

built pedagogy

The project will provide a new learning environment that will demonstrate the best that each of the professions represented by the faculty has to offer. It will be an outstanding work of architecture, in both appearance and performance; it will be an outstanding work of urban design, activating and connecting to the campus and its community; it will use advanced construction, structural and servicing techniques, it will demonstrate integrated design between the natural and built landscape in and around the building. The building will also communicate ongoing work in each of these professions by enabling completed and in-process work of staff and students to be highly visible, as well as being enlivened by regular discussions, exhibitions and displays of contemporary and historical work.

- > Architecture of performance and legibility
- > Communication of intent
- > Clarity of purpose
- > Excellence of response
- > Shows the inside out
- > Fosters knowledge transfer
- > An active participant in, and enriching, the urban realm
- > Making the contained processes more delightful, effective and satisfying



This criterion is essentially divided into two parts. The first section speaks of excellence of response at both urban and building scales. The second part seeks to create a building which fosters legibility: legibility of the activities, outputs and preoccupations of the staff and students.

The brief speaks of an inner character- of a building which is derived from its uses, its systems, its construction and the manner in which it is used.

As such it will be a singular building. That singular building will, nevertheless, be a part of a community and it will change that community through its presence. The community is one of buildings and one of life. The community is the precinct within the university; it is the local area of Carlton and Parkville; and it is Melbourne.

Part of our role as architects would be to explore strategies for the reconciliation of the internal integrity with the external expressiveness of the building.

ENERVATING THE PUBLIC DOMAIN

The reconciliation of the determination to create a building dedicated to making the contained processes more effective and more satisfying with the need to enrich the urban environment of its locale was a significant thread of exploration for our **Adelaide Advertiser** building in Adelaide.

The building is the office for the Adelaide Advertiser and Sunday News newspapers, and other functions of New Corp. The building demonstrates a high level of environmental sustainability - it was only the third office building in Australia to receive an As-Built Green Star rating.

The central business district of Adelaide has excellent east-west connections, but poor north-south links. The Adelaide Advertiser building is located on Waymouth Street in the CBD where the north-south oriented Post Office Place meets that street. The building creates a better pedestrian environment along Post Office Place by stepping the face of the building back along both streets to create a more inviting and sunny corner, and by placing retail functions there create a greater level of interactivity with the street.

The north-facing facade has, in response to environmental imperatives, a double skin glazed facade which responds differently to hotter or cooler weather. That facade is the primary address of the building to adjoining public domain. To create a connection between the internal uses and the urban domain we wanted the facade to communicate the business of the building- a variant of "knowledge transfer". In doing so the building is transformed from mere backdrop to the urban realm to an active participant.

We did so by creating letterforms on both the outer and inner glazed skins. The letterforms are an indicator of what happens in the building, and provide an urban-scale graphic to bound the adjacent streetscape. The moiré created by the slippage of the inner and outer letterforms against each other creates a dynamic interplay for pedestrian and those in cars moving past the building.

CREATING RICHNESS FROM MONOTONY

Single buildings can stimulate urban connections through their placement and drawing power. If in doing so the pedestrian environment is improved, there is a good chance the urban realm will be a better one. The stimulus provided by that key attractor building can then seed further urban renewal. In a car-based city, however, it is difficult to achieve that quality of environment using single

attractor buildings- we need greater critical mass.

Canberra is a car-centric city, which is a corruption of the Griffins' masterplan. Critical to improving the urban domain in Canberra is the creation of environment encouraging people to walk rather than to drive. To do so requires infilling of the city to create a greater density allied with a breaking down of the single use strategy informing much of the city.

The **NewActon Precinct** is a critical element in that process.

Sited between the Canberra CBD and Lake Burley Griffin, the NewActon precinct contains a significant mix of uses: residential, commercial, hospitality and retail. It is centred on a heritage building which housed many of the public servants and politicians in the fledgling city. Three new buildings are intended to be constructed around that older building. The first, NewActon East, has been completed, the second, South, is being built, and the third, Nishi, is currently in schematic design. The NewActon precinct.

The key aspiration of our design is to optimise the balance of potentially competing influences including the influence of the heritage building on new buildings, the current and future nature of urbanity in Canberra, the interrelationships between the different uses, balance between public and private space on the site while creating an environment of richness, of delight, with an interplay of arts, architecture, living, working and recreation.

