



Architecture
Today

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Houses
Gianni Botsford:
House in a Garden

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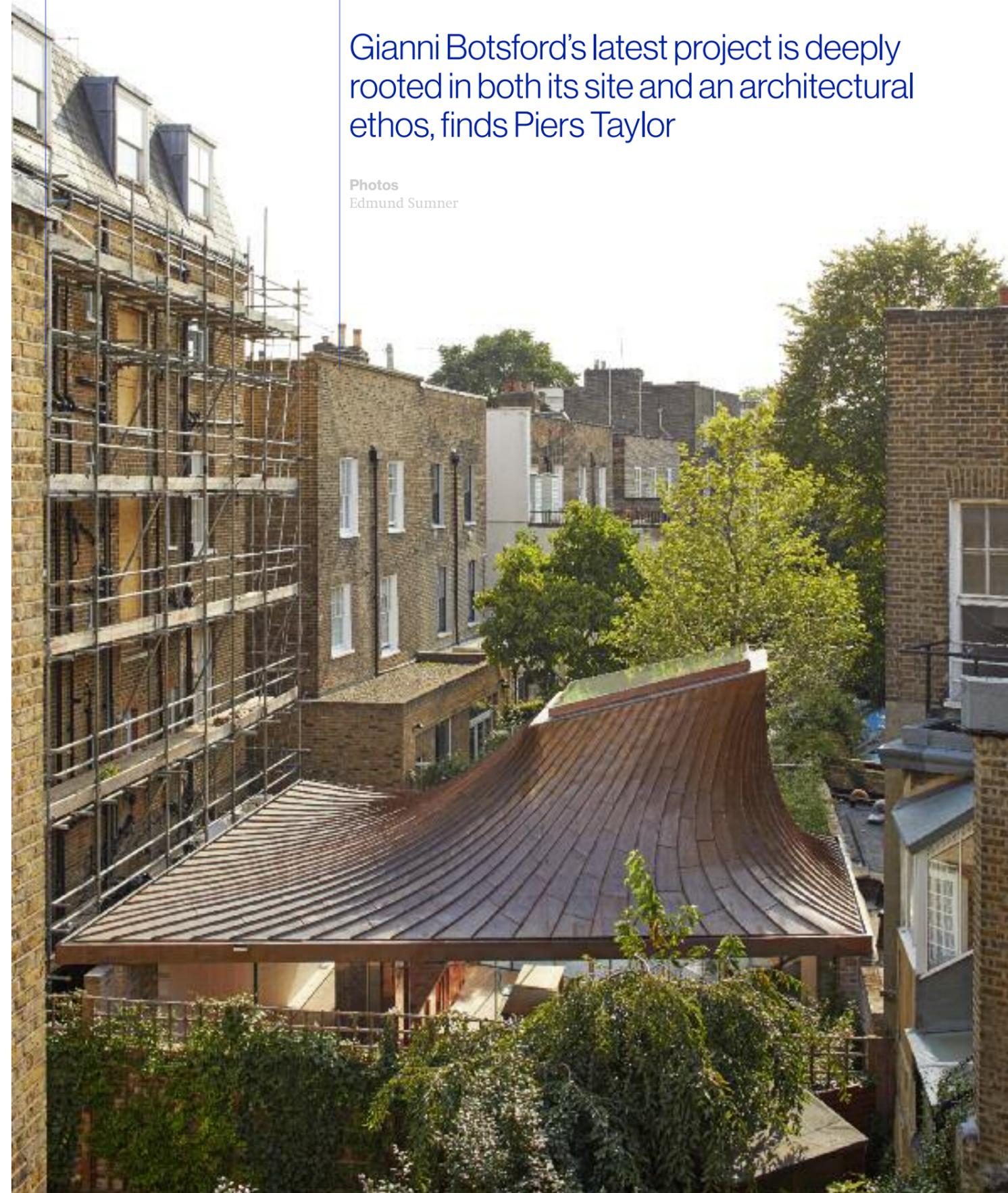
Focus
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House in a Garden

Gianni Botsford's latest project is deeply rooted in both its site and an architectural ethos, finds Piers Taylor

Photos
Edmund Sumner



Left, below

The backland site is accessed via a passage alongside an 1840s villa, on whose top two floors architect Gianni Botsford has his own home.

Bottom

The double-curved roof structure is formed from glulam spruce and concludes in a rooflight.



Gianni Botsford, perhaps more than any other architect working in his field, shows how the single family house can be a fascinating basis for invention. In order to fully understand the genesis of Botsford's latest project, 'House in a Garden', it is useful to look at his background, and a precursor project — Light House (2005). Both projects manifest his interest in 'local adaption', in similar contexts in west London.

