A triangular site has produced a response of bold geometries resulting in a popular and convivial building full of pleasures and surprises, writes Jay Merrick.

My first visit to the LSE’s Saw Swee Hock Student Centre, a couple of weeks after it opened, produced two overriding impressions: firstly, a kind of wonder that such a vividly angular form could arise in such a scrunched fag-end of cityscape; secondly, that the bold geometries of the internal volumes had been instantly taken over by students. This was not look-at-me object architecture; it was an original response to a triangular site parcel that produced a building that worked.

A short film made after the opening, Vox Pop, spliced together students’ remarks about the building and two comments sum up the range of their responses. ‘The architecture is strange, but in a unique way,’ said one. ‘It’s
very artful,’ mused another. Their responses were universally enthusiastic.

O’Donnell + Tuomey’s design of the Student Centre possesses Medieval, Expressionist, and Soaneian qualities. It is not, however, a grand architectural statement. It is, instead, a remarkable unfolding of formal, spatial, and functional possibilities. And it is absolutely anti-iconic – the opposite of, say, Daniel Libeskind’s proposed extension for the V&A more than a decade ago.

There are no drama-queen algorithms, mystic maths, or parametrics here, but an obsession with bricks helped. The precise position of every facing brick was mapped: 43,633 brick specials, 28,000 solid specials, 98,000 standard bricks. Total: 173,377.

The architecture’s external language of expressive, contextually informed triangulations, folds, glazing shapes and cranked cantilevers translates, quite brilliantly, into interiors and specific functions. Despite the geometry, no parts of the building seem either forced, or left over. And there are surprises: the circular, cave-like quiet room, and the chapel on the second floor, with an end wall composed of stained glass.

One encounters visual, textural and spatial pleasures at every turn: the angles of the landings and stair-runs; the positions of the outlooks; the triangulated coloured panels on the lift core; views of as many as three levels at once; the concrete secondary staircase plunging down, like a giant béton brut drill-bit, through six levels into the basement club-cum-auditorium.

The shifts in light and atmosphere and the subtly contrived transitions between calm and active spaces have conjured up a properly convivial building. The big, high-ceilinged Learning Café on the piano nobile, with its skewed light-reflecting oval discs, has an almost chic vibe; the ground-floor bar is bathed in soft tan light that recalls interiors in Edward Hopper paintings; those working in the radio station booth are particularly pleased they can be observed from the second-floor landing.

At the top of the building, on the sixth floor, the café and roof terrace look out over chunks of the LSE’s estate, and the darkly scaled spire of the Great Hall of Lincoln’s Inn. The terrace’s angular plan feels casually witty, rather than strictly geometric, and on my first visit to the building, in the middle of an afternoon, the whole top floor was buzzing with students.

The eye has not, as Charles Jencks might say, been conned. And the architectural virtues of the Saw Swee Hock Student Centre are framed by an even greater virtue. This building proves that a fine practice, sophisticated client and planners, and D&B contractors who realise they’re building something special, can deliver outstanding new city fabric on sites of very poor quality.

*Jay Merrick is architecture critic of the Independent*
Project Q+A

John Tuomey
Director, O'Donnell + Tuomey

What was your initial design concept?
Our first thought was to make a building that responded to the on-street, open-street campus character of the LSE. The student concourse at the LSE is the street. Our competition motto was 'Street Life'.

Did the executed project differ from this initial concept?
The finished building doesn’t differ much from the competition design. It looks much the same in elevation and plan. The brief changed in some areas, especially the omission of a double-height events space on the second floor, which made the section more straightforward from a structural point of view. The facade didn’t change much. It took a long time and some concerted effort to develop the details to make it look the way we first intended.

What was the client’s input?
The client stayed close to the design development process at every stage from mid-competition workshop to final construction. This was what made the project possible. We had a committed and supportive client. They wanted a good building.

What was the most challenging aspect of the project?
The site was tricky, being triangular and hemmed in on all sides. The plan is controlled by an intricate set of gridlines, drawn in from the site geometry.