Intrinsic to that has been the structure of the landscape, which has emphasised permeability and continuity through the site and which has strengthened connections created by the masterplanning and building design.

The planning has created permeability through the site where none existed. The landscaping responds to that design imperative. Integrated with the buildings, the landscape creates external rooms from what would otherwise have been merely space between buildings. A significant connection through the eastern building from a major bounding road into a heritage courtyard created a link which in effect spans from the past to the future.

INTEGRATING THE LANDSCAPE

The first of our exemplars is located in the central business district of a city in South Australia; the second is located on the edge of a city CBD in the ACT. The third exemplar lies on a stunning locale on the Derwent River on the outskirts of Hobart, Tasmania.

Key influences on the design are a magnificent natural and cultivated landscape of river, cliff and farmland containing significant heritage buildings.

The interplay of the museum uses, their relationships to the heritage buildings, and the manner in which the new building forms an integral whole with the landscape has been a critical element of our design approach.

The Museum of Old and New Art near Hobart is located in a site with significant topographical and heritage richness. The design creates a museum as cliff alongside the Derwent River. By doing so the clear field of view over the river from the adjacent heritage Roy Grounds house is maintained. The natural sandstone of the site forms a major wall for the museum, and access to the Museum is through that rock. The roof of the museum forms an external sculpture court as an integral element of the landscape.

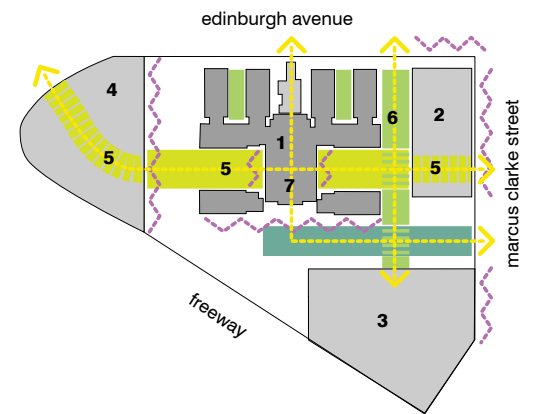


Adelaide Advertiser building, Adelaide

Detail image of the north facade. This facade faces over the urban environment of Waymouth Street. The street environment was recognised in the Jan Gehl document as being poor, primarily because of the narrow width of the footpaths and the lack of interactivity between the footpath and the buildings bounding those. Our design sought to redress those issues by creating a generous sheltering loggia adjacent the facade at ground level and at higher levels to create an interesting, engaging relationship between pedestrian and building.

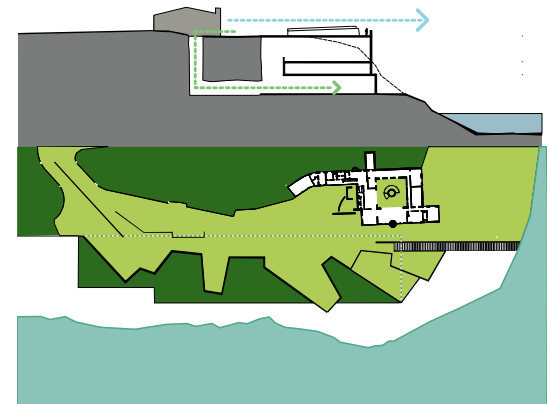
The north facade is a double skin facade of 1 metre in depth. This facade stores heat from the sun during winter to for transmission into the building, and during summer vents hot air away from the inner facade. The facade incorporates sun shading which is used as a platform for window cleaning.

Communicating the nature of the building to the public domain, letterforms are incorporated on both outer and inner skins, creating a moiré of pattern and language, rewarding movement past the building.



The NewActon Precinct in Canberra

1 Heritage building incorporating hotel/ retail/ offices/ hospitality | 2 NewActon East, incorporating residential/ commercial/ retail/ hospitality | 3 NewActon South, a residential tower/ 4 NewActon Nishi, incorporating residential/ commercial/ gallery/ retail/ hospitality | 5 Public link east to west through the site | 6 Public link from north to south | 7 Public link through from hotel entry on Edinburgh Avenue to Kendall Lane, the historic entry road to the heritage building



Museum of Old and New Art, Hobart

This section shows the location of the gallery as an insertion into the landscape. Inserting the building maintained the clear view field of the heritage building above, and provides a landscaped platform to the Derwent River.

The building provides a crafted cliff in this location. As befitting its semi-subterranean location, entry to the museum is through a shaft and tunnel excavated through the rock.

