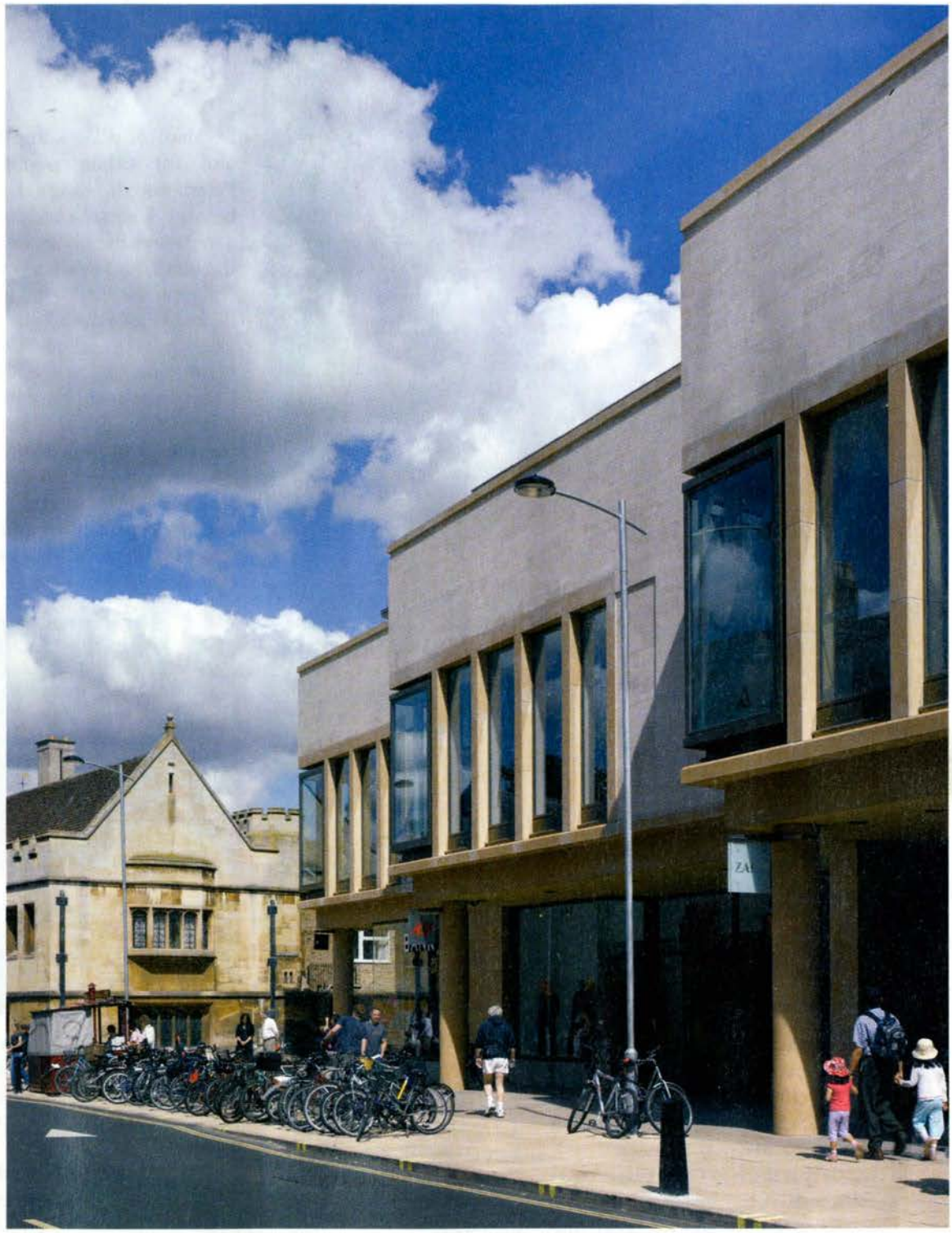
URBANISM ■ Developing density: surgical repair to the heart of Cambridge

Two new retail buildings opposite one another have profoundly altered the centre of Cambridge. ***Ivor Richards*** *weighs up the merits of Chapman Taylor's Grand Arcade and Panter Hudspith's mixed-use Christ's Lane, while* ***Colen Lumley*** *investigates their role in the 50 year renewal of the city's historic core.*

Cambridge University and its major colleges have been steadily building new architecture since the mid-1950s. Little of this vast expansion is particularly evident to the ordinary citizen within the town, with a few notable exceptions such as Bridge Street, the Quayside and the excellent buildings for both Magdalene and St John's by David Roberts and Powell & Moya from the 1960s.

