

CHANGE OF TACK

WRITTEN BY *Peter Salhani*

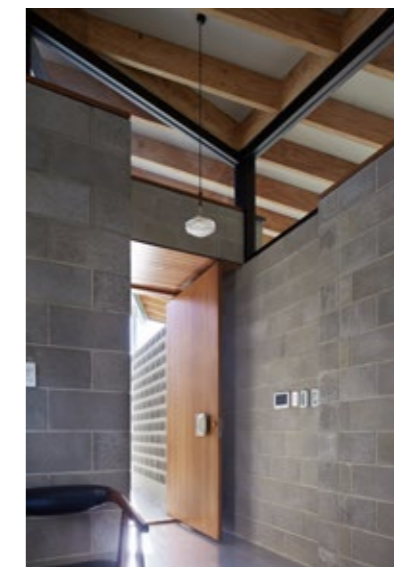
In December 2015, the city of Perth lost an iconic building by a seminal architect. The 1965 Paganin House in Floreat, designed by Iwan Iwanoff was destroyed by fire. Along with Iwanoff's trademark use of concrete, Paganin House combined the elegance of European modernism with the optimism of California's Houses, and had long been studied by architecture students at both Curtin University and the University of Western Australia. "It was one of his most important works in Perth – highly influential. It's a huge loss," says Andrew Hagemann, a principal at Fringe Architects.

Hagemann's latest project is something of a tribute to Iwanoff – an architect he both studied and admired. The clients have three young children, a collection of mid-century furniture and a particular interest in Iwanoff's concrete blockwork. "Our core idea was to create a new form of family home that responds to its site and adapts to the changing life stages of a five-member family," says Hagemann.

Built on a standard site in the suburb of Wembley, the Concrete House responds instinctively to the Perth climate of extreme sun and the Fremantle Doctor. The site runs east-west, but the architects ran the house sideways down the block, anchoring its core back to the south boundary, folding its east and west wings towards the north. In doing so, a functional linear garden is enclosed along the entire north boundary (right).

"Flipping the plan allowed us to open every room onto the garden and temper the worst of the weather with the building's mass. And the garden centres on an existing jacaranda tree, which was actually our starting point for inverting the plan in the first place," Hagemann explains.

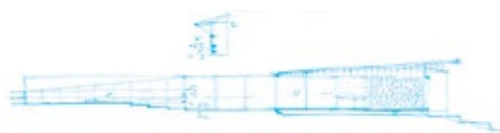
The interior is organised along functional lines. Its two-storey core has a central kitchen below, parents' pavilion above, with east and west wings wrapping north to embrace the garden. Entry, living and dining areas occupy the west wing, with a basement garage below. The more private



left Cantilevered outdoor living pavilion at Concrete House by Fringe Architects

right Concrete and breezeblock entry is a tribute to Iwanoff and a tactical screen

Architects in Perth are like sailors, taking their tactical cues from the skies and winds, to deliver homes that do more than merely shelter.



above Concrete House turns sideways to the street and away from the weather

east wing is the children's domain, with bedrooms, bathroom, rumpus, swimming pool and a separate entry for when they're older.

To filter the stiff winds of the Fremantle Doctor, the south elevation is fitted with small hopper windows at low and high levels, bringing air into the kids' rooms, while glass louvres at the far east and west ends pull a cross-breeze right through the long plan. Buffeting against the blistering sun are the mostly solid east and west walls, that, along with the concrete floors, collect thermal energy. The exposed north is shielded from glare by a roofline dipping low over cantilevered outdoor terraces, "cocooning the interior".

At the main entry, a breezeblock wall is a direct nod to Iwanoff and a tactical device at the south-west street corner, screening for privacy and further filtering the Doctor. It also allows patterns of late afternoon light across the living room terrace. Like Iwanoff, Fringe Architects has used the brute strength of concrete not merely to shelter from the elements, but to harness them.

Closer to the coast at South Terrace, architect Philip Stejskal adapted a 1910 semi-detached worker's cottage for a young extended family, with a similar focus on

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daylight and the Fremantle Doctor. This site also runs east-west, but is only six metres wide, with a near neighbour to the north.

"With a strong possibility the neighbour might extend in the future, the driver of this project became how to collect north light from high up and funnel it inside, to future-proof the house," explains Stejskal. His bijou Bellevue Terrace project won a National AIA Award for Residential Architecture – Houses (Alterations and Additions) in 2014, with its pivoting shutters and louvres embedded in the timber skin of the extension.

For the larger South Terrace project, Stejskal modified the old cottage and replaced its lean-tos with a sectional new kitchen/living/dining zone, stretching the interior towards the rear-lane garage. This enclosed a small courtyard to the north and internally connected (via timber stairs) to an atelier above the garage, comprising bedroom, bathroom, verandah and rooftop garden.

To broker north light between the neighbours, Stejskal raised three 'light scoops', like periscopes, through the extension. The light scoops draw in the winter sun and offer glimpses of the sky and trees. He tempered east and west glare with cost-effective screens of Hardie-lattice and reprised his pivoting vertical louvres from Bellevue Terrace for intrigue in the living room.

