

THE RESIDENTIAL ARCHITECTURE MAGAZINE

HOUSES

BOLD (RE)INTERPRETATIONS

1 + 2

BBP

BACKHOUSE/RITTER/GRAHAM

EKBERG

ERA

GALLAGHER

HRDINA

INNOVARCHI

MACCHIA

OWEN

POLLY

SMS

BRUCE TOWNSEND IN PROFILE



LANDSCAPING AND LIGHTING

recalling machu picchu

Influences as diverse as the paintings of Alasdair McGregor, the architecture of old Japan and the Inca buildings of Machu Pichu in Peru have been brought to this evocative dwelling by Sydney-based Chilean-born architect Jorge Hrdina.





ART AND NATURE, SHELTER AND EXPOSURE, safety and danger: such are the polarities woven into every aspect of this dwelling. With these themes foremost in mind, architect Jorge Hrdina has designed a building that confidently explores them – that embraces, rather than shies away from, the tensions they produce.

The magnificent location itself embodies the drama and magnitude of such fundamental concepts. The site, at the extreme edge of a one hundred metre high cliff, is exposed to extreme southerly winds and panoramic views on an epic scale. From close range, the edge elements of the house – the deck and the wet-edge pool – seem to merge as one with the ocean and sky. And viewed from a distance, the building appears to be growing out of the very cliff face – both, after all, have a good deal of sandstone in them.

In form, Jorge conceived the design as four pavilions, arranged primarily to address the shelter-exposure dichotomy. The two principal pavilions on the ground floor form a sheltered private zone for a second pool, an outdoor dining area and a covered walkway linking the two buildings. The ocean-facing pavilion acts as a buffer, taking the brunt of the elements and deflecting them: in this building the roof angles in particular have been carefully calculated to temper the wind. "The angle and length of both the main pavilion roof, and the wing roof over the kitchen, were computer modelled, so they act as wind deflectors over the courtyard," explains Jorge. "In fact, the computer model showed that in a 110 km/h wind, a 12 km/h wind would be experienced in the courtyard. These architectural elements are

designed both to protect the occupants from existing harsh conditions, as well as introducing a sense of scale – so the severity of the location harmonises with the more intimate living dimensions. For example, one can sit under a lower roof near the kitchen area."

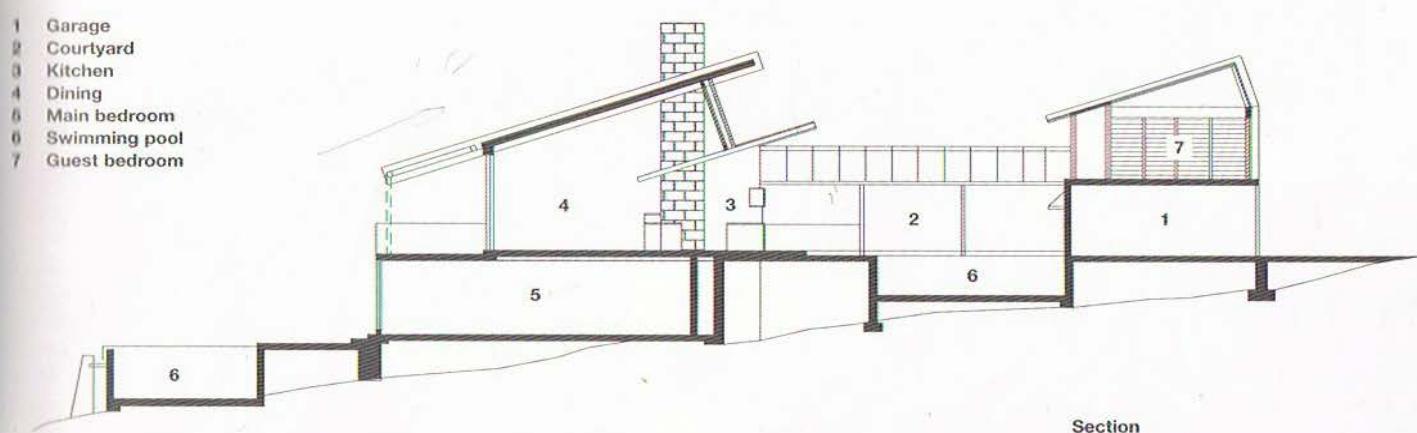
On the upper level, two smaller pavilions rest on top of the large entrance pavilion (which contains the garage, store and laundry), and are separated by an intimate upper courtyard. Sited well away from the exposed coast-facing section of the building, this elevated courtyard benefits from the fact that the breezes are markedly diffused by the time they reach it. A study is accommodated in one pavilion, and a guest bedroom is in the other. From here, one looks out to ocean views or down to the courtyard and pool below, where water falls into the pool from a slot in the stone wall to create a restful ambience.