The more dispersed faculties of the Arts and Humanities at Sidgwick Avenue and West Road, together with the new colleges of Robinson and Clare Hall nearby, signal the western shift. This policy is now particularly marked with the remote western expansion of Research & Development.

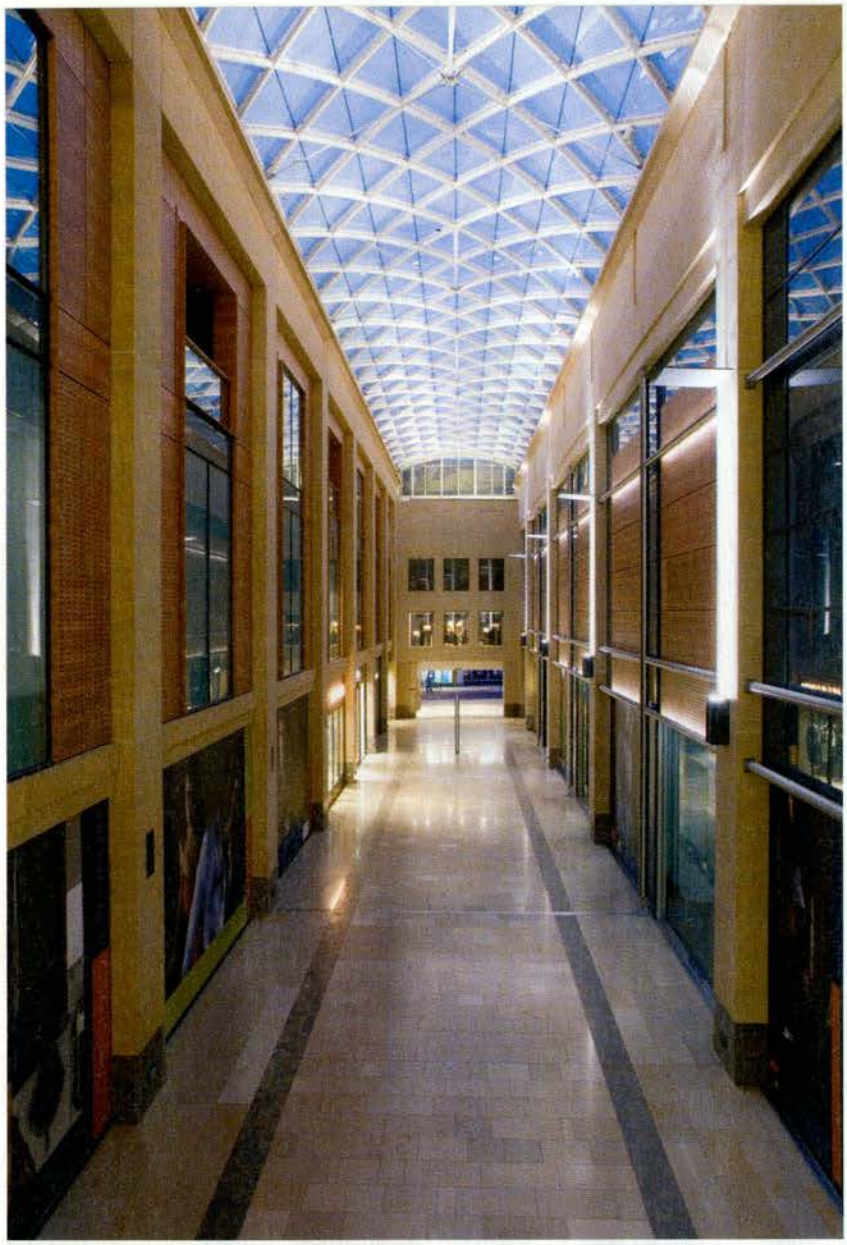
The commercial development of the medieval market town has consistently followed a more distinctly densified pattern, whether by policy, commercial pressure or both, beginning with Bradwell's Court and later the Lion Yard in the 1950s and 70s. Two recent projects exemplify the continuity of this densification as well as the increasing sophistication of commercial and mixed-use architecture in Cambridge – the development known as Grand Arcade designed by Chapman Taylor, incorporating the new John Lewis store with concept design by Colin Stansfield-Smith and John Pardey Architects, and Panter Hudspith's mixed-use project across St Andrew's Street which



reinstates the built-over Christ's Lane and provides two floors of retail space with apartments above.