To loosen the tightly compressed site, Stejskal gives his elements multiple meanings. The purpose-designed garage door opens partially for the Fremantle Doctor without a loss of privacy. The old and new buildings are 'stitched' together with plywood cabinets that provide both a spatial division and essential storage. Materials used also have multiple meanings, with the new clay bricks and terrazzo flooring a reference to the suburb's mercantile past.

Stejskal's process includes asking fine-grained questions of his clients, such as how they like to sleep (block-out or filtered light), or where they like to read. "I try and get inside their head," he says.



PHOTOGRAPHY | ROBERT FRITH | PETER BENNETTS

Philip Stejskal Architecture
Beaconsfield, VIC
architectureps.com

Fringe Architects
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SOLAR ACCESS DIAGRAMS HELP ANTICIPATE THE WAY A SPACE WILL BE NATURALLY ILLUMINATED.



left South Terrace extension by Philip Stejskal Architect uses lattice screens and light scoops to borrow and soften the sun's rays from high up, while its new living space (top right) flows onto a sheltering central courtyard

right 1976 Marsala House in Dianella, WA, by Iwan Iwanoff

Iwan Iwanoff

Bulgarian-born architect Iwan Iwanoff brought European modernism to Perth in 1950, two years after Harry Seidler landed in Sydney. Renowned as a brutalist for his use of off-form concrete and breezeblock, his projects include the Northam Council Offices and Library and a string of houses in and around Floreat – host suburb for the 1962 Commonwealth Games. A pioneer of environmental design, he cooled his Floreat home above the studio with concrete blocks expressed as grilles on the outside, but concealed inside by floating timber cabinets, drawing air discreetly through the interior. His work symbolised the new modernity of the times and today enjoys a cult following. The Western Australian Chapter of the Australian Institute of Architects names its annual Small Project Architecture Award after Iwanoff. His 1976 Marsala House (above), affectionately known as 'Dianella's Disco House', is the youngest residence on the WA State Register of Heritage Places.

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SAM KLOPPER | KLOPPER & DAVIS ARCHITECTS



right South wall of the new double volume living space (with mezzanine study) at architect Sam Klopper's Schenton Park home

left top & bottom Timber wraps three sides of the Klopper House, before it opens to the north. Teak cladding wraps from outside to inside



TOM DIXON'S COPPER SHADE IN BRONZE MATCHES A TIMBER INTERIOR PERFECTLY

right A small new entry link to the old cottage is 'aged up' with a pressed-tin ceiling

below The beautiful and breezy Mayfair House by Klopper & Davis, sports finely turned timber and a butterfly roof



"A house is such a personal thing to create for someone and design should go beyond mere functionality."

Explicitly combining function with form, Sam Klopper of Klopper & Davis Architects added a teak-clad crucible to a 1920s red brick cottage for his own family in the micro-suburb of Schenton Park. The son of architect/builder Brian Klopper, he has distilled all his climate defence strategies into this building, as well as some of his father's influence. "Brian's got a way with materials that I've tried to inherit. I like to wrap a material from outside to inside, so it reads as both a structure and surface," says Klopper.

The timber addition – in Pacific teak, a stable species that is slowly turning silver over time – flanks a lane to the south. Its cradling form encloses the south and east faces of the new kitchen/living area. By contrast, the north-facing first-floor master bedroom and mezzanine office are held in a shell of white off-form concrete.

"A lot of my architecture is about those dichotomies and pairings. To really reveal spaces opened up to the light, you need a dark, deeply massed form. There's also a dialogue between public and private space that I like to emphasise with materials: masonry to enclose the quieter private spaces and timber for the lighter public zones."

Within this double-height interlocking volume, east and west ends are sealed or filtered for weather, with "small banks of louvres to the south and west drawing in the Fremantle Doctor and highlight louvres to the north drawing it out". For thermal performance and reduced embodied energy, new windows and doors are framed in timber, not aluminium. The north face along the garden is screened externally by an awning that

permits winter sun to warm the stone floor internally, with hydronic underfloor heating as auxiliary.

This porous new pavilion is grafted on with a new side-lane entry that keeps the original cottage private for the children's rooms. The entry's low scale and pressed tin ceiling are both a link to the past and one of the tactics in a Klopper game of scale.

"I guess the strongest influence from Brian would be that sense of vertical scale. We're both tall and I think we both design using volume (height) and planes in tandem. Here you walk from the compressed entry space into the much taller living area, so its feeling of volume is amplified. It's nice when you walk into a house to have that sense of tension."

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City of light and wind

Perth's bleaching white light is a combination of direct sun and reflected light, says architect Simon Pental. "The city sits on a flat coastal plain of sand deposited against a granite continental edge over millions of years. The light reflected off this dunal landscape is what gives it that intensity. It's been said that a similar effect gave the Dutch Masters' paintings a similar (though less searing) quality of light; at the time their landscape was dominated by water, so they also received a lot of light reflected upwards." Add to that the Fremantle Doctor – the stiff south-west breeze that blows in every summer afternoon off the ocean, cooling Perth down by three to four degrees – and you have a powerful set of natural elements that every architect in Perth designs around.