The lower diagram shows the plan of the plaza in front of the heritage house



academic environment

The new building will provide an inspiring work environment for all staff, and in particular, will facilitate high quality research outcomes from academic staff and Research Higher Degree (RHD) students. The academic work environment will provide a range of opportunities from quiet, individual research through to collaborative work with other academics and with RHD students. The building will play an essential part in the Faculty's goal of attracting and retaining the best staff and allowing flexibility and choice in work styles.

- > An inspiring environment
- > Helping you be better
- > Challenge the best to get the best
- > Flexibility, flexibility, flexibility
- > Create meaningful space out of incidental space
- > Balance the need for concentration and collaboration

This section is articulating the need for the building to be highly responsive to the needs of staff. It also refers to the range of working conditions required for various individuals and groups.

As a design team responding to those needs, we would consider the quality of those spaces, the interrelationships between them, size, proximity and servicing. We would consider the explicit identity or ambiguity of spaces. Additionally, we would be asking ourselves and you questions like:

- > Are there other ways these spaces could be used? Can we make them more flexible?
- > What is the quality of in-between spaces- are there uses, perhaps less formal, that can create real space out of less-considered space.
- > How is the accelerating rate of change in technology going to alter our preconceptions? Will that technology change the way we use and understand teaching, learning and experiential spaces? How do we design for that change?

While for the purpose of this EOI those questions are related to a building housing design faculties, those are questions we are familiar with on many of our projects.

CONNECTING THE DISCONNECTED

The exploration of the integration of differing uses and the exploration of intended and unintended synergies is clearly going to be a key focus of the design process for this building. For us it is an illuminating contrast to the program of the Sydney Myer Asia Centre at the University of Melbourne. Major influences for that building were the exploration between the three major streams using the building: undergraduate, post-graduate and university private functions.

Within those constraints nevertheless, this is a building which celebrates connections: horizontally, connecting the public thoroughfare of Swanston Street and Carlton with the inner reaches of the university, and vertically, connecting visually the different strata of the building to the public ground floor by a central atrium.

In that sense the building has two very different characters: that of the external form which represents the three strata of the brief in a tripartite composition whilst internally the building section represents a slice through the strata.

BENEFITING FROM THE UNALLOCATED

We discussed in **Built Pedagogy** the Adelaide Advertiser building. Those who work in the new building had arrived from other buildings where, typically, the accommodation had been cellular rather than open plan. It was the intention of the client group that the new building would foster improved communication within the organisation.

The planning of the building therefore was intended from the start to optimise the balance of privacy and community. The basic formation, comprising working spaces separated from servant spaces by a full-height atrium, created a focus for accidental and non-specific communication in the neutral space of the naturally lit atrium. Communal areas such as tea rooms, bathrooms and key meeting rooms were deliberately placed on the other side of the atrium from the working spaces. As a result the connecting bridges became casual meeting places. The communication stairs located at the bridges provide easy use of facilities on other

floors and, therefore, easy and convenient communication between floors.

An important consideration was the creation of informal and unallocated spaces, the interrelationship between those and the working areas, and how the "in-between" spaces could become real and useful in their own right by fostering a different level of communication and interaction between staff.

GETTING THE BALANCE RIGHT

The optimising of the balance between privacy and communication is a focus of work we have been undertaking with a Federal government agency. (For reasons of confidentiality we are unable to identify that agency.) That investigation was a key element of a program to design an office for that agency which would result in the group being more effective in their work. We considered the potential tension between requirements for concentration and collaboration; we assessed the best balance of closure for each type of work; we incorporated need for environmental sustainability; and we considered future flexibility needs as the working methods of the agency change over time.

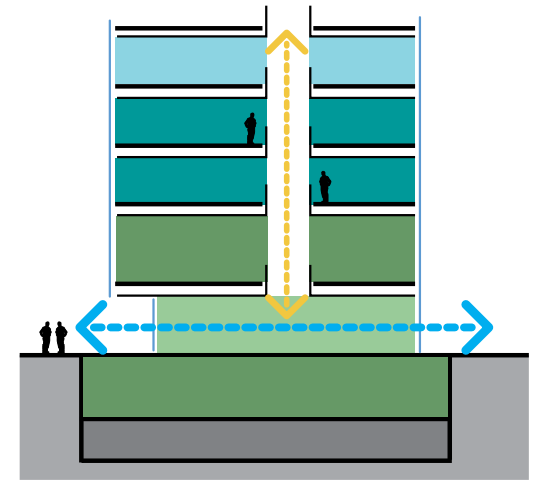
The collaborative environment incorporates collective spaces, such as meeting rooms and break-out spaces. However, it also includes assessment of the interrelationship of privacy and interaction at the immediate environment at the work desk itself.

