## JRNAL OCTOBER 2010 | £5.50 | €19 | US\$20 | WWW.RIBAJOURNAL.COM House and home Celebrating the Manser Medal Compare and contrast. Two rural additions Profile: John Christophers is sustainable in suburbia Made to measure: Bateman's Row does it all Rethink: James Gorst on domesticity Intelligence: Martello tower's enlightened conversion

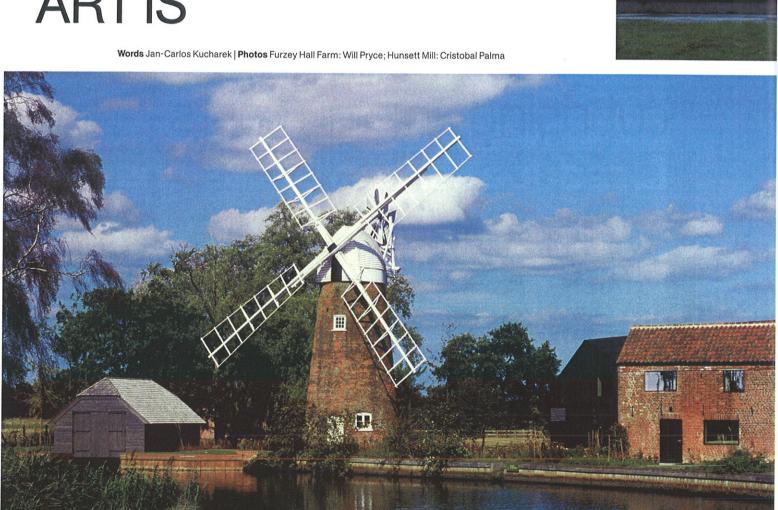
## Process | Furzey Hall Farm and Hunsett Mill





It's the perennial poser: how to marry picturesque and protected age with contemporary style and comfort. Two extensions to venerable sites drew over the originals in different ways to create modern collectables from old masters

## HOME IS WHERE THE ART IS









AFTER BASTARDISING GOYA ETCHINGS and Adolf Hitler watercolours, Jake Chapman, client of Waugh Thistleton's extension to Furzey Hall Farm in the Cotswolds, knows a thing or two about adding to an original. Recently Cabaret Voltaire, the Zurich club founded in 1916 by authors of the Dada Manifesto Hugo Ball and Tristran Tzara, asked the Chapmans to give their take on the early 20th century Dadaist movement in its show 'Die Dada Die'.

The Chapmans took an original 1607 Pieter Breughel the Younger Crucifixion scene, and in their dark dystopian manner, painted on their own visions. Dada, they argued, came out of social and aesthetic conditions that can be neither evoked or recreated, and to try to do so contributes to the death of the movement. But in their act, the brothers question, in the spirit of Dada, what is sacred and what is sacrilegious. And in the meantime a fickle art market decides the value of the new painting, depending on whether it's perceived as reified or ruined. It's a conundrum that would have fascinated Ball and Tzara.

Architects may well identify with the notion of extreme re-readings of history, but while the art market might thrive and profit on this public paint-throwing, the conservative UK property market rarely proves amenable to such risky tactics; yet with the following two Manser Medal nominated private projects, the architects have certainly had a go, with two

very distinct approaches to the idea of the family home.

Furzey Hall Farm links an old farmhouse to its barn with a Miesian glass extension that creates a new living and circulation area and a whole new relationship between the two buildings. Acme Architects, on the other hand, has swept away piecemeal additions of the past on its 19th century Norfolk mill house, and introduced a radical new structure that takes the building's existing shape, mutating as it replicates it, to create a bold rereading of the original both in form and materials. Engineering approaches are oppositional too, with one going all out to leave no trace, and the other's structure manifesting itself in every planar facet of its volumetric enclosure.

Waugh Thistleton's project, an 18th century

'The Chapmans took an original 1607 Pieter Breughel the Younger Crucifixion scene, and in their dark dystopian manner, painted on their own visions' ABOVE: Furzey Hall Farm, south east elevation to courtyard and kitchen. LEFT: Hunsett Mill, south west elevation from the River Ant. TOP LEFT: Jake and Dinos Chapman, Calvary, 1607-2010, o on canvas, 121.5cm b 206cm. Courtesy RS&A Gallery, London.









Cotswold farmhouse bought as a quiet country retreat from London's bustle, demanded sensitive treatment.

Partner Andrew Waugh explains that the proximity of the handsome Cotswold Stone barn immediately behind it meant that the idea of linking the two with a contemporary space, from which the circulation extended like spokes from a hub, was always at the forefront of their minds. But he adds that the real interest lay in the fact that the architectural intent was modified at every point as part of a critical process between them and the artist client.

It's no surprise then that the final design was drawn out of multiple conversations between them that drew on the houses of Adolf Loos' student Richard Neutra, an architecture of planes set within the natural landscape, and reconciled this with the abstract installations of Donald Judd. Influences from both are evident, with a preoccupation for simple, minimalist lines that contrast with the natural materials and traditional forms of the existing buildings.

