

AR School Winner: Hayhurst and Co's spatial envelope of the Whitehorse Manor Schools in south London forms a smart jacket encasing a clever masterplan

<http://www.architectural-review.com/buildings/a-shrewd-and-witty-collage-of-new-forms-without-wow-factor-intentions/8689130.article?blocktitle=AR-School-2015-Winner&contentID=14417>

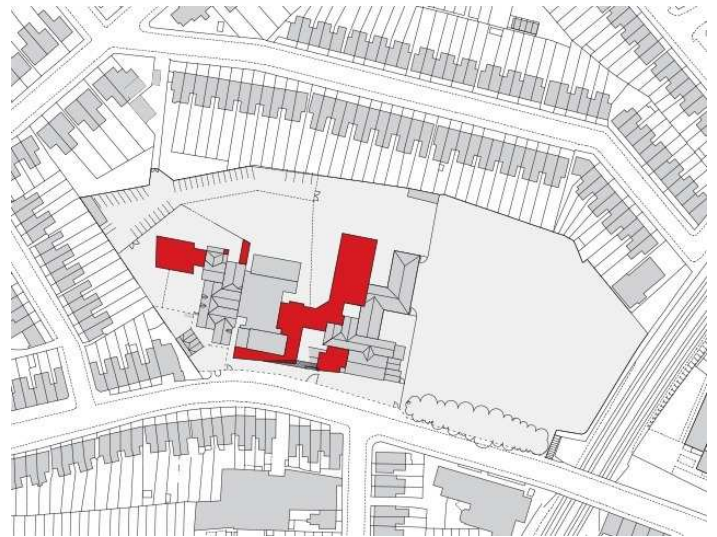
The transformation of the 630-pupil Whitehorse Manor Infant and Junior Schools has a single defining, and potentially trivialising, headline image: the copper-clad cowl-cum-combover that links the bookend buildings - one Victorian, the other built in the 1970s - which face the traffic sluicing past the frontage along the A212.

Hayhurst and Co was a practice of three architects when the scheme was conceived in 2009 for the Pegasus Academy Trust, and Nick Hayhurst admits there was a laser-like intensity and ambition at work; it was obviously a chance for them to make an early mark. However, the combover has nothing to do with wow-factor intentions.

'The site had been a typically thrombotic hodge-podge development of buildings across more than a century'

The architecture of the £4.5m scheme is a shrewd and witty collage of new forms, spaces and programming on a 1.7ha site that had been a typically thrombotic hodge-podge development of buildings for more than a century. By removing 400m² of existing ground-floor fabric, adding a new upper level, and recomposing part of the external ground-plane, the practice has significantly stretched spatial envelopes, delivering 1,400m² of new internal and external space. Most crucially, the design has reinvented the school as an educational community and as a place that is visibly open and connected to the general neighbourhood; this sense of an inviting and revealed place of early education is perfectly evident in the new classrooms and transition spaces, and in the fact that parents are plainly comfortable in the buildings.

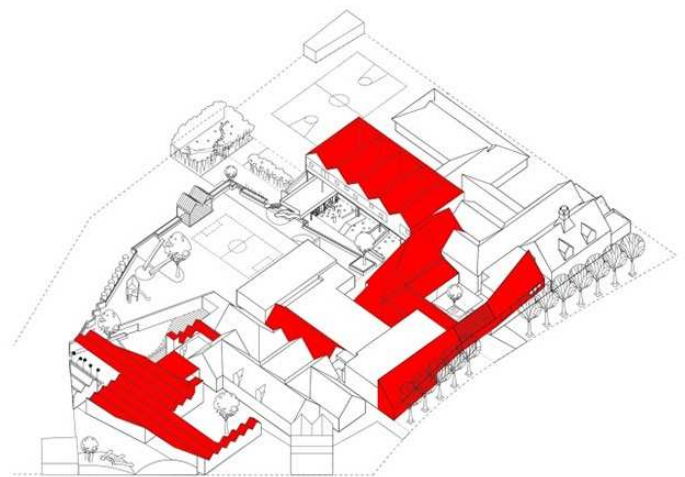
On a purely architectural level, the scheme sets out a charming array of trainspotting contextual responses. Fundamentally, however, the design is a highly engaged piece of placemaking that has made the Whitehorse Manor Schools an exemplar of the government's £8bn Primary Capital Programme, which pledges to renew half of all the UK's better-performing primary schools by 2023 and, physically and atmospherically, to give them a heart-of-the-community ethos.



