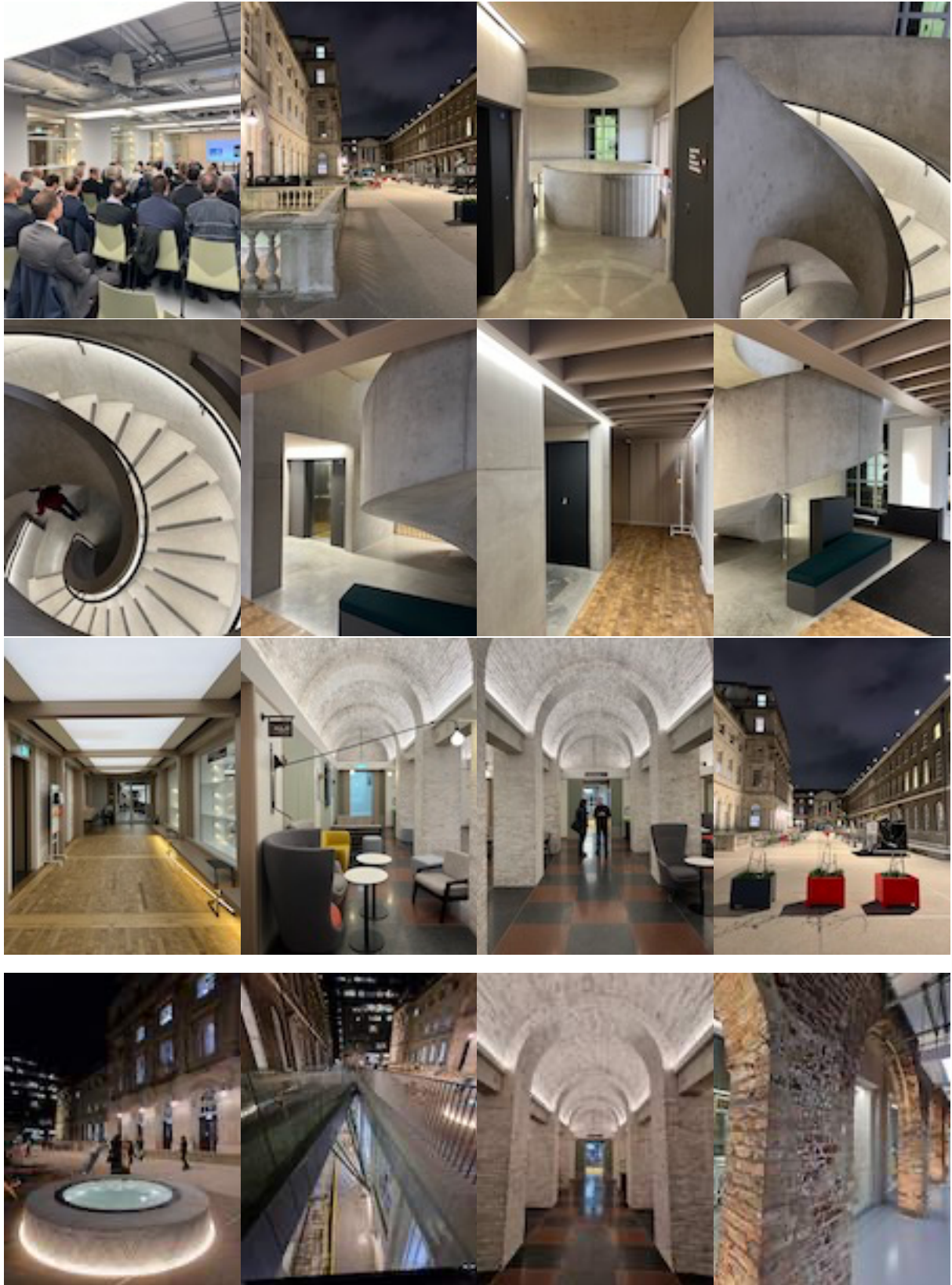


20th Century Buildings: Refurbish or Replace?

The Quadrangle Building, Strand Campus, King's College London

13th December 2023



Overview

Higher education saw tremendous growth and change from the 1960's, with current universities expanded and redeveloped, new universities such as Kent, Sussex and Stirling created and technical colleges merged into new polytechnics, themselves becoming universities in the 1990's. Many of these early buildings, such as the 19-storey tower at Sheffield University from 1957, are now listed. Universities today, in looking at the needs of tomorrow, have to consider how best to plan future facilities within this extensive heritage of 20th century buildings.

Over 100 delegates attended a lively evening of debate and discussion on the theme of '20th Century Buildings: Refurbish or Replace, held in the recently-refurbished Quadrangle Building at the Strand Campus of King's College London.

The evening was introduced by Ian Caldwell, former Director of Estates and Facilities at King's College London, who explained the background to the Quadrangle as a 1950's development at the heart of the campus, taking advantage of damage to the previous 19th-century structure caused by bombing in the Second World War. A bold modernist masterplan for the campus was developed in the 1960's, of which two buildings, the Strand and Macadam Buildings, were completed, leaving the campus with a mixed and interconnected buildings of different quality and suitability for a modern university.

The submissions for the original architectural competition for the Quadrangle had included both redevelopment (to enable an additional floor to be inserted) and refurbishment. Hall McKnight won the competition with a scheme which was praised as being analytical, having a clear philosophy, uncovering layers of the past and engaging with the history of the buildings surrounding the Quadrangle, establishing a strong, distinct character to the Quadrangle as the focus of the campus.