The sense of calm experienced in the inner courtyard is drawn, in part, from influences of art and nature – but also from a Japanese aesthetic which resonates particularly strongly with the clients, who spent some years living in Japan. This influence is seen also in the refined use of materials, and in the sophistication with which transition zones have been orchestrated. And the overall pavilion construction of the building recalls certain architectural typologies of traditional Japan, especially in the use of timber details and richly-toned timber panels.

To capture the views, all the main living areas and the two principal bedrooms are located in the double-storey pavilion facing out over the cliff. On the ground floor, two bedrooms enjoy immediate access to the deck and wet-edge pool. On the upper floor, the indoor and outdoor



THESE PAGES, LEFT: This view from the wet-edge pool shows the lower level bedrooms and the upper level living area in the main pavilion, which overlooks the coast. RIGHT: The deck and the wet-edge pool merge with the ocean and horizon, while a retained tree is a sculptural presence. PREVIOUS PAGES: The upper level living and kitchen area is dominated by dramatic roof forms and clerestory-style glazing. Huge sliding doors link the indoor areas to the terrace.





living areas operate as one on calm days and – when the winds are up – enormous glass sliding doors effect a smooth transition from exposure to enclosure. Jorge believes these doors to be among the largest single-piece sliding doors, in a domestic application, in Australia – they weigh 750 kilograms each and are about 3.5 metres high and 4 metres long. Such monumental proportions sit comfortably in this context: the entire building, in fact, is a robust tribute to the structural engineer.

The living, dining and kitchen zones are arranged under a roof that tilts northwards for solar gain via clerestory glazing running the length of the building, and operable louvres are in place to control light flows and promote ventilation. The wing roof over the kitchen cantilevers over the inner courtyard and pool, and is angled so as to provide shade during summer while allowing solar gain in winter. In the living area, an intimacy of scale is achieved via a lowered ceiling which cantilevers out from the wall and forms a hood over built-in seating and shelves. This cosier scaling is offset by the lofty upper ceiling and the high stone wall that forms part of the structural system and acts as a thermal mass.