These truly significant urban renewals of the medieval and Georgian/Victorian town have a huge impact on both ordinary pedestrian users and shoppers alike, and they have been very quickly assimilated into the life of the inner city. Substantially complete and occupied, they are now ready for a critique that examines their contribution to urban

Above *Panter Hudspith's Christ's Lane development, facing onto St Andrew's Street (photo: Paul Riddle).*
Top left *John Lewis store at the junction of Downing and St Andrew's Street, designed by Colin Stansfield Smith and John Pardey Architects as part of the Grand Arcade retail development by Chapman Taylor, (photo: Keith Parry).*



life, the implications of two distinct urban typologies, street and arcade – the great West End avenues and emporiums such as Selfridges provide the precedents – as well as their own physical, material qualities.

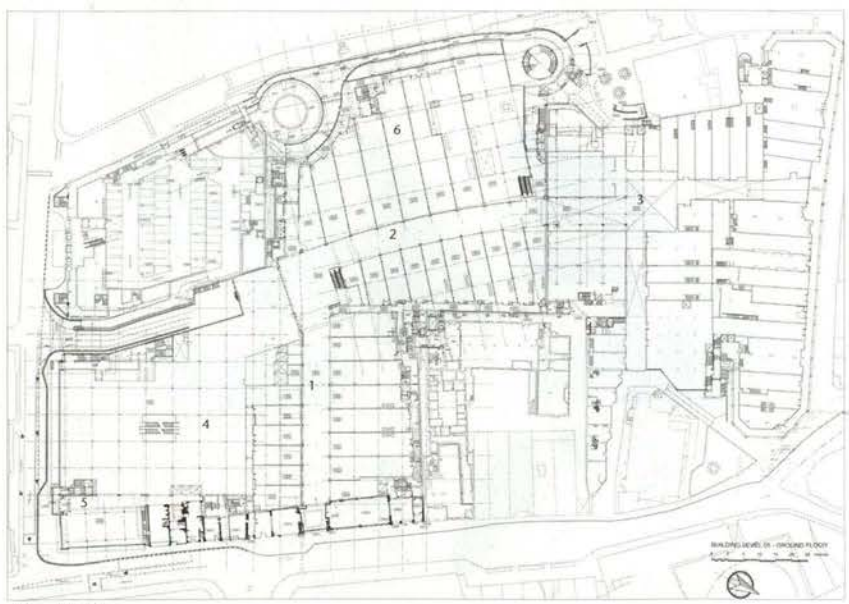
The crowds that flock to Cambridge, especially at weekends, demonstrate the fact that with much-improved public transport, the city has become a centre not just for its necklace of villages and fenland towns but also for urban populations from Ely, Peterborough, King's Lynn, Norwich and beyond. They are choosing the vibrant life of a town over the plastic ersatz environment of the ubiquitous drive-in retail experience.

Chapman Taylor's Grand Arcade and Panter Hudspith's Christ's Lane provide different but parallel offerings and both are evidently popular. At Grand Arcade the John Lewis department store has integrated well as a through-route. The Sliver Atrium leading from the Downing Street park-and-ride set-down is the most successful spatial event on entering the store, and demonstrates the need to expand the central atrium which is currently filled with escalators. The successful retention of a full block-width of restored

shopfronts on St Andrew's Street, and the revelation of this fabric to those asending the glazed elevators to the rooftop brasserie adds a further real connection to the historic street context.