Speakers:

The speakers, who examined different aspects of refurbishing or replacing 20th century buildings, were:

- **Nick O'Donnell, Director of Estates and Facilities, King's College London** provided an overview of the Quadrangle project within the campus strategy for King's College London, commending the university and the project team for their commitment and long-term vision for the retrofit of an important, but hidden, part of the estate in which DNA had been discovered. Nick described how the brief had changed since the original competition, to now support new strategic initiatives in the Department of Engineering, for which large flexible spaces were required - perfect for the Quadrangle.
- **Ian McKnight, Partner, Hall McKnight** described the challenges and opportunities of the Quadrangle including the careful analysis of the existing building was undertaken. The existing 1950's structure has been retained to create new spaces, including an interconnecting staircase bringing daylight flowing from the courtyard above which has been relandscaped. As much daylight as possible has been incorporated into the project and the Quadrangle had been enhanced greatly by including 19th century arched vaults under the adjacent King's Building which had formerly been occupied by archives and now provided a much-improved entrance, flexible study areas and toilets.
- **Patrick Watson, Partner, 3PM** described how university clients were seeking to lead in retrofits that achieved high standards for sustainability and wellbeing, including King's College London at Bush House, the LSE in its Firoz Lalji Building and Cambridge University at Entopia.

He emphasised the importance of agreeing and maintaining shared values throughout the project and described how this has been achieved. The belief that sustainable buildings cost more was also knocked on the head.

- **David Cheshire, Director, AECOM** explored 20th century buildings from the point of view of sustainability and the carbon impact of refurbishment or replacement, in particular embodied carbon, noting that these are not just issues for existing buildings, but should be embedded in the design of new buildings for long-term sustainability. There are imaginative examples of buildings that go beyond Zero Carbon in terms of sustainability and social impact – buildings have the ability to do more, with thought and creativity.
- **Elie Gamburg, Design Principle, KPF** reflected on the challenges and opportunities of retrofit, where there is sometimes a polarity in views between retention and refurbishment. Brutalist 20th century buildings often bring out conflicting views. He also emphasised the importance of buildings contributing to their communities and having links with public spaces around them and described the future ambitions for the 20th century buildings on the Strand Campus, including the opening up of the Strand Building onto the newly created public space outside, making it more opening and welcoming, in contrast to its original design.

Key issues include:

- Commitment of the university client and of the project team to find the optimum high quality design solution, noting that university clients are now setting high standards for both sustainability and wellbeing, and that planning authorities were increasingly adopting a 'reuse-first' approach to developments.
- The Importance of careful and thoughtful analysis of existing buildings including, if necessary, alternative future uses for which they may be more suited, the adjacent 180 Strand being an example, particularly where the original building may have conflicting views about its architecture, whether that it should be kept or that it should be demolished. 20th century buildings have not existed for long enough to gain full appreciation, as we have for 18th and 19th century buildings, which themselves at one time were seeing substantial demolition.
- Considering opportunities 'outside the structure'. The Quadrangle retrofit had been enhanced greatly by including 19th century arched vaults under the adjacent King's Building which had formerly been occupied by archives and now provided a suitable entrance, flexible study areas and much-needed toilets. Existing structures may be able to support additional storeys on top, to add value to a project.
- Retrofit is not just about past buildings; it is also about future buildings being designed for reuse, with materials that can be reused or recycled, unlike many of those from 20th century buildings.
- Retrofit (and new) projects should see the building set in a sustainable cultural and community environment, connecting into adjacent public spaces, landscaping and communities and also incorporating, perhaps at rooftop, new initiatives such as beehives and growing food.

Discussion:

To start the discussion, the presenters were asked for their views on how they would tackle an example of a post-war iconic building which has sat empty for many years, in part due to the uneconomic feasibility of redevelopment, in this case the Hotel Kyjev in central Bratislava, designed by Ivan Matušík and built in 1973. Once the most important hotel in Bratislava, it has been closed for seven or eight years now - deteriorating into a sad state of decay and neglect and is also a reflection that current and former communist countries have immense legacies of post-war buildings. While the panellists were unable to comment on the economic viability, it was important to look at analytically at the building, and its connectivity with the local community and local developments. Is there an opportunity to use it in the short term, perhaps with pop-up activities? Could it be an exemplar of sustainability and community engagement - new uses that support social and economic objectives?

Further discussion emphasised the importance of thinking outside the existing structure - those 20th century buildings which were well-built often have the structural capability to take additional floors, while reflecting that some, including the Quadrangle, have structural limitations. It was also noted that post-war buildings from different decades had different qualities of design and construction. The role of the design manager within construction companies was also raised - at Cambridge, the design manager had been instrumental in finding the suppliers for many of the sustainable aspects of the building.

The issue was raised that the emphasis on 'reuse-first' in terms of looking at future building projects, was a policy in London and in some of the larger cities but had yet to become the norm elsewhere. How can this be achieved?

Finally, it is worth ending with the call from David Cheshire that we should 'Shift to an 'ideal of design where human environments are symbiotically integrated with ecosystems and contribute to rather than harm ecosystem health.'" (Maibritt Pedersen Zari)

Thanks are due to:

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