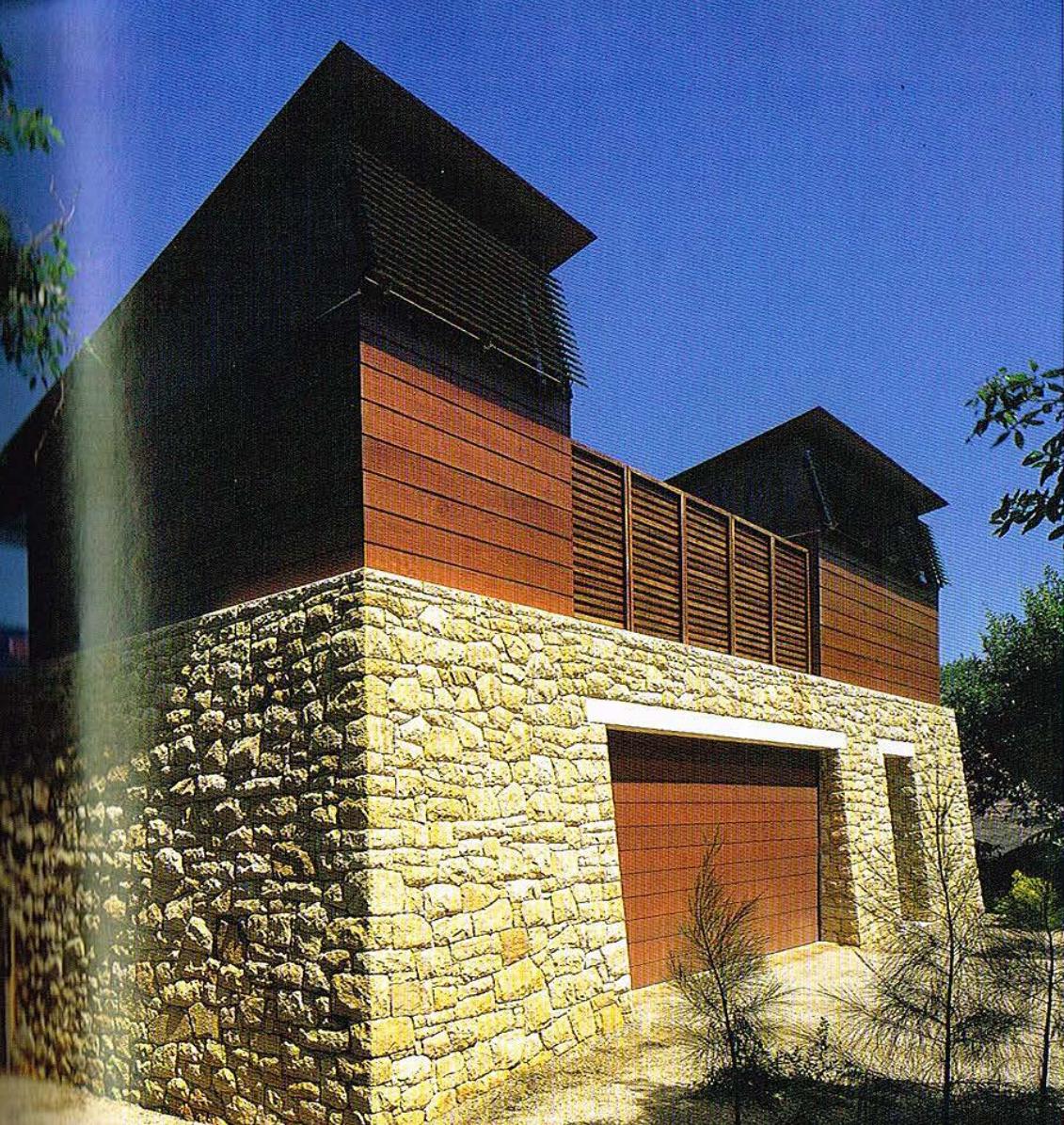
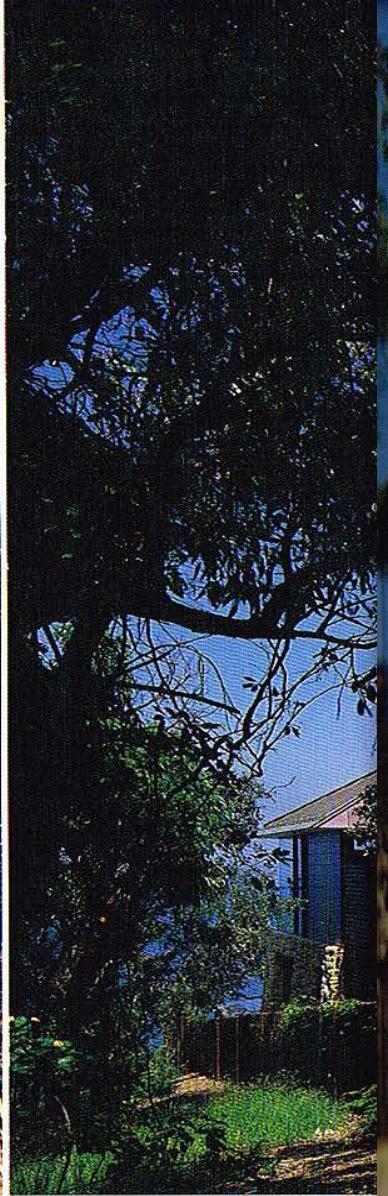
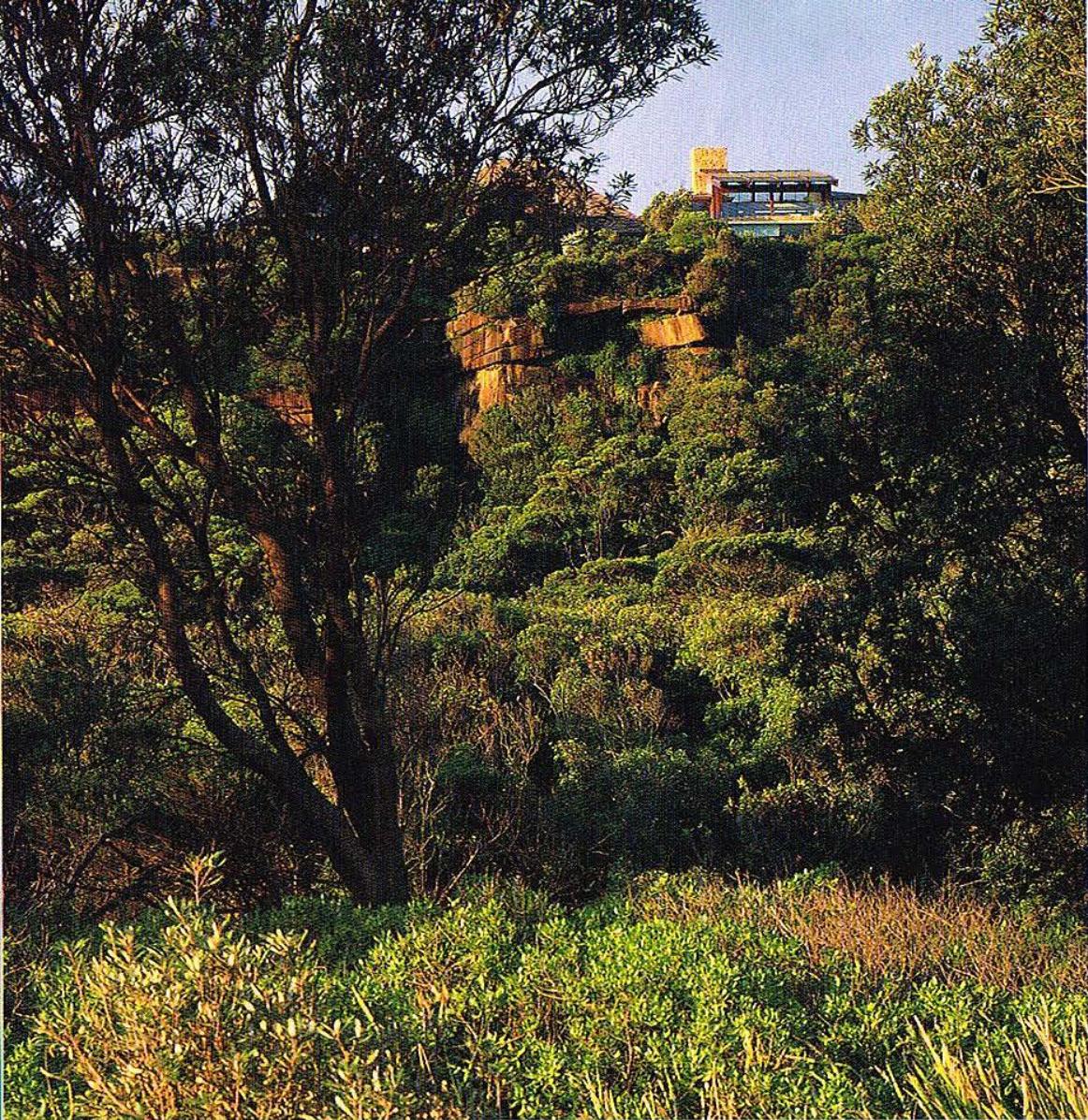
Colours, materials and textures are employed throughout the project to interweave narratives about the relationship between art and nature. The dry stone walls that form the lower exterior walls of the two main pavilions are inspired by the cliff-top Inca buildings of Machu Pichu in Peru. But in this context the walls are of local Gosford sandstone, a direct reference to the cliff face just below, which is formed of the same. Western Australian sandstone flooring continues this theme indoors. The use of timber throughout – the cedar external louvres, exposed