The client brief was complicated, with diverse uses overlapping and without obvious precedent in building typology. The section is like a slice through an ocean liner, with different functions on every floor. The brick wall is probably the most complex part of the project. But getting the building out of the ground was a triumph of logistics in itself.

What is the most important lesson you have taken from this project?
The same lesson learned on other projects is confirmed by this one. Speak to everybody in the same way – clients, colleagues, planners, builders, craftsmen. Don’t disguise your intentions or talk in jargon. People will work with you to make something special if they think it’s worth the effort, if you invite their participation, and if they can see how their contribution is valued. We ask people for their help. All we ask is that they do the best they can.

Where does this building sit within the evolution of the practice?
It’s a very important piece of work because of where it is and how it operates, but it feels to me like it’s consistent with the way we’ve been working for years, with no radical change in our thinking. But it’s too soon to say. We haven’t had much chance to repeat ourselves since every project seems to have made different demands.

Let’s see what happens and then we’ll know how to answer that question in hindsight. And maybe it’s not a question for us to answer. I’m more curious about what we do next. And life is short.

Project data
Client London School of Economics and Political Science Architect O'Donnell + Tuomey Structural engineer Dewhurst Maclaren and Partners / Horgan Lynch Consulting Engineers Services and environmental engineer BDS Security, fire, acoustics, transport and logistics, venue Arup Project manager Turner & Townsend Quantity surveyor Northcroft Planning consultant Turley Associates Building control consultant Carillion CDM co-ordinator Gardiner & Theobald Main contractor (D&B) Geoffrey Osborne
Materials

1. Hand-made Tudor-Mix Saxon Bricks by Coisford Brick & Tile
2. Jatoba hardwood windows and curtain walls by GEM Group
3. Sandblasted concrete structure with GGBS and Batacarb mix by Foundation Developments
4. Steel structure and balustrades, painted oxide red by Bourne Special Projects and Structural Stairways
5. Vitreous enamel cladding to liftshafts by A.J. Wells + Sons
6. Terrazzo floors with equal parts Portland/White cement and 9-12mm chippings by WB Simpson & Sons
7. Meldonian hard Yorkstone terrace paviours with Capital Finish by Marshalls
8. Select character European white oak floors with sawn finish by Woods of Wales
9. Sto Silent render to suspended acoustic clouds and soffits by Sto
10. White Ceramic Tiles by Johnson Tiles
Drawings

Site plan

1. Plant
2. Lobby/entrance
3. Reception/entrance
4. Smoke ventilation plenum
5. Activity centre
6. Media centre
7. Residence
8. Gym
9. Careers centre
10. Exercise studio
11. Stair
12. Events space
13. Kitchen
14. Store
15. WC
16. Pub
17. Cafè
18. Multi-faith prayer room
19. Inter-faith social space
20. Student union office
21. Coffee/ juice bar
22. Roof garden
23. Green roof
24. Void
25. Bicycle parking
26. Meeting space
27. Servery
28. Service yard
29. Seat
30. Post room
31. Cloak room
32. Events mezzanine above
33. Green room

Section A-A

Section B-B
Brickwork skin

The composite concrete and steel framed structure is clad in a faceted, hand-made brick skin—sometimes solid and sometimes perforated—creating dappled daylight inside and glowing like a lattice lantern at night.

The brick skin is supported from the concrete frame at storey-height intervals using a proprietary system of cast-in brackets and angles. Stainless-steel windposts, carefully sized, co-ordinated and positioned within brick overlap dimensions, cast-in supports and opening window sections behind, give the required structural stability.

Large areas of storey-height, untreated hardwood glazing are supported from the concrete frame where the brick skin is drawn open to campus views. These glazed timber sections are fixed flush with the brick skin providing a continuous envelope.

Meticulous setting out, production and installation were critical to achieving the geometry of the buildings’ volumes, the precision of its internal and external fold lines and the resolution of complex interfaces.

*Willie Carey, associate director, O’Donnell + Tuomey*