Analysis of the characteristics of offices and different workstation configurations has been undertaken.

That exploration has included acoustic and aural privacy, interaction, control, physical and psychological comfort. The exploration included the spatial characteristics of the building itself. Interrelationships between working spaces and break-out spaces, and the interweaving of those was a core part of the design.

The organisation has traditionally worked in a very different type of environment. Most of its staff were provided with a separate office, as that provided them with the privacy which is require for their work. It was considered, however, that need for privacy had overridden the potential for increased effectiveness if there were to be increased casual interaction resulting from incidental and accidental conversations, or from the reduction of physical impediments to discussion.

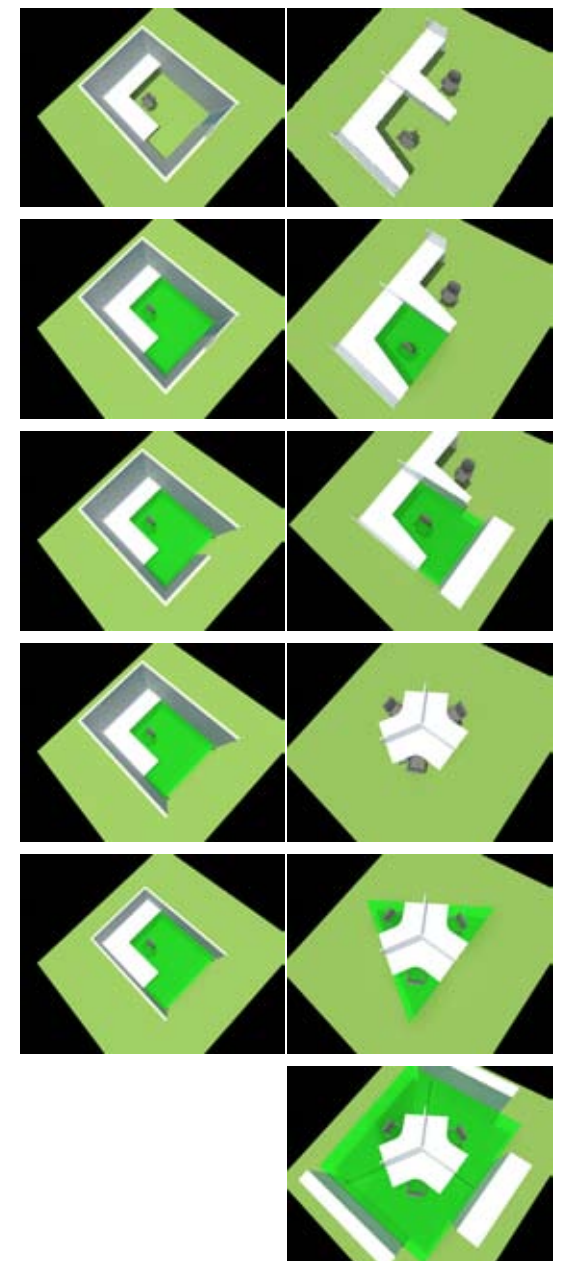
There was a joint exploration with the client group of the differing possibilities from fully cellular to fully open configurations so as to arrive at the mix of configurations which provided right balance of privacy and community.



Sydney Myer Asia Centre, Melbourne University

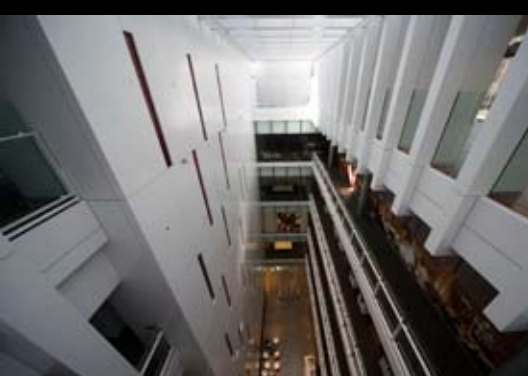
The SMAC contains three different strata of university activities: undergraduate, post-graduate and a non-academic department. The design brief called for separation rather than active engagement between those functions.