Site plan

The design brief was composed under the leadership of the executive headteachers, Jolyon Roberts and Lynne Sampson, its key requirements being significantly more classroom and secondary learning spaces, a new main entrance shared by infants and juniors, and 'a family feel'.

Apart from its shimmering new street threshold, the scheme has delivered five new junior classrooms, along with new infant reception and nursery rooms, an expanded assembly hall with a sound-insulated 600mm street wall section, a spacious reception hub, play areas that are greatly improved, elegant landscape plantings by Howard Miller, internal refurbishments and circulatory improvements.



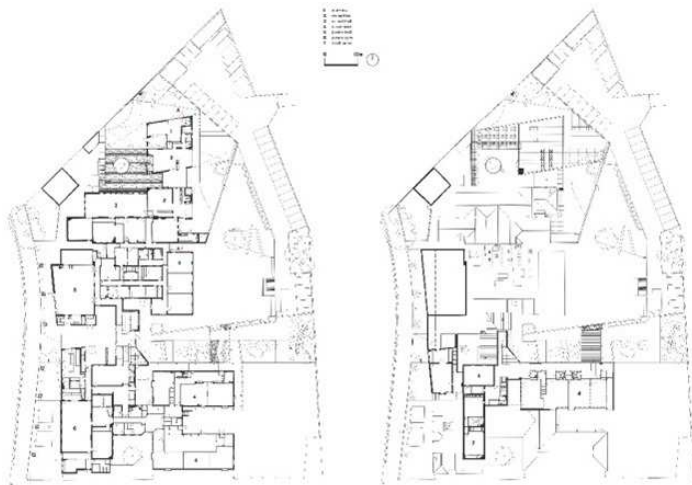
Axonometric - click to expand

The practice was lucky in two key ways. Having delivered a small project involving the junior school's locally listed Victorian bell tower in 2008, it was invited by Roberts to produce a feasibility study for expansive improvements to the conjoined junior and infants schools; unusually, perhaps, Roberts' invitation was unilateral rather than bureaucratically formalised. Hayhurst and Co took its chance, delivering a feasibility study that was effectively a development masterplan and a rough schematic design proposal.

The second key factor was that the project was procured via a traditional contract, which gave the architects substantial control over the design and construction of most of the key elements for the majority of the project period. The scheme looks and feels well built.

The first phase of the project, completed rapidly in 2011, delivered internal improvements to the infant school and its nursery. The second phase, completed in 2014, dealt with the main entrance and reception area, the central wing and outdoor play areas of the junior school, and a new roof linking the infants' and administration segments. These outcomes give no sense of what confronted the architects, or the degree of transformation that has taken place in this fillet of the borough of Croydon.

Two 'before' images summarise Whitehorse Manor's historic site constipation and its rather defeated demeanour. The first is a monochrome aerial view showing parked cars jammed into the very centre of the site, surrounded by school buildings from the 19th century, the 1930s, '50s, '70s and '90s. The second is a photograph of the elevation facing the A212, in which the Victorian and '70s buildings are joined by a cheapjack kitchen block that looks like a stretch bungalow. The entrances to the two schools are barely noticeable gullets at the two ends.



Floor plans - click to expand

At the heart of the design response were three forms of ordering that can be thought of as macro, midi and parti: first, a plan-driven clarification of the whole site; second, a conceptual and actual greenway that runs from the new entrance straight through into the first section of the central play area; third, an architectural concept articulating a sophisticated game with roofs, gables and interior ceiling forms. The game isn't precious: the contextual coding is of a piece with the overall re-ordering and extension of space.

The car park zone was cleared to de-herniate the core of the site; the once-deadly kitchen was pushed back, in plan, from the pavement; the entrance portal-cum-maintenance bridge formed the new metal-clad centrepiece of the street elevation; and this non-Euclidian golden section continued northward along the pavement to enclose the frontally deepened assembly hall.



Section AA - click to expand

Students, parents and visitors pass through the portal, cross an open, veranda-like transitional threshold, and then enter a large reception

volume (the only securitised layer) beneath a dramatically angled - and visually gripping - cascade of timber-battened ceiling pitches. From here, junior school students proceed up a wide, angularly splayed staircase-cum-terrace to five 60m² classrooms with oversized doors in the new 15m-wide upper floor built on the existing single-storey '70s wing.