Grand Arcade itself is enhanced by the shift in direction at the John Lewis atrium and the junction with St Andrew's Arcade. The strategic placing of coffee shops here, with escalators that beckon to the upper-level shopping, makes for a busy and satisfying urban place. Momentarily the Milan Galleria and the marvellous street life of Italian cities come to mind – triggered perhaps by the presence of Carluccio's shop and restaurant at one of the two entries from the car park structure, and

Above *The Grand Arcade includes 52 retail units on two levels in sizes suited to modern retailers (ph: KP).*
Above right *St Andrews' St entrance. Four listed buildings were incorporated into the project (ph: KP).*
Plan *1 St Andrew's Arcade, 2 Grand Arcade, 3 Lion Yard, 4 John Lewis, 5 Sliver Atrium, 6 retail within parking structure.*
Bottom right *Atrium entrance to 25,000 square metre John Lewis store (ph: KP).*



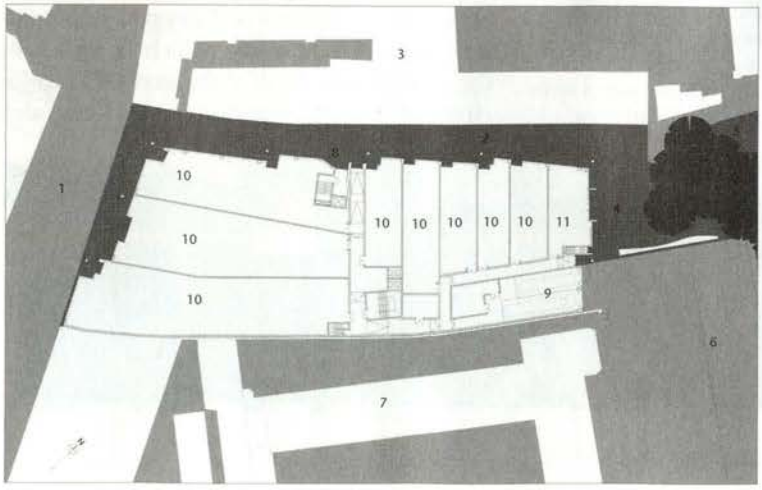
the bright daylight diffused by the lofty glazed diagrid barrel roof.

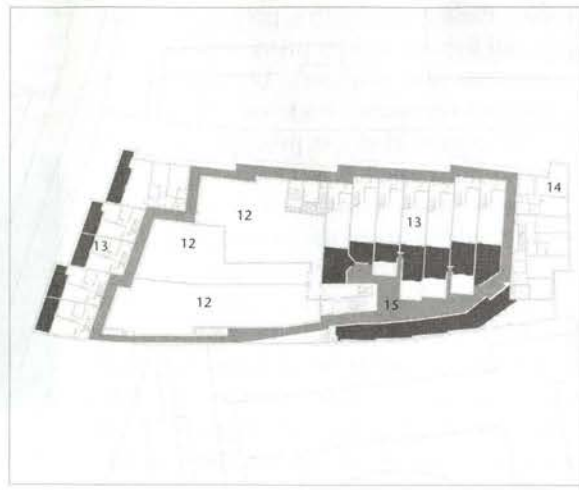
But it is at night that the success of Panter Hudspith's Christ's Lane becomes most evident: not only is it a vital pedestrian artery to the city bus station, it is also enhanced and brought to life by the placement of a restaurant at the corner leading to the buses and to the route across the neighbouring green space of Christ's Pieces. As well as its many pavement-level tables the restaurant has an upper level with large glass bays that overlook the urban park. While the gates of the Grand Arcade are closed after hours for security reasons, the burgeoning nightlife of Christ's Lane is ongoing – it is, after all, just a side street lined with shops, but crucially the restaurant and bar are open to all-comers, late. A popular and natural success.

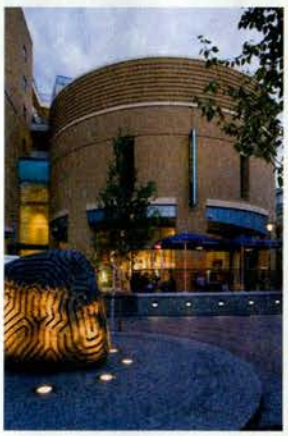
In the daytime the typologies of street and bar are well fused, the pedestrian armies flow and mingle and the buses pull in and out of the new sheltered stations. The enhancement of urban life in Cambridge is very much in evidence.