blackbutt ceiling beams, hardwood decks, rock maple bedroom louvres and Chilean rauli sliding partitions – resonates with the wild, natural setting created by copse of banksia trees and the cliff itself.

The clients' collection of paintings by Australian artist Alisdair McGregor also informed the palette of colours and materials. "The clients had commissioned Alisdair McGregor for artworks for their previous home," says Jorge. "Part of my brief was to interpret aspects of McGregor's work in order to appreciate the clients' artistic tastes, in terms of colours, textures and form. The most revealing painting was a Hawkesbury River landscape showing a detail of an Angophora gum tree, a sandstone boulder, and some water. Clearly, natural Australian colours and textures were going to be the key to this project."

Finally, the building, vis à vis its location, evokes the theme of safety and danger. "The concept of this building, to some extent, reflects on this idea," says Jorge. "The precipice is beautiful and alluring, but it is still reminiscent of imminent danger. As a contrast, there is the womb-like courtyard which is protective and safe. The inner courtyard pool is safe, introverted and contained, while the southerly aspect is beautiful but frightening, with its ferocious winds. While hovering near danger, it is still part of life."

In this building Jorge Hrdina has achieved a complex layering and interplay of big ideas and diverse influences, while also orchestrating a highly livable environment that acknowledges the shifting moods and needs of the occupants. A robust presence on an exposed precipice, architecture and nature have met here in perfect accord. **JD**



ARCHITECT
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PRACTICE PROFILE
Practice engages in medium to large scale multi-residential projects, as well as institutional and single residential work. Five staff.

PROJECT TEAM
Jorge Hrdina (director), Simon Herbert (documentation, design development), Peta Baker, Jorge Hrdina Snr. (project administration).

BUILDER
Belvedere Constructions

CONSULTANTS
Engineer Hyder Consulting
Landscaping Michael Cooke, Avant Garden
Interiors Jorge Hrdina Architects and Bronwyn Wall, Design Environment
Lighting Steenson Vanning
Pool engineers G. Ninnis Fong and Partners
Pool Wright Pools

PRODUCTS
Roofing Copper External walls Blackbutt; Gosford sandstone Internal walls Gyproc; Gosford sandstone; Chilean rauli timber in bedrooms Windows Cedar frames; ss door furniture Doors Internal – solid core generally; bedrooms – rock maple frame and operable louvred inserts; Chilean rauli sliding partitions; larger sliding doors have ss frame with timber over Flooring Acogem sandstone; piano room – rock maple; study – blackbutt Kitchen Stone Italiana benchtop; rock maple and stainless steel to cupboards Bathrooms Teak duckboards in showers Heating In slab electric heating External elements Mixed hardwood decking; cedar operable louvres

TIME SCHEDULE
Design, documentation 12 months
Construction 13 months

PHOTOGRAPHY
Eric Sieins

THESE PAGES, LEFT: Crafted from local sandstone, the house merges with the cliff and resonates with its rugged natural context. RIGHT: The garage forms the base of the north pavilion, the upper floor of which comprises a small courtyard, a guest room and a study. PREVIOUS PAGES, LEFT: An intimately scaled cantilevered ceiling delineates the living area in the main pavilion. RIGHT: The system of roofs in the main pavilion acts as a wind diffuser for the courtyard.

- 1 Driveway
- 2 Garage
- 3 Store
- 4 Laundry
- 5 Cloister
- 6 Pool (swimming)
- 7 Pool (plunge)
- 8 Courtyard
- 9 Outdoor dining
- 10 Kitchen
- 11 Dining
- 12 Living
- 13 Fireplace
- 14 Piano room
- 15 Deck
- 16 Drying court
- 17 Main bedroom
- 18 Bedroom
- 19 Ventilation corridor
- 20 Study
- 21 Upper level courtyard