Nevertheless the building provides significant connections, as illustrated by this cross section through the building. The ground level provide a major entry point to the university from the public domain of Swanston Street through integrated landscape into the university proper. When passing through the building an atrium provides a visual connection through the building, allowing recognition of the different societies within the building while providing a source of natural light.



Privacy and community

The diagrams above illustrate a series of illustrations arising from the examination of privacy, control and interaction possibilities for a series of cellular office, orthogonal workstation and snowflake workstation arrangements. The diagrams assisted discussion with organisation representatives and presentations to staff exploring and explaining alternatives





design studio

The new building will provide an outstanding teaching and learning environment for all staff and students. It will provide a range of formal and informal teaching and learning spaces, encouraging interaction between students from all year levels, while still providing acoustic and visual privacy to enable work to proceed without interruption where necessary. Teaching and learning spaces will be based on advanced theories of studio and classroom design, addressing the role of technology, staff-student interaction and work styles in their layout, furnishings, and equipment. Studio is seen as the focus of student learning, the place of immersion in professional culture driven by experiential learning and global engagement in relevant social issues

- > Capturing distributed intelligence
- > Inclusion and collaboration
- > The public performance of architecture

This section focusses on the design studio as being core to the learning experience. Key concepts are the creation of a variety of different spaces providing a range of experiential qualities and which not only make advantage of technologies but which allow for the take-up of future technologies.

There is a very real potential for the design processes for this building to mimic the life and the nature of the design studio; for the multidisciplinary design team to work in the sort of environment we would be creating, and to act in a manner that will be a core part of the life of those who will inhabit the building.

When recently reading the paper "Toward a Model and Theory for Transdisciplinary Graduate Education" presented by Sharon J. Derry and Gerhard Fischer at the 2005 American Educational Research Association Annual Meeting we were very interested in how closely their description of the management requirements for distributed intelligence, which they see as being as a complex entity with multiple interacting dimensions, related to the issues we face with complex projects.

Many of the complex projects we undertake require a multi-disciplinary approach. Some of the organisations we interact with for those projects are in themselves multi-disciplinary. Typical issues we face both in those projects themselves and in the team we assemble for those projects are:

- > Where knowledge resides- assessing the availability and then coordinating knowledge and tools from different disciplines;
- > Linking knowledge centres- managing participants in different locations;
- > Technological attribution- understanding what roles are best suited for the human mind, and what are best suited for technologies;
- > Accelerating change: managing ongoing change in the technologies we use.

AN ARCHITECTURE OF LEGIBILITY

Architecture is both a practical tool and an expressive language. It is rational and pragmatic but, simultaneously, it is symbolic. The symbolism of the new building for the ABP will be doubly resonant: the first major built symbol of the university looking to the 21st century, and the new, highly public, home for those who will be having a significant influence on our built environment in the future.

To be such a symbol the building needs to be much more than a physical presence on the campus. It should have a greater influence. The building should provide a physical home for research, teaching and knowledge transfer. But there are more extensive and valuable opportunities. The design process could seed research and, itself, be responsive to ongoing research. The design process could be observable by the staff and students, and they could exert an influence on that process. The design process could embrace and test theoretical and applied constructs promulgated by the faculty. The building could be a laboratory enabling ongoing research, and create experiential reality for staff and students. In addition to creating a venue for knowledge transfer the building could itself act as a vehicle for communication.

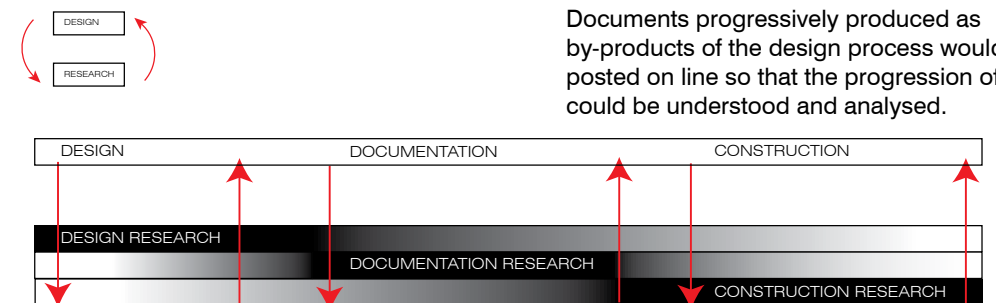
For this building, therefore, the process will be of significant importance: it is why we call this Architecture of Legibility. The design process

for this building could be a public performance. The performers would not be limited to architect, consultants, client, builder, but could also include staff and students. The activities could be played out in public. The information produced by those activities- even preliminary, incomplete and potentially incorrect information- could be publicly posted for examination and critical assessment.