Both new retail interventions make an important contribution to the repair, conservation and enjoyment of the city centre as a

Top, far right *Views down Christ's Lane from St Andrew's Street and from Christ's Pieces (ph: PR).*
Model *View down Christ's Lane towards Christ's Pieces.*
Plans *Ground and second floor: 1 St Andrew's Street, 2 Christ's Lane, 3 Christ's College, 4 civic square, 5 Christ's Pieces, 6 Drummer Street bus station, 7 Emmanuel College, 8 residential entrance, 9 loading bay, 10 A1 unit, 11 A3 unit, 12 plant/storage for retail units, 13 two-bed duplex, 14 two-bed flat, 15 communal courtyard.*







whole. Panter Hudspith's project, however, goes still further with its provision of rooftop apartments and duplexes, bringing private residential occupancy back into the fabric of the city centre. Had the principle of mixed-use also been applied to Grand Arcade and its vast car park roof levels, it would have brought added life to the overall project and great amenity to the residents as well.

The urban architectural fabric of both arcade and street provide the third element of the total experience of these large-scale insertions. Both Grand Arcade and John Lewis are faced principally in buff precast stone cladding, including the walls, facades and the slab-column pilasters that line the arcaded spaces. These are infilled with pre-patinated metal panels (in the case of John Lewis) and timber panels with fretting in the limestone paved malls. The glazed diagrid barrel roof is detailed to a refined finish, as are the handrails, light fixtures, bridges and escalator flanks and details. The architects' intention was to provide an intimately-lit arcaded interior that is comfortable and welcoming; the generous light-flooded daytime volumes contrast with the subtle downlighting in the evening.

The huge parking structure, sited to the rear of the development, is faced in suitably curvilinear brickwork, with one of the car ramp rotundas forming the circular enclosure for Carluccio's shop, which faces its small piazza – a very welcome event. Its essentially commercial function notwithstanding, it should be very clearly affirmed that Chapman Taylor's Grand Arcade establishes a new level of quality and commitment to a lasting urban fabric.

Over the road, the most important aspects of Panter Hudspith's response to its own planning and design brief are the reinstatement of Christ's Lane itself and the reintroduction of mixed-use occupancy to the city centre. The roofscape is pressed into service as the site for a magnificent, discrete landscape of courtyard penthouses and high-level pedestrian lanes, bicycle ways and storage.

Christ's Lane adds to Panter Hudspith's portfolio of mixed-use urban projects that includes Princesshay in Exeter, Flaxengate in Lincoln and the Oxford Castle Heritage Project, developments that have given the practice a wealth of experience in this type. In turn a language of expressive, refined forms and associated material-fabric has emerged to provide a mature framework in which each project is both situated and differentiated, inflected and composed to find close integration with its context.

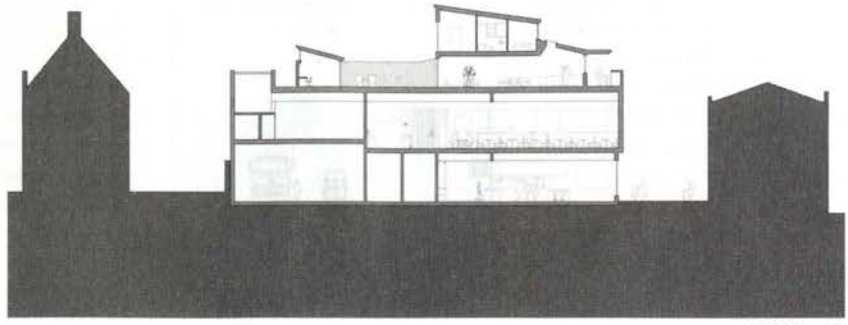
Take, for example, the three distinctly different elevational forms of Christ's Lane: first, the two-storey shop fronts to St Andrew's Street are articulated and stepped in plan to form three distinct bays which accord with the general plot width of the street. This principle of three-dimensional set-backs also