The new 3.4m high interstitial space

'The real interest lay in the fact that the architectural intent was modified at every point as part of a critical process between them and the artist client'

TOP: The Furzey Hall barn in its original state. Structurally unsound, it was not capable of bearing the additional loads imposed by insulating and lining the ceiling.

ABOVE LEFT: The original structure and (MIDDLE) after being strengthened with removable steel sections.

ABOVE RIGHT: The remodelled barn.

between them now forms what Waugh termed 'the bleeding heart of the house', with Chapman sufficiently impressed by the statement to insist that its kitchen walls be painted the colour of blood.

Off this new volume run two fully glazed circulation corridors, stretching along the back wall of the farmhouse to a new timber clad extension containing a guest bedroom and bathroom, and along the side wall of the barn, leading to the huge double height main living space of the barn, and beyond to the parents' private quarters.

The move has its own internal logic once within the home but it makes for a slightly disconcerting entrance from the farmhouse, where the eye is led along the full length of one corridor's poured floor to terminate at a distant view of a standalone bath — a satisfying twist on the usual domestic hierarchies. And despite the house's size, it's a gesture that smacks of an intimacy that is prevalent everywhere — nowhere more so than in the original farmhouse itself, whose three floors have been dedicated to the children. Its scale suits them — ceiling heights are low, and



subtle shifts are made to internal colour schemes, like startling fuchsia pink window reveals, bringing warm light into the space. Other details reinforce this Wendy House experience — the replacement timber staircase is simply constructed — a beautiful oversized oak handrail sitting atop unusually thick balustrades of duck-egg blue painted timber dowels. An adult hand seems small against it, and in contrast to the small size of the farmhouse itself, the witty playing-off of scales creates effects akin to an 'Eat Me/Drink Me world.

Elsewhere, the engineering is similarly sophisticated, if far less palpable. While evident in the detail, such as the folded plate stair of rusted steel leading from the master bathroom to bedroom, the real gymnastics are saved for the glazed, column free corridor spaces opening fully to the garden that cantilever off the existing structure, and the roof of the barn itself.

Engineer Elliott Wood fully supported the architects' desire to reduce the visual structure to a minimum to maintain the compositional integrity of the existing

'The original farmhouse has been dedicated to the children. Its scale suits them – ceiling heights are low, and subtle shifts are made to internal colour schemes'

ABOVE: Sections showing the relationship of the old Furzey Hall farmhouse to the existing barn.

buildings, and went to real efforts to achieve it. Any steel columns to the corridors would have had to be insulated, increasing visual interference, so this was ruled out at an early stage. But with the corridor facade opening fully onto the pool and garden, the possibility for structural deflection had to be minimised, despite the architect's contradictory demand for the thinnest roof section possible. Where the cantilevers were installed, existing stonework was carefully restored to ensure good bearing, with tolerances so tight that manual on-site strengthening of the cantilever's box sections was required.

But the most onerous aspect of the 'leave no trace' engineering approach was when it was ascertained that in its existing state, the roof would struggle under any increased loadings of insulation and dry lining. Steel ties fixed with resin, carbon tape and flitch beams were all considered, but the most honest solution involved stripping the roof back to the rafters and installing a new fine steel frame fixed to the top of the barn wall. With increased lateral loadings on the top of the wall, this was then tied back to the original timber structure



using metal straps. The original Cotswold stone roof was then reinstated, the original structure untouched but augmented in a deft move.

While Waugh Thistleton's approach sat easily with the planners, the planning process was far more complex for Acme Architects and its proposed extension for two families to a mill building in its idyllic setting on the River Ant in the Norfolk Broads. Here was a Dadaist dilemma of a different nature — how to take the most photographed and painted chocolate box view in the county and add to it in a contemporary manner without overwhelming the picturesque original composition.

Acme's Friedrich Ludewig confirms that the Norwich planners' interest in the design of the project was active and continual, but the firm's thinking was always that while the windmill and the original mill house were sacrosanct, the cumulative build up of extensions at the back was not only unsightly, but poorly built. Its design strategy was predicated on removing these ancillary structures to return the site to its original 19th



'The Norwich planners remained firm – any extension had to maintain the original ridge heights of the mill house' century components and start from there.

The challenge then was the nature of the extension. This went through 20-odd space increasing design manifestations, from subterranean 'Tellytubby' hillocks to mirrored stainless steel to perspectival trickery, but the Norwich planners remained firm — any extension had to maintain the original ridge heights of the mill house. Thus constrained, the firm decided to look again at the traditional form of the house and decided to take its basic shape and mutate it as it curved around the back of the house, defining a new private courtyard for the home.

The ridge heights and eaves constraint did prove problematic however — floor to ceiling heights in the original home were already painfully low, and Acme saw that any additional headroom would have to be claimed from the structural zone.

With engineer AKT, the decision was made to construct the whole extension in crosslaminated Norway spruce panels. Not only did the material have enough intrinsic strength to obviate the need for any supporting structure,









but the decision to play on the traditional roof form produced folded plates whose geometry gave additional stiffness.

