



The new entrance to Coalpit house (left and right), part of a new skin that also includes the rear elevation and swimming pool (above).

Recently, Michael Stiff has spent much of his spare time checking out the culture of Japan, including its bars and restaurants. This has certainly helped him in his work; this year his practice, Stiff & Trevillion, has designed the Royal Academy's travelling exhibition, 'New Urban Environments', which has been on show in Tokyo, and is currently completing the first of a chain of Japanese restaurants in Soho, following its successful interior for Wagamama in central London's Bloomsbury (1992).

Both Stiff and Andrew Trevillion share a fascination with modernist buildings such as Le Corbusier's restored Villa



A 1970s' house in Sussex has been rewrapped in a somewhat more rigorous manner by Stiff & Trevillion.

Mark Dudek reports

Remaking history



The scale and proportion of the double-height entrance hall (above) has been kept, allowing for effective circulation and penetration of light deep into the house.



Site plan (left) and original rear elevation (below).

Savoie with its fluid interior routes and the mathematical engagement with the grid of Mies van der Rohe's Barcelona Pavilion. The architecture of Louis Kahn is also cited as an important reference, and this remodelled house at Coalpit, Haywards Heath, is something of a romantic homage to high modernist architecture.

The basis of the work was an earlier house that was architect-designed in the 1970s. The unsightly extensions and additions of the subsequent years were removed, and the original house enlarged and completely transformed by the addition of new elements: an external entrance court, a new double-height entrance hall, an indoor swimming pool, a new landscaped garden and a glazed loggia allowing free movement from inside to outside.

The design skilfully choreographs a range of new materials and finishes that enhance this inside-outside quality. White limestone is used on the garden terrace, which runs into the loggia. This material dissolves into a smooth black slate within the living spaces. Light pine timber panelling and carpet are used side by side. Rough, whitewashed brickwork sits next to smooth, fair-faced plaster.

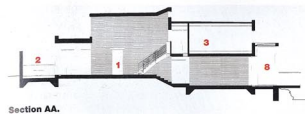
Patterns within the room quarrel quietly among themselves, with a conciliatory winter sun illuminating deep into the space through the double-height, glazed loggia. The effect is one of calm neutrality, a house for contemplation and reflection.

The new additions are 'wrappings' around a core structure. A major route through the centre of the plan, a number of visual axes connecting the interior to its external landscape, and the delineation of clear thresholds are some of the devices that impose order.

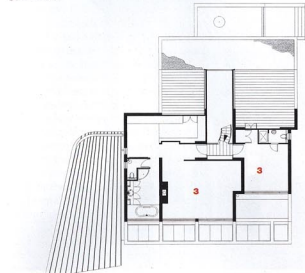
This systemisation effects a seamless transition between the old and the new structures as the linked interior spaces refer out to the surrounding landscape. It is reminiscent of Kahn's Korman House, the new structure modulating and controlling the site. The additions are so powerful that the end result is a startlingly vibrant new building – particularly on the garden side, where the swimming pool reflects a luminous blue light up into the living spaces even on the duller day.

Stylistically, it is a thoroughly modern building, and yet it is very site-specific. One key to this is the way in which the new building responds to its context.

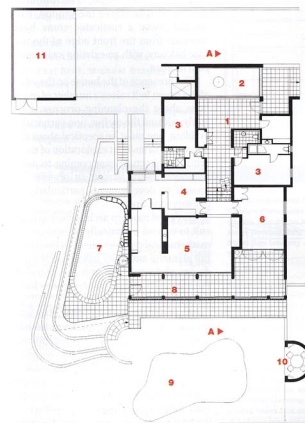
The best views are towards the south, with the Sussex Downs stretching widely



Section AA.

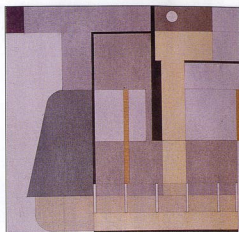


First-floor plan.



Ground-floor plan.

- KEY TO FLOOR PLANS AND SECTION**
- 1 Entrance and hallway
 - 2 Pool
 - 3 Bedrooms
 - 4 Kitchen
 - 5 Living room
 - 6 Dining room
 - 7 Indoor pool
 - 8 Loggia and conservatory
 - 9 Outdoor pool
 - 10 Pool house
 - 11 Garage



Mike Stiff's painting of the floor plan abstracts the elements (top, right). Detail of entrance hall (right).

across the horizon. The three main living spaces are orientated along this southerly aspect at ground-floor level, with two master bedrooms on the first floor.

The facade is unified by the addition of the double-height glazed loggia, which runs along the entire facade of the garden elevation. The picture window not only opens up views but also gives the building a presence that is appropriate to the scale of the landscape beyond. The loggia and a secondary recessed line of glazing behind establish rich modulations of light and texture.

Adjacent to the loggia is the new indoor swimming pool, the tapering form of whose space adds a playful twist to the plan. It is integral yet separate, another room in its own right, yet part of the social life of the new house. The room suggests an opening up of the plan, so that, whereas the landscape of the house is contained within the geometries of a grid, the pool room landscape literally tumbles out and down into the garden itself.

The garden design – by Whitelaw

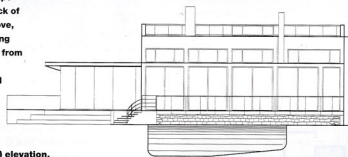




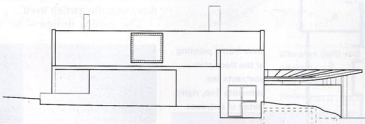
The loggia wraps around the back of the house (above, right), its glazing quite different from that for the swimming pool (above, left).