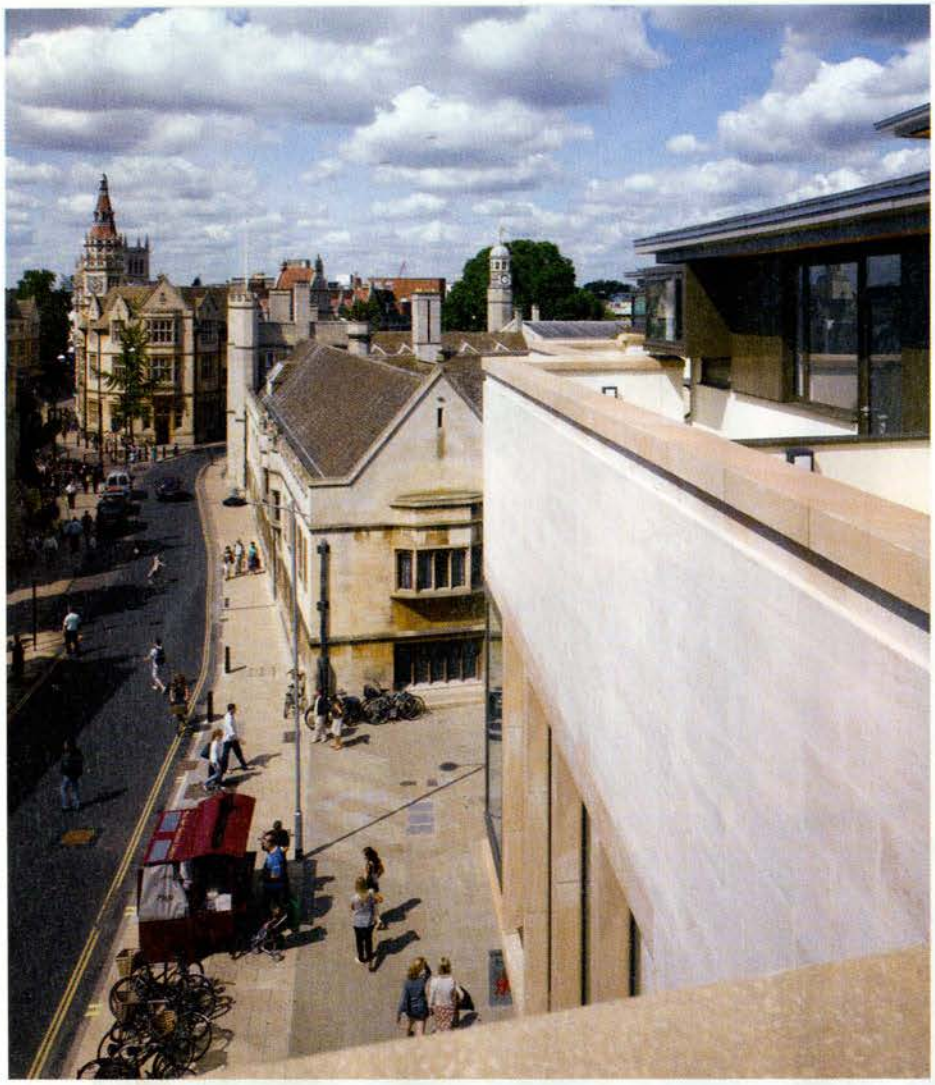
Above *Ramp drum for 600 space parking structure; internal material language of wood, metal and stone (ph: KP).*
Below *Section through arcade. A service basement runs under the entire site.*

reveals views of Christ's College, and sets up the framework of major materials: limestone facing (Ancaster Hard White), matching precast concrete units and powder-coated glazing frames. In contrast, Christ's Lane is articulated by projecting vertical window bays outboard of a striated yellow-ochre brick facade, capped by a planted rim which forms the deep edge of the pedestrian breezeway to the rooftop residences above. Finally, the form presented to Christ's Pieces contains large panels at first floor to house the restaurant, together with stone cladding to the duplex residences overhead. The inevitable service yard has perforated brickwork.

The overall complex is very simple with two levels of different-sized shop units and two floors of apartments above – duplexes to north and south, the latter set within a stepped metal roof with deep overhangs. A similar roof shields the high-level breezeway giving access to some rather special courtyard penthouses which stretch across the full width of the upper roof landscape at their entrance level, with first floor bedrooms over this western end. At entrance level the living spaces address a private patio garden with further studio accommodation and bicycle access beyond. Conversely the kitchen spaces afford splendid views westward over the city roofscape and Christ's College. Within these recessed forms the materials change to white-painted render and timber-clad patio walls, with grey metal glazing and cladding elements. The inclusion of the patios and garden studios to seven of the fifteen apartments makes for a very particular home – overlooking the historic city with its spire-

Above *St Andrew's Street; brick panels on Christ's Lane (ph: PR).*
Below *SE-NW section through Christ's View duplex.*





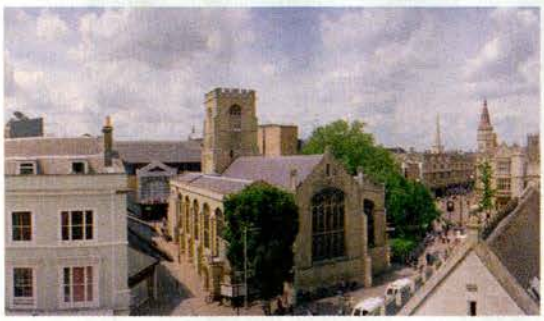
inflected skyline, while at the same time looking inward to a fully private outdoor space.