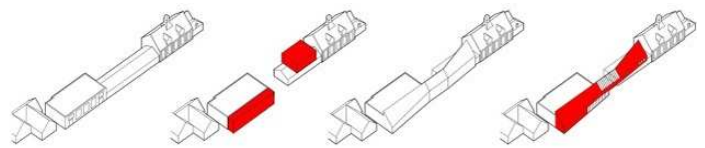
Nick Hayhurst notes that the relatively elaborate timber stair structure cost less than building an enclosed staircase and, as there are four exit routes from the classrooms, including a large open-air study deck and stairs down to the play area, there were no fire escape issues.



Section BB - click to expand

In the infants wing, the practice decompressed the multi-purpose hall by stripping out a suspended ceiling and exposing its high Victorian double-pitched volume. In the nursery wing, Hayhurst created brilliantly childish ceilings (and timber fittings) resembling tiny versions of peaked Victorian ceilings, recalling the AOC's alfresco timber roofs at the Janet Summers Early Years Centre in Southwark in 2006.

Hayhurst carried this perky peakiness even further (if not FATishly) by perching small faux gable-ends on the top of the low white-painted brick wall that divides the play areas for the infants and the nursery mites.



Process diagram - click to expand

'It's a lexicon of different scales of intervention,' he says. 'The idea of scales of pitches, the smallest for the smallest children, and the largest to give a sense of civic scale.' The only planning proviso was that the height of the new street-facing centrepiece should not exceed the Victorian building's ridge height.

Hayhurst relishes the relationships between the original Victorian roofs and the new roofs and ceilings: for example, the pointy ceilings in the nursery replicate the scale and pitch-angles of the dormer windows in the infants hall. The five roof ridges above the new junior classrooms are evenly spaced, but the four classrooms beneath them create a sectional asymmetry. There is a contextual wilfulness in this: Hayhurst wanted the pitches to have steep Victorian angles, which ruled out a four-ridge arrangement. He also liked the fact that the mismatch gave each of the east and north-lit rooms unique sections; ergo, referential complexity and volumetric contradiction.



Peagasus Academy Class Room

The west elevations of these new steel-structured classrooms, clad in western red cedar shingles, are quietly elegant. And the decision to create a wide, substantially glazed corridor on the west side that jetties out over part of the central greenway and play area produces a very pleasant, loose-fit internal atmosphere; the vibe in the new parts of the school is distinctly convivial.

The new architecture owes a great deal to the consultation and research process that informed the design, and this part of Hayhurst's design and access statement is a model of its kind. Three other London schools were visited by the architect and the client group: Childeric Primary School, New Cross; Heavers Farm Primary School, South Norwood; and dRMM's Clapham Manor Primary School. There was a critical area use-analysis, and an interesting range of teacher and pupil input.



Source: [Anthony Coleman](#)

The public's initial reaction was distinctly mixed. Jolyon Roberts says many local people objected to the copper-clad facade of the centrepiece. 'Well, it was something new, wasn't it? But I think about 80 per cent of the local community approve of it now. And I admit that I didn't understand the cathedral scale of ceiling [over the reception area]. But it's a nice surprise, isn't it? And to get another seven classes without needing more land is really something.'

Hayhurst and Co's early projects were house extensions. In a sense, their interventions at the Whitehorse Manor Schools are also house extensions, writ both large and small. To re-echo the Venturis, the practice has delivered a scheme whose architectural manner, programmatic clarifications and contextual expression deserve a suitably playful subtitle: Learning From Lost Vagueness.

Whitehorse Manor Schools

Architect: Hayhurst and Co

Structural engineer: Ian Wright Associates

M&E engineer: Edward Pearce

Photographs: Anthony Coleman

<http://www.architectural-review.com/Journals/2015/09/18/u/t/g/Axonometric.pdf>

<http://www.architectural-review.com/Journals/2015/09/18/y/t/a/Ground-Floor-and-First-Floor.pdf>

<http://www.architectural-review.com/Journals/2015/09/18/e/r/k/Section-AA-Through-Nursery.pdf>

<http://www.architectural-review.com/Journals/2015/09/18/v/y/s/Peagasus-Academy-Section-BB.pdf>

<http://www.architectural-review.com/Journals/2015/09/18/f/m/n/Process-Diagram.pdf>