This inclusive and collaborative approach excites us, and would be a natural extension of how we already work with our clients, our consultants, builders and other collaborators. Using design tools which promote inclusiveness we seek to open up all of our processes and decisions to group assessment and debate as we step forward through design inquiry. In that way the different skills, experience and capabilities of all the project participants can be encapsulated as a positive influence.

The verbal, written and descriptive language of architects too often has the unintended result of removing others who don't understand the code. By contrast we seek to make clear every aspect of our deliberations, and to explain why it is what it is. In so doing we invite others to make their own informed assessments and so enrich the understanding of possibilities.

How would our approach manifest itself on this project?

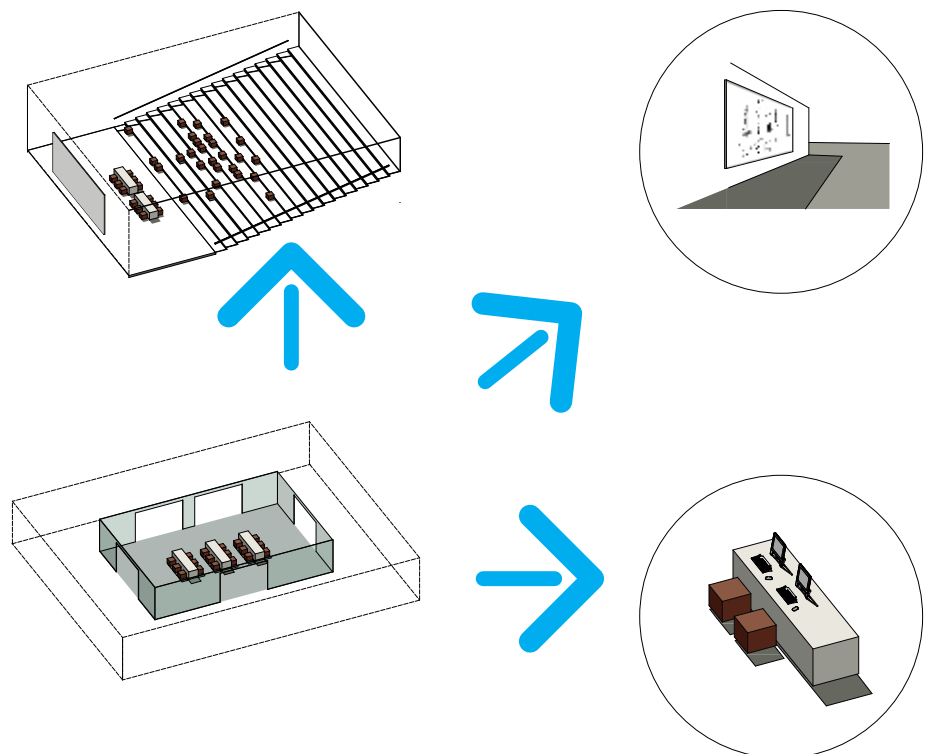


The design process is a mix of structured and unstructured elements. There are organised activities, structured work and agreed outputs. At the same time there is a parallel stream of thinking, reflection and creative impulses which cannot be structured, but which needs to be folded back into the structured activities.

The structured activities would happen in public. Meetings would be open. In fact we see those happening in lecture theatres so that anyone may attend as observer. We see those observers as being able to question, in which way the observers become participants. Information presented to the formal participants would be done so that all in the lecture theatre can see and understand that information. We enjoyed working this way. We always prefer to open up our activities rather than close them down. For example, we have held a design meeting exploring an arts precinct within an art gallery, a primary building in that precinct. Instead of holding the meeting in the administrative areas, we held the meeting in the middle of the public gallery. As a result this meeting became as much an object of interest and scrutiny to the public as the excellent works of art surrounding us.

We would set up our project team on site at the university. The space we would work in would be deliberately open so that our work could be observed. We would hold regular briefings within that space for anyone who wished to attend.

Documents progressively produced as by-products of the design process would be posted on line so that the progression of the work could be understood and analysed.



