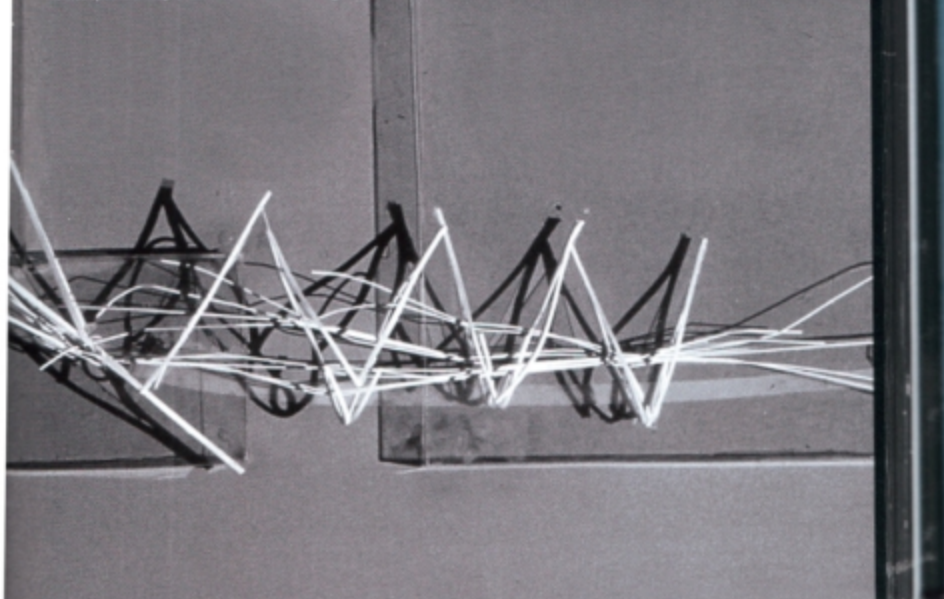
The team's initial analysis of site and brief focused on a mapping and then simulation of paths running between several of the new developments, which have mostly been planned as isolated, self-contained business worlds. The project begins to reconnect this larger corporate field by reshaping the ground surface between the towers. It creates a new, artificial ground plane: a 'stratification' of normal office life into compressed programme layers that serve as



SOFT SECTIONS. Sample cross sections showing the folding of several adjacent office spaces on top of each other.



SHADOW SPACE. The main volume of the office building is excavated from below ground.



the supporting structure for an open public space above. This new synthetic geology merges with strata of large-scale, open-plan office and consultancy spaces occupied by a combination of tenants who require short- or long-term office space immediately adjacent to the recently built office towers.

What emerges from the team's early analysis of existing conditions is a dense network of circulatory paths defining interior and exterior routes between office spaces all around the site. Structural stability is provided by pushing the ground up or down along these paths, to create a folded structure that is rolled inward or outward along its edges. 'Involutives' are surfaces commonly found in biological systems, and refer to coiling or curving forms, often in multi-layer structures or shells. They are curves defined by the spiral trace of a flexible line unwinding from a larger figure – in this case, an irregular figure defined by the field appropriated by the project as a site. The





A NEW FOREGROUND. The project lies in the shadow of London's first high-rises at Canary Wharf.

GEOMORPHIC CONTINUITY (this page). Aerial view of the building topography, developed as a new ground surface.

DESIGN STUDIES (opposite). Selection of programmatic diagrams and views showing the mix of private and public spaces.

degree of coiling at the edges of the slabs is controlled as a way of helping users navigate through the deep plan of the interior: as the edges are 'opened up', greater amounts of daylight signal entries and exits from the interior circulation system.

The term *involute*^{14.1} is also used in mechanical engineering, to describe the curving contact surfaces between gear teeth. A similar design strategy is pursued here at the scale of the superstructure of the building, which is formed by a series of lofted ribs swept along the circulation paths that shape the overall figure of the ground/interior. <<

14.1 For a discussion of involutes, see Bertoline, *Fundamentals of Graphics Communication*, 3/e (2002; McGraw-Hill Higher Education), at highered.mcgraw-hill.com/sites/0072122096/student_view0/glossary_1.html

