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he Opera House cannot shoulder the responsibility forever. It desperately needs help. This has already arrived with some of the work at Sydney's Olympic Park. Projects such as Ed Lippmann's design for the King George V Recreation Centre is another that adds considerably to the texture by which the city is judged.

Sydney's Rocks precinct, the birthplace of white Australian settlement, is the focus of Lippmann's sports' facility. It uses the toughness of the Bradfield Expressway concrete and the mellow Rocks sandstone to insert a building of shimmering modernity. Under the sweeping carapace-like shell, Lippmann has created a joyous, light-filled space that may well chart new directions for major public buildings in Sydney.

Perhaps not surprisingly there has been a lot of static and interference surrounding this development. Two of Sydney architecture's elder statesmen have challenged the suitability of Lippmann's work. Dubbed a 'Blimp' by Leo Schofield, the facility promises to keep architecture in the headlines. The \$3.4 million project is about to attract attention only dreamed of by many much larger practices.

Ed Lippmann discusses the form of his billowing, breeze-filled curtain of steel and glass with Peter Hyatt:

Architects such as Jean Nouvel, Richard Rogers and Rem Koolhaas have little difficulty working within historic contexts yet have not felt the lash from their peers. You might expect criticism from say, a tapestry guild, but your own profession?

We shouldn't overstate that. The comments were made over 18 months ago during a presentation to the National Trust. Philip Cox was critical because he felt the site should be left as open space. That was a curious argument as the site was not exactly open space to start with. If you look at what has happened in Prymont with the casino and the erosion of open public space, you would wonder what the problem is at the Rocks. Andrew Andersons was talking about a solid-walled masonry building with little holes punched in it. That was the old heritage line which has become almost totally passé.

But you also had support.

We had pretty robust discussion with the Sydney Cove Authority at Board level and there were people like Chris Johnson (NSW Government architect) and John Richardson (partner of Philip Cox) and they were very supportive. I have to say Philip Cox was sympathetic to the design but was against the project for political reasons.

Apart from leaving them alone, there are pretty well two schools of thought on dealing with historic precincts. Re-create the old or invent the new. You have chosen a contemporary counterpoint in preference to bluff.

People might have expected to see a mock 19th Century building in the Rocks. Imagine a sandstone bondstore sports centre with a 30 metre span roof 9 metres high.







A stage for light, shadow and athletic performance.

"We will be moving towards a more poetic quality."

This was a great opportunity to produce contemporary architecture for all the right reasons. The harbour bridge would have been criticised for being un-contextural in the '30s but it has become a symbol. The Eiffel Tower had a similar history. I'm not comparing KGV to these national icons, but the issues are the same.

Does it force the design to turn in on itself more than elsewhere?

I don't think it's introverted. It's really quite extroverted. It was important to make a public building which could be experienced from the outside by way of transparency and which is not exclusive. The relationship to the scale of the street came about by studying the height of the neighbouring buildings and in that respect, the perceived height of the building is actually lower than almost all the parapets along Cumberland Street. I think the architectural form is inventive because it achieves a low impact. It is important for modern buildings to become part of the grain of the city in exactly the way Jean Nouvel's Cartier building does in Paris. That's what cities are about. The diversity of architecture from different historical periods makes cities rich and interesting, not edicts which dictate the use of stone or vertically proportioned windows.



work in Japan. She gives her steelwork a very organic shape, expression and volume.

We will be moving more towards that poetic quality. A number of residential and commercial projects underway pick up on freer, fluid geometry.

You obviously wanted to create something quite unequivocal.

People should respond to architecture as much as design should respond to people.

Buildings shouldn't necessarily be innocuous and polite or disguised behind facades. The Sydney Cove Authority is developing a site across the road from KGV and the architects of the scheme were quoted as saying they felt it inappropriate to do a statement building in the Rocks. It comes down to a lack of confidence that you can't do something different to, or better, than anything around you. It was far more challenging and exciting to do this project in the Rocks than on a greenfield site at Homebush precisely because of its historic urban context.

You obviously wanted a building with street credibility. Your name is indelibly part of such a project?

The project has invited comment which is not altogether a bad thing. The sports hall is pure structure. It's highly legible but does much more than just hold up the roof. You can see the way the base of the trusses support the bleachers. The circulation system is unlike most sports buildings where the spectators have to walk around the court and seats. We provided a route around the back of the seats and created a more generous area for players, better contact with spectators and a more interesting facade as a result. The natural ventilation system relies on a bank of low level louvres at ground level which draw cool air onto the hall and exhaust it via high bay louvres at the rear so that the building breathes.

How did the material selection assist from concept to completion?