Design and research

Design and research could inform each other through the design process. The design program could seed examination which, in turn, could influence subsequent design of the building. There could be consideration of slowing the design program from a typical duration to allow time for that research.

Design process legibility

The project team would be based at the University. That space would be open and publicly accessible. Meetings would be held in lecture theatres enabling open process and interaction. The project information, including the 3D computer models, would be placed online for viewing on computer, or through larger screens throughout the faculty.





living building

The building will demonstrate outstanding performance in the design and on-going operation of its environmental systems. It will use the best available techniques and technologies for sustainable design, and for the use of materials, energy, air and water. The building will also act as a laboratory, providing opportunities for staff and students to control, adjust and monitor environmental systems such as sun-shading or natural ventilation. The building will take advantage of local climate conditions to resourcefully provide high levels of occupant comfort, which will be evident through changes in the internal environment or to the external fabric. Internal spaces will be adaptable and flexible, but still have access to high quality natural light, ventilation and acoustics.

> The living building extends beyond a collection of design responses frozen in time

> It is a framework for continual evolution.

An active participant

An agent for change

An agent provocateur

> Imagine a building that could physically respond to user feedback

This section correctly emphasises the importance of environmental sustainability, but extends the importance of that imperative beyond the mere incorporation of appropriate principles and systems into the design and construction of the building. Instead the resultant building will be a basis for understanding and exploring at a visceral level principles of sustainability, and providing the basis for research and application of future approaches.

Sustainability is fundamentally important. However so are other considerations, many of which are described in previous sections. Often there can be a conflict between critically important influences on a project and sustainability imperatives. The key consideration is how we can reconcile the sustainability with those other imperatives so as to maintain that sustainability and create a synergy.

Our approach is to iteratively explore those interrelationships to transform them from potentially competitive to complementary.

FROM COMPETITIVE TO COMPLEMENTARY

A large project we are currently designing in Canberra demonstrates that approach. Because this project is not yet in the public domain we are unable to identify it. We are working closely with a multi-disciplinary team from Arup Sydney, led by their sustainability director.

The building is very complex, combining residential, commercial, public, retail, hospitality and community uses.

A speculative commercial building, by definition, needs to be commercial if it is to exist. The funding mechanisms for these buildings are such that there can be in-built resistance to the proposition of extension unless there can be demonstrated a commercial return. The costs can be easily calculated, but the return is not always so clear. Unlike institutional buildings, in which there may be a subsidising of programs to extend our knowledge, the creation of a high level of environmental sustainability in commercial buildings can be difficult. That is especially so in large scale, and therefore higher risk, buildings.

Currently environmental sustainability imperatives are at odds with other more historic imperatives, especially security. Security concerns have been growing exponentially since 2001. These loom large in current assessments of buildings. Many of those are antithetical to the responses required of our buildings for sustainability performance.

The principles for incorporating sustainability measures in high-rise residential buildings are simple, but the cost/ value environment makes those very difficult to incorporate. Viability of residential buildings are determined by sales rates, construction costs and building efficiencies.

At a time when sustainability is regarded as very important, the value systems inherent in this market do not reflect these concerns.

It is in that context that we have been driving this development to a high level of sustainability. It is essential to get the basics correct: siting, orientation and dimensions of the buildings so as to achieve ventilation and controllable sun penetration to optimise natural heating and cooling of the buildings. That was not easy.

We found that there was a fundamental conflict between the "sustainability map" and the "value map". Essentially, view orientation was at odds with solar orientation. Detailed analysis showed that solar penetration into the apartment building could be achieved if a solar corridor was created through the adjacent commercial building. That was done. The resultant building

design displays not only the results but also indicates the process through its built form.

This has resulted in a building which is sited to optimise the urban design potentials of the site, including capturing the great views available south over Lake Burley Griffin, but which has also captured the passive sustainability potential of natural ventilation and controllable solar gain.

The commercial building planning is predicated on the need to gain natural light to reduce energy used for lighting, and to create conditions for natural ventilation so that energy consumption related to air conditioning is minimised.

Accordingly the building is based around narrow floorplates surmounting a central atrium. The atrium encourages venting from the office plates, and the narrower floor plates allow more natural lighting to suffuse the floors. Operable external shading allows clear glass to be used, thereby increasing natural light infiltration.