In considering these plans, Chermayeff and Alexander's Community and Privacy (1963) comes to mind, especially for its inclusion of Philip Johnson's Rockefeller Guest House in New York (1950). Panter Hudspith's interpretation of a similar idea at roof level, is an appropriate response to this bustling urban setting, and provides full cross-ventilation and daylight in a dense plan-form.

The consistency of the stepped geometry, immaculately crafted building forms and careful material assembly within a clear spatial heirarchy deliver a building of significance. To the credit of both architect and developer, a collegiate-class architecture has been achieved within commercial constraints and demands.

Christ's Lane and Grand Arcade together form a new pedestrian route for all to enjoy, a great contribution to urbanity. They are a welcome addition to the particular strain of modern architecture that is now synonymous with Cambridge, drawing on its legacy to establish a new city quality within the historic core.

Ivor Richards is an emeritus professor of architecture and former associate of Leslie Martin. He works in private practice.



Urban impact

In Cambridge the old urban narrative of university city/small market town, has been radically affected by the scale of urban expansion and by new and developing communities, ***writes Colen Lumley****. Over the past 60 years research and science parks, turbo-tourism, international conferencing, language schools and ethnic immigration have collectively opened up social life and transformed the urban culture. While the city grows the infrastructure struggles – a legacy of restrictive historic fabric combined with disjointed transport hubs, obstructing the elegant resolution of the new scale of habitation and movement within the city, contributing to the bad dream of modern life.*

The recent history of retail development in central Cambridge began with the Holford/Wright Plan of 1950 which posited that the commercial future of the city turned mainly on provision for central area shops, through its influence on the siting of other commercial and cultural outlets. The antiquarian flavour of the report belies its influence, still strongly manifest in projects only reaching their conclusion today. In the early 1960s the plan was incorporated into a masterplan for the central area by city architect Gordon Logie. Grand Arcade is the final piece in the jigsaw of the piecemeal redevelopment envisaged by Logie nearly 60 years earlier, with virtually the same combination of elements.

The large complex together with the adjacent Christ's Lane are the principal objects of the most recent resurgence of retail in the city centre. Grand Arcade is an enlargement of the Lion Yard development of the 1960s – the first shopping mall in the city; Christ's Lane is a redevelopment of Bradwell's Court. Both emanate from the strategic policies of the 1996/2004 Local Plan which required the raising of the quality of shopping and ease of access. The sites are located in a confined urban matrix, still reflecting medieval street patterns, on the southern margin of the historic core. Transport and the expansion of central retail facilities are closely partnered issues, and access from catchment areas a key concern to retailers.

The first phase of implementation of the Logie Plan took place in the 1970s with Arup Associates' Lion Yard redevelopment, which rebuilt the site of the Red Lion coaching inn and pedestrianised Petty Cury. It replaced the coaching inn and backlands, provided an arcade to Petty Cury and a shopping mall extending from the Market Square and linking with Bradwell's Court and the central bus station beyond. The mix included a new central library, magistrates court and multistorey parking.

A subsequent study of retail needs (Parry Lewis Report) envisaged major new centres to the south and east of Cambridge. The strategy was to extricate retail from the syndicate of landowning colleges by moving out of town. This attempt was quietly quashed for fear of damaging the

Top *Christ's View (ph: PR).*
Above *From Christ's View residential balcony; rooftop breezeway; apartment interior (ph: Alastair Carew-Cox).*
Left *The Grand Arcade site.*

Right *Internal courtyard at Christ's View duplex (ph: PR); St Andrew's Street (ph: PR); view from Christ's Pieces (ph: ACC).*
Below *Rooftop of Grand Arcade parking structure (ph: KP).*

retail centre and the the surrounding environment. Meanwhile out-of-town shopping centres arrived on the scene as Sainsbury's opened the city's first supermarket on the inner ring road.