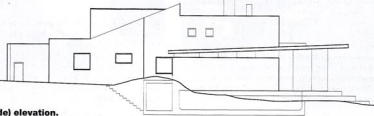
South (garden) elevation.



North (entrance) elevation.



West (side) elevation.



Turkington – works particularly well in relation to the house. The building appears to float above the ground, suspended above a rusticated stone base recessed from the front edge of the terrace balcony, with an existing swimming pool in front.

The presence of the house on the edge of the green belt raises a number of questions about the planning process. Certainly, without the earlier, non-vernacular building, one must be sceptical about the possibility of such an exploration of modernist architecture ever coming to pass. Planners tend to favour an organic approach to development, particularly in conservation areas.

But good modern architecture is difficult to extend organically because of its mathematical completeness. In this case, the planning authority has respected the design philosophy: apart from control of the materials used, the designers have been allowed a free hand.

Michael Stiff is categorical: this was the easiest planning application he has ever been involved with. To paraphrase Kahn, this came about simply because the site asked for a solution of this nature.

There is no postmodern ambivalence here: the closed building suggested matching brickwork to the original house; the views and solar orientation at the front could only ever have been about open-

ness and glazing. It is the confidence and clarity with which this is carried out that makes Coalpit such a refreshing addition to the modern architecture of Sussex.

Viewed as a range of designer photographs, the building undoubtedly comes across as an elegant stage set, dreamlike in the best Villa Savoye tradition. But it is more than that. Its ordering of a set of existing site factors, a ragged garden, an irregular and uncoordinated plan form, and the generally dated feel of the original structure have been achieved by the use of other historical precedents – surely a valuable lesson to any architecture student: know your history.

However, restraint must be exercised when plundering the past. This is a mature piece of architecture, and the mark of that is its ability to appear totally original within its richness of reference.

For the client, a lover and collector of modern art, this building feels like a wholly appropriate addition to his collection.

Mark Dudok teaches at the University of Sheffield School of Architecture and runs the Children's Environments Centre. He is currently collaborating with a specialist manufacturer in the development of a range of modular housing units.

CREDITS

Architect Stiff & Trevillion Architects (Michael Stiff, Michael Bradley)
QS Stanley Griffith & Gibson Associates
Structural engineer Price & Myers
Landscape architect Whitelaw Turkington

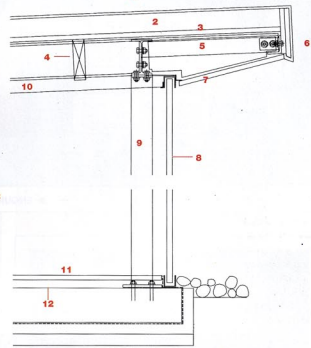
Cost Specification

Grass internal area	482m ²	with 50mm screed finish to take 20mm
Contract value	£845,895	Cascale Portuguese limestone by Stone Craft
Cost/m ²	£1,181.59	(reader enquiry no 301), 20mm Vacheron Rouge stone flooring, fully rubbed, sawn edges by Stone Age (enquiry no 302) and anthracite grey woolen carpet.
Costs		
Demolitions and substructure	£11,390	Carvyl walls
Upper floors and stairs	£14,800	100mm Thermaite turbo blockwork (reader enquiry no 303) with Gyproc plaster finish
Roof	£28,850	Internally (enquiry no 304), 75mm cavity with 50mm Jablite cavity bat insulation (enquiry no 305), 100mm external leaf of West Heathley Stock brickwork (enquiry no 306).
External walls, windows and doors	£98,020	Loggia
Internal walls and doors	£17,870	80mm reinforced steel columns with 100mm galvanised steel studs with 20mm marine plywood clad with 275mm white PPC Alcobond composite aluminium cladding (enquiry no 307). Specialist sliding doors and structural glazing roof by Cantifly of London (enquiry no 308).
Falls, floor and ceiling finishes	£78,940	
Fittings, sanitary and plumbing	£35,630	
Mechanical and electrical services	£42,740	
Internal swimming pool	£98,610	
Pool house	£10,420	
Garage	£17,850	
External works and drainage	£81,268	
Specifications		
Ground floor		
Floor is 150mm concrete slab on 25mm Polytam		



Rear elevation: the original brick core is still visible rising above the loggia and pool.

KEY THROUGH SWIMMING POOL GLASS WALL
 1 Stainless steel standing seam roof
 2 80mm rigid insulation
 3 20mm marine ply deck
 4 Joist
 5 T-section
 6 Stainless steel fascia
 7 Softboard
 8 Double glazed unit
 9 90mm diameter column
 10 Stretch plastic ceiling
 11 Stone flooring
 12 Screed



Construction detail through full-length glass wall of indoor swimming pool.

Roofs

Tiled roof: Redland Delta concrete roof (enquiry no 309) tiled on treated battens on high performance felt.
 Flat roof: Grey Sarnafil single ply membrane (enquiry no 310) on glass fibre matting on 80mm foamglass insulation on 20mm marine plywood. Stainless steel roof: stainless steel standing seam roofing by Eurocom (enquiry no 311) on Meltrant acoustic felt (enquiry no 312) on 80mm foamglass rigid insulation on 20mm marine plywood.

Fittings

Stretch plastic ceiling in pool by Barisol (enquiry no 313). Heating by Acova (enquiry no 314). Ironmongery by Hignode (enquiry no 215). Lighting by Kron (enquiry no 316), SKK Lighting (enquiry no 317) and GPC Lighting (enquiry no 318). Staircase and architectural metal work by Park Metal (enquiry no 319).