The building went up very fast. Despite the geometry of the roof, the quite complex curved trusses, all of which were laid out by the architectural team, erection of the portal frames was very straightforward. The Custom Orb roofing is fairly conventional but we developed a really nice cladding system with Arups using Mini Orb panelling to give the end walls a module consistent with the curtain wall and all based on the standard Mini Orb

The panellised sheets were laid over a galvanised skin which provided a waterproof barrier. I think the result is one of the successes we'll carry onto other projects in

The 'silver' steel finish is used to striking effect. Is this a reaction against the bland brown and beige that afflicts so many urban developments?

I thought it was very important that it not be a bright colour. I wanted it to be white. There was some debate over 'skin' colour. The Sydney Cove Authority was comfortable with grey and I think that is reasonably successful.

Frank Gehry sheathed the Guggenheim in shimmering titanium scales to spectacular effect. A lot of your work has this monochromatic, metallic gleam.

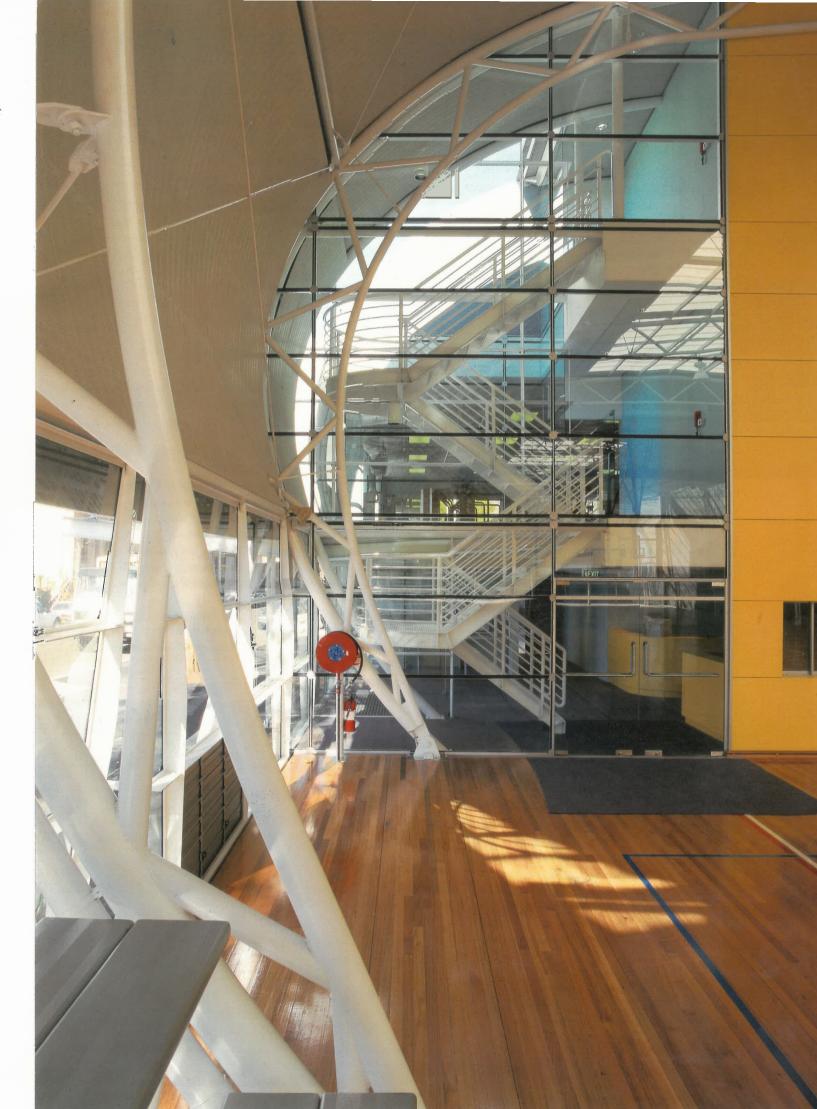
A few people have made that connection with Bilbao, but I don't see that. Gehry has done a fascinating building. His building is very expressionistic and quite disorganised. KGV is much more structured and organised. I wasn't really happy to accept metalwork and surface irregularities although it is difficult with curved forms to achieve perfect finishes. We worked very closely on site with the cladding subcontractor and we all learned a lot from the project.

There is a very pronounced identity to your work which is about making structure de-materialise; about making potent forms which in some ways give the appearance of almost being flimsy.

The structure is responsive to the elements. If you walk on the roof you can feel it bounce. In a strong wind you'd



Vertical circulation via a steel staircase connects to first floor gymnasium and terrace. A glazing strip along the west wall helps to produce balanced natural illumination and cut reliance on mercury vapour lamps.



feel a similar effect. I remember walking up that steel staircase in Richard Rogers house and commenting on the bounce. You can pare metal down to a point where you really do achieve that kind of responsive structure. I think that is the point that you begin to achieve really good design.

Steel consistently forms a major part of your palette of materials.

Virtually everything from the ground up is steel. This kind of building couldn't really be done with any other material and still achieve such elegance and detail.