The development of the Grafton Centre in the 1970s, in the Fitzroy Street/Burleigh Road area identified in the Holford/Wright Plan as a second shopping centre, was planned to take the pressure off the historic sector. The original masterplan, not fully taken up, was by Richard Rogers and entailed the destruction of part of nineteenth century Cambridge.

The 1996/2004 Local Plan raised the sights on retail provision in recognition of the burgeoning regional shopping centre status of Cambridge. Grand Arcade, occupying a 2.8 Ha site, is the single biggest redevelopment ever undertaken within the historic core. A park-and-ride facility on the southern edge of the city was included in the package, as was additional car and cycle parking. The seven-year implementation period following planning approval entailed a complex round of decanting and temporary accommodation, affecting the magistrates court, central library and John Lewis store.

Grand Arcade provides the final set of components to Logie's megastructure. It extends the Lion Yard mall, creating new access points from the surrounding street network. Key to the scheme was the redevelopment of the 160-year-old Robert Sayles/John Lewis store. The Grand Arcade mall itself branches from the atrium of Lion Yard and dog-legs (as St Andrew's Arcade) to an entrance on St Andrew's Street. The mall divides the development into three blocks with individual structural grids.

Although complete since Spring, the leases on many retail units are still to be taken up, while the attraction of the new venue has drawn traders from other parts of the city, with consequential impacts on the locations vacated. It will be some time before the full impact can be assessed.

The Holford Plan envisaged the redevelopment of a block of mainly nineteenth century buildings formerly surrounding Bradwell's Yard, between Christ's and Emmanuel College on St Andrew's Street for retail. This was implemented in the early 1960s with a small shopping arcade which led to the central bus station on Christ's Pieces. The scheme involved the building-over of Milton's Walk/Christ's Lane. Panter Hudspith's project replaces part of this development and reopens Christ's Lane after 50 years of closure, replacing the arcade, which had become a pinch-point in circulation in the growing city. The emergence of new independent pedestrian routes traversing the city is a life-enhancing attribute that has its correlation in the historic passages and paths of Cambridge. The promenade that has evolved from the stalls of Market Square, through the shopping malls and arcades, and across Christ's Pieces and New Square to the Grafton Centre and its East Road hinterlands is a new social feature. The Grand Arcade and Christ's Lane developments reinforce and enhance this reorientation of the primary urban circulation pattern, drawing the visitor more sympathetically from architectural and academic delights into the commercial and cultural everyday heart of Cambridge.

Colen Lumley, a founder member of the Cambridge Urban Forum, was assisted by Brian Human in preparing this text.

Grand Arcade project team
Architect: Chapman Taylor; design team: James Atha, Andrew Brown, Marian Cross, Anna Fauvelle, James Freeman, Anna Idzikowska, Kazuyo Matsuda, Tim Partington, Trevor Rowlinson, Richard Savory; design architect, John Lewis store: Colin Stansfield-Smith, John Pardey Architects; qs: Cyril Sweett; structural engineer: Beattie Watkinson; m&e engineer: Faber Maunsell; planning consultant: Drivers Jonas; lighting design: Spiers & Major; client: USS, Grosvenor.

Seclected suppliers and subcontractors
Jaune de Metz-faced precast cladding panels: Techcrete; perforated cherry acoustic panels, metal rainscreen: GIG; structural glazing, glazed roof: SpaceDecks Systems; stone flooring: Vetter; Rheinzink standing seam roof: TR Freeman; polished plaster: Armourcoat.

Christ's Lane project team
Architect: Panter Hudspith; design team: Simon Hudspith, Paul Curtin, Dan Changer, Tobi Weaver, Magnus Wills, Andy Matthews, Bella Edgley, Gareth Hunter; qs: WT Partnership; structural engineer (contractor team): PEP; m&e engineer (contractor team): Venables Associates; client structural engineer: Whitbybird; client m&e engineer: Faber Maunsell; landscape architect: Churchman Landscape Architects; main contractor: SDC Construction Group; client: Land Securities.

Selected suppliers and subcontractors
Residential windows: Crittall; brick: Baksteen Old English Buff Multi; stainless steel roof: Arcelor Mittal Stainless (Ugine-Alz); masonry/stonework support systems: Ancon Building Products; terrace waterproofing: Permanite/Ruberoid; plasterboard: British Gypsum; aluminium roof edges: Bailey Eaves.