Botsford's fascination with how the specifics of site could be rigorously mapped and used to inform architecture began when he studied at the AA with John Frazer in the early 1990s. Diploma unit 11 explored 'evolutionary architecture' as an attempt to evolve form and structure in a kind of simulation of the developmental processes of nature. When Botsford went to the AA to study with Frazer he was already 34, but wanted to learn a different mode of designing altogether from that in which he'd been working for 10 years, having grown tired of design-by-instinct or architecture-as-style, and by his own lack of rigour in the process of design.

"Frazer was interested in thinking big about the earth's problems", says Botsford. "He was interested in the earth's systems and how these interconnected". Frazer discouraged students from 'designing' — in the way that most architects do — before a framework is fully defined. Instead, he would encourage the use of computational systems that layered up information to allow issues to be revealed and seen in a new way. Botsford now recalls that he'd hardly thought about sunlight — the issue that has defined his work for the last 20 years — until he met Frazer. Working with Frazer, Botsford developed sophisticated three-dimensional solar mapping and generative tools that allowed him to gather information from a site that could be used as a basis for design.



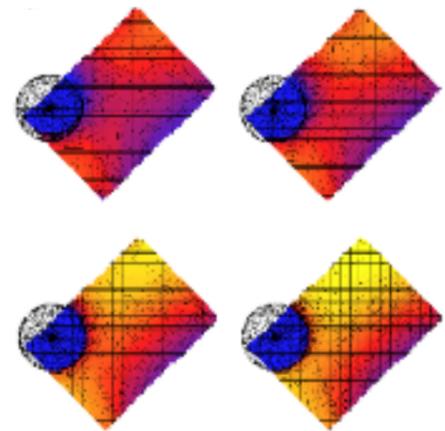
Below, right
Entrance hall; main living space.

Bottom
Sub-basement, basement and ground-floor plans; sections. On a plot of 256 square metres, the house has a gross internal area of 253 square metres.



Below, right
Insolation analysis, measuring the heights at which daylight penetrates the backland site, and collage view of the existing condition.

Bottom
The engineered timber roof structure, of which every piece is unique, was prefabricated from digital models in Italy, and craned into place in eight sections.



After leaving the AA, Botsford evolved this way of working – in conjunction with Arup – for his first significant commission, Light House, which was on a backland site in Notting Hill. The project took nine years to realise, and allowed Botsford to understand how Frazer’s evolutionary architecture could be married to a domestic typology and a tight urban site.

House in a Garden effectively began in 2007 and picks up where Light House left off. It is on another backland site, immediately adjacent to Botsford’s own Garden Apartment, where he has lived for many years. A flat-roofed bungalow had been built on the site in the 1960s and Botsford had spent much time observing how the sunlight affected the bungalow and its garden, before eventually buying the site and embarking on a proposal for a replacement dwelling as a prospective self-built development.

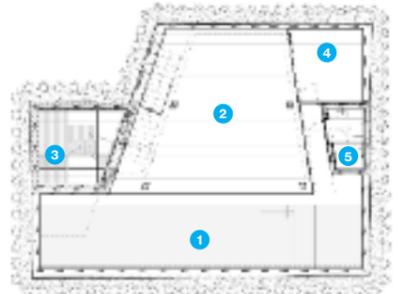
The project was purchased post-planning by a developer who was savvy enough not to meddle with Botsford’s scheme, and remained relatively hands-off during the development of the project for construction. Although a big risk for Botsford initially, the pay-off has been an autonomy and creative freedom that is often lacking with too close an involvement from a client.

The key move is understanding how to harness the sun on a site that is surrounded by five-storey buildings, and the dominant roof form of ‘House in a Garden’ is a reflection of this in allowing sunlight to penetrate into the main living space. The tip of the roof is the lowest position that sunlight reaches into the site at the winter equinox.

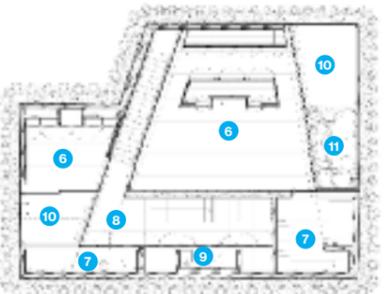
The roof form is further defined by the need to ensure that sunlight can penetrate into the garden courtyards each side of the living space, and to maintain views and light for the neighbouring buildings. The strikingly beautiful copper-clad funnel has an expressed double-curved timber structure on the interior, making the main living space feel as if it is under a lightweight tent.