Once made, this decision led to others. Wherever the projected roof plate interface with the wall panel drops below 2m height, the architects kink the roof back up at an incidental angle, creating a roof soffit landscape of sculptural peaks and troughs. The quality of the timber panels making up the volume looked and smelled so appealing that the interior surfaces were left exposed and untreated. Likewise, with no need for lintels, the facade composition became flexible. Windows puncture the walls and roof at seemingly random positions, with corner windows no less complex than conventional ones. With the roof structure used partially to suspend the first floor, the ground floor is virtually open plan, so light pours in from all angles. Acme was also keen to open out the internal volume, so that the upper floor pulls back to create dramatic views of that reverse mountain range roof soffit. What the architect couldn't gain in floor heights and area, it won by hollowing out the space to create dramatic

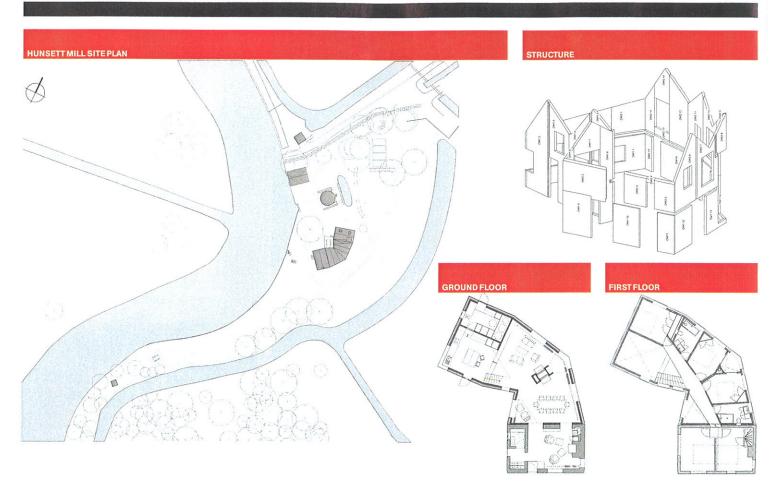
double-height volumes.

Environmental concerns within the new design were paramount. Concurrent with the design of the house, the Environment Agency was in the process of shoring up the River Ant's flood defences. The client was keen to have a means of defending the house against floods, which happen every five years or so, and which were having a crippling effect on the family's insurance premiums. Acme's solution was ingenious and two-pronged. Ludewig says that the Agency was over the moon with its proposal to bring in over 200 skips of clay and place it to the rear of the site to build a berm wall to protect the house. This one move, combined with the local farmer's decision to allow his land to return to wetland in perpetuity, saved the Agency from having to deal with seven miles of riverbank further downstream. In the event of the wall being breached, the whole extension sits on a 350mm concrete upstand, hidden by a sacrificial softwood cover plate that runs from skirting to dado.

Significant time was spent with the planners on deciding what the exterior

TOP: The completed home and extension from the windmill.

ABOVE, FROM LEFT: The original collection of extensions; the site reduced to its original components and then added to using the cross-laminated panel system by Eurban.



treatment of the new extension would be, and despite the architect's initial radical approaches, Ludewig realised that the final choices would come from the pallet of the local vernacular, so the firm looked at the hierarchies inherent in their use.

Locally, flintstone was always associated with churches, brick with houses, and timber slats with working buildings. It had always been Acme's intention to make the extension subservient to the main buildings, and so it decided on timber slats for every facade and the roof. A little more honesty was demanded from the material however, and after investigating various indigenous options, the practice opted to import Japanese 'Yakisugi' charred cedar slats that gave a thick, rich silver-black patina. It's an exterior finish that in a certain light, gives the extension the feeling of being 'barely there'.

Acme is happy with this effect, describing the building as a ghost of the original. It is — in form, nature and deference — although Ludewig admits that some of the daytrippers photographing the scene from their rowing boats have complained that the extension

'Both houses respond with a different aesthetic to the presence of the past, but also bear in mind the ultimate needs of the user'

SITE PLAN: Two hundred skips of clay were required to create the berm wall flood defence to the rear of the house – a strategy that ultimately spared the Environment Agency having to deal with seven miles of river defence.

STRUCTURE: The cross-laminated panels produced a jigsaw approach to the building's construction.

along with the new flush windows of the original mill house, have ruined the 'Chocolate Box' view in perpetuity.

Despite the gymnastics of form and materials that accompany these two extensions to their historical originals, it must be remembered that these are family homes and their success must be predicated on how well they actually meet the needs of their occupants, rather than expressing the formal mores of the architect.

The Chapmans' layering of modern readings onto Brueghel's Old Master might set up an interesting aesthetic dilemma and drama, but it remains an artistic notion. In their own ways, both houses respond with a different aesthetic to the presence of the past, but also bear in mind the ultimate needs of the user, to give a luxurious architecture of humility and deference. And for architects that might think otherwise, there's a lesson in remembering Breughel's father's painting, 'Fall of Icarus', where the high drama of the winged boy who flew too near the sun and plopped into the sea is a mere blip, lost in the workaday normality of everyday life.