You have achieved a good span and let it be read very easily.

The sports hall is a 30 metre clear span, steel truss, portal frame curved to provide the height required for basketball while fitting, within millimetres, of Sydney Cove Authority's envelope height controls. The council's brief insisted upon visibility of the large painted mural on the side of the Bradfield Highway and so we developed the 100 metre long structural silicone glazed curtain wall to the street. Inside the mural forms the forth wall to the hall, naturally lit by the glazed roof spine and, at night, by mercury vapour lamps. The facilities building accommodating all of the back-up functions is a more conventional structure, but it too is 'hands off' the Bradfield mural. Frameless glass stacking doors extend space out from the community room to the public terrace.

Has the penny, or at least dollar, finally dropped in that clients suddenly understand what strong architecture can do for the whole financial viability of a project?

We still operate at a certain level of insecurity. We're getting bigger commissions but we still push the big ideas. That's not the safest place to operate from and there's always the risk that we're pushing too hard, that we're just a bit far out there. I get a sense that greater recognition brings greater opportunity and certainly clients can begin to see that these projects actually make sense and satisfy briefs perhaps in unexpected ways.

Is the time right to be given a high-rise tower? We get North American architects to give us North American towers. Maybe we should trust our own.

Melbourne has tended to be more generous with their younger generation than Sydney. Most Sydney high-rises have been, or are being, designed by either high calibre well established local and international architects, or the 'schlock' variety who produce commercial rubbish. I'm sure my office could produce a quality high-rise tower. Perhaps it's just a matter of public perception or marketing.

You had a client who backed you?

The project would not have been possible without the support of Sydney City Council's project office. We worked very closely with the council. They were just as committed to seeing a high quality contemporary building on this site as I was. Despite their support, it is the architect who must maintain that incredible singlemindedness to see a project through. You can never be sure if or when a job might come off the rails.

How much of it is drawing board and how

CAD is used to achieve a very high technical standard of detailing. I sketch a lot and look to it as technical back-up.

How does it rate in the maelstrom of development, most of which goes unnoticed?

I think over time the project will rate very highly because it isn't monumental but says something new. It is also a very human building. One of the client team commented that it was too good for sport - that it has a sense of grandeur. The sports hall is an uplifiting experience. While it's a recreation centre, there's no reason for it to be a bland, antiseptic experience.

There are fairly obvious advantages in using steel including span and speed of construction. Have you been able to wring other benefits from the material? Any surprises?

The quality of workmanship in the steel fabrication was very high. The welding of the truss chords and the tapered steelwork in the facade sub-framing was very satisfying. I remember inspecting trusses which lay in sections like dinosaur bones on the floor of the fabricator's workshop. We wondered whether they would go together properly. They were erecting two a day, the sports hall framing including purlins and bracing was up in under two weeks. Having the experience of so many smaller projects during the past 12 years, these larger buildings are actually quite straightforward because of the economies of scale. The important thing was proper detailing prior

At a glance, how has steel been put to work?

The roof of the building is custom orb over steel purlins while the internal linings are perforated Mini Orb to control acoustics. A custom designed, low cost Mini Orb panelised skin to the north and south facades reflects the articulation of the glass panelling to Cumberland Street. The facade along this side is a fractured form of frameless glass, structurally siliconed into a steel sub-frame, Colorbond panel 'foils' below the curving roof form.

We once talked about architects wearing threadbare and mouldy suits. Surely these are distant memories for you now.

I guess so. I sold my Vespa two years ago. As the office grows so does the infrastructure which is expensive. You will still find me working away until all hours of the night. We take part in a lot of competitions because I'm interested in bigger public commissions. Some of those just wouldn't be available otherwise. You have successes and near misses but that takes time and money.

Is this the point at which you feel you have arrived? Well I think we finally have. We recently won a





competition for a very exciting flagship building for a large automotive corporation which promises to be a great break for our office. Negotiations with the client are at a delicate stage but if it comes off it promises to be an incredible project.

Oh what a feeling.



Project: Client: Architect: Structural engineer: Builder: Steel fabricator: Principal steel components:

King George V Recreation Centre Sydney City Council, City Projects Lippmann and Associates (02) 9318 0844 Taylor, Thomson Whitting Buildcorp Nowra Engineering

Specially fabricated panels consisting of flat COLORBOND® sheet coil wrapped over a plywood carcass, MINI ORB® panelling, roof purlins, trusses roof sheeting and glazing sub-framing 2,800 m² (internal), 1,500 m² exterior court, playground, terrace

Cost: \$4 million Photography: Peter Hyatt

Top: MINI-ORB® panelling on the north end provides a seamless, economical solution. "The welding of the truss chords and the tapered steelwork in the facade subframing was very satisfying."

The Harbour Bridge provided Lippmann with strong cues for his curvaceous form.