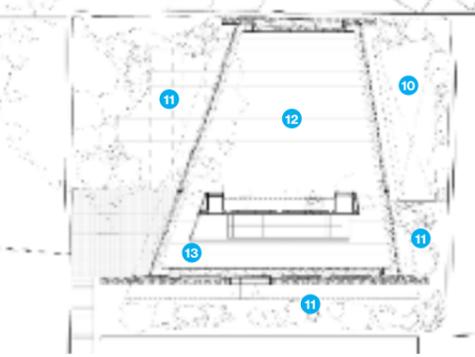
Sub-basement



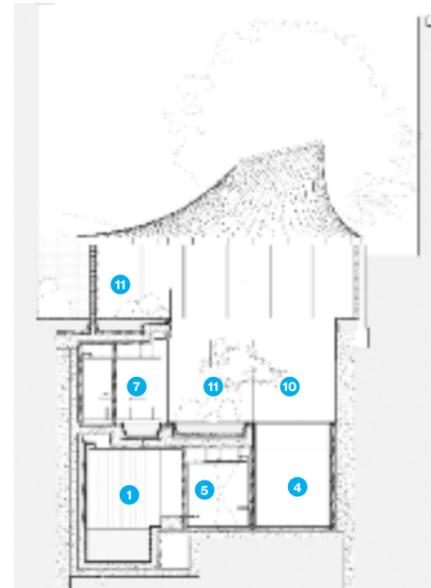
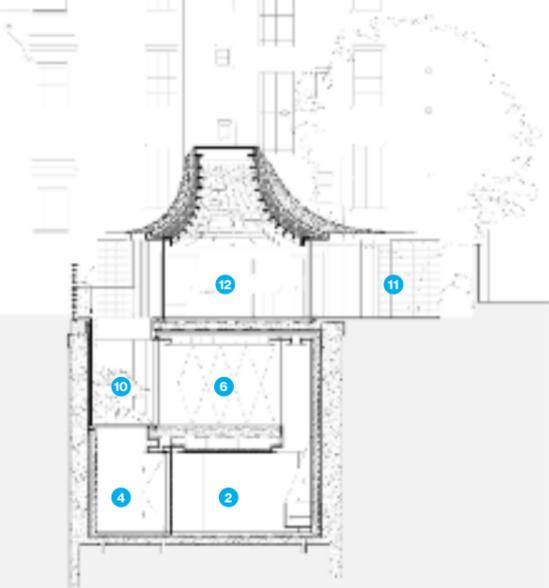
Basement



Ground floor



- Key**
- 1 Pool
 - 2 Gallery
 - 3 Plant
 - 4 Yoga studio
 - 5 Steam room
 - 6 Bedroom
 - 7 Bathroom
 - 8 Hall
 - 9 Utility
 - 10 Lightwell
 - 11 Garden
 - 12 Living room
 - 13 Entrance hall



The house isn't only about the roof, however. There are two subterranean floors below the ground-floor living room, which also benefit from Botsford's forensic analysis of the site, receiving light and gaining views of the sky via lightwells and internal courtyards. The house provides an unusual experience in London, where sites are so often restricted and infill typically means being bound on either side by existing buildings, and to the front by the street. Emerging back up to ground level is akin to arriving on a rooftop, surrounded by even taller buildings, and yet with a genuine sense of tranquility and privacy.

House in a Garden is an inverse of its earlier cousin, Light House, in that the formal relationships with the sun and site are explicit rather than implicit. The project provides a useful companion to Light House in showing how careful site analysis and a rigorous methodology can produce strikingly different results.

Mapping often has a binary relationship with architecture — what gets built looks like the map — but Botsford is clever enough to allow his work to transcend the data that underpins it. Botsford is one of those rare architects who have no stylistic preconceptions: each of his houses (including the Lubetkin Prize-winning Casa Ki-ké in Costa Rica and Layered Gallery in London) show the same focussed application of an idea but look completely different from one another. He shows how an extraordinary body of work can be developed from the most straightforward of building types. Whatever Botsford does next, we know it won't be like anything he has done before. ↗

Project team

Architect

Gianni Botsford
Architects

Structural engineer

Built

Services engineer

Pearce & Associates

Quantity surveyor

Leslie Clark

Landscape architect

Todd Longstaffe-Gowan

AV

Andrew Lucas

Arbiculturist

Treeprojects

Approved inspector

Salus

CDM

Goddard Consulting

Lighting designer

Isometrix

Contractor

New Wave (London)

Selected suppliers & subcontractors

Basement structure

Abbey Pynford

Glulam roof structure

Züblin Timber,
Tischlerei Lobis

KME copper roofing

Roles Broderick

Specialist metalwork

SteelOne

Swimming pool

London Swimming Pools

Marble supply and bespoke sanitaryware

Sitem

Timber flooring and panelling

Dinesen

Windows and skylights

Cantifix, SkyFrame

Sanitaryware

Liquid Design



Above, right

The material palette of Douglas fir, Carrara marble and copper balances warm and cool tones. Daylight is drawn down to eight metres below ground.