What this approach speaks of is a determination to find the best solution. To do so needs an ongoing inquiry and a wish to interrogate existing solutions to find better ones if we can. The disposition of the buildings was a major determinant of performance. We had separate teams within our office challenge that disposition to see if a better performing master plan could be created. Our engineering consultancy team also interrogated the scheme based on considerations of sustainability, and engineering concerns. From that agreed basis we then commenced more detailed responses to the sustainability imperatives.

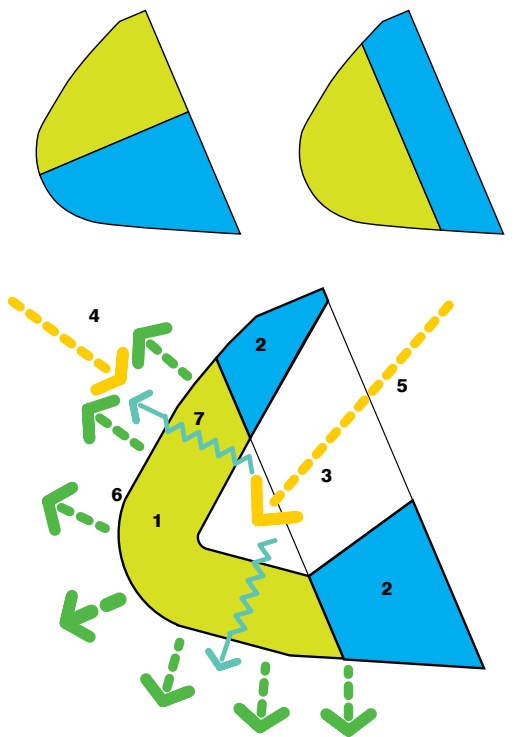
Sustainable development initiatives and projects to could be used to bolster the academic curriculum, either supporting existing programs or responding to the growing demand for new research and programs that address global climate change.

As an example, the Adam Joseph Lewis Center for Environmental Studies at Oberlin College in Oberlin, Ohio, USA, was developed as a LEED Platinum facility that would achieve a carbon-negative status by producing more energy than it consumed. Exploration of any of the features of the building are built into course work. Students participate in the building's operation by monitoring performance and tuning systems.

Similarly the ABP building could monitor energy use or, if renewable energy generation were to be installed in the building, could provide energy generation numbers on the University of Melbourne's Facilities Management Unit website, Achieving a Sustainable Campus.

Canberra Project- commercial

The diagram below shows a cross section through two floors of the commercial building. The office floorplates are relatively narrow to allow natural ventilation from outside to inside. In the centre of the building is an atrium which creates natural venting to assist that cross-flow ventilation. The outer edges of the floorplates are chamfered to allow maximum daylight penetration into the building. The sun-facing facades are provided with operable and fixed sunshading which completely shades the facade so that clear glazing can be used, increasing daylight penetration. Interior blinds are used to control glare when required. Displacement air systems use natural convection of air to reduce energy requirements, and improve air quality. Those systems are bolstered by chilled water in the floor slabs along the building facades. Concrete floors are left exposed above perforated ceiling systems to increase the emissivity from the thermal mass of the floors.

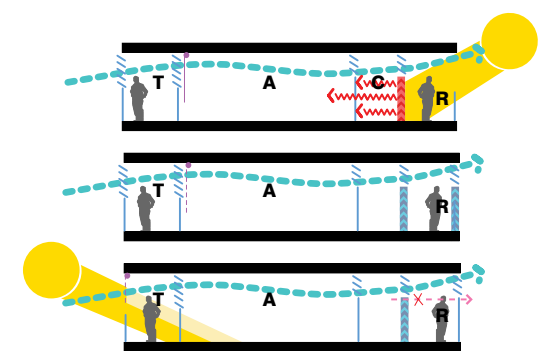


Canberra Project- building formation

The "sustainability map" (top left) posits residential north, and commercial south, as those are the optimal locations for solar orientation. The "value map" (top right) posits office east and residential west, so that the residential can capture wonderful views and thus create better market value.

The scheme reconciles those apparent conflicts. The residential building is opened up to the north sun by creating a "sun chasm" through the adjacent commercial building. To capture those possibilities, all apartments are single loaded, with entry through corridor and conservatory creating excellent transition from semi-public to private while creating opportunities for solar gain, ventilation and privacy variation and control.

1 Residential | 2 Commercial upper levels | 3 Commercial lower levels below | 4 North-west sun access | 5 North sun access | 6 Views | 7 Cross-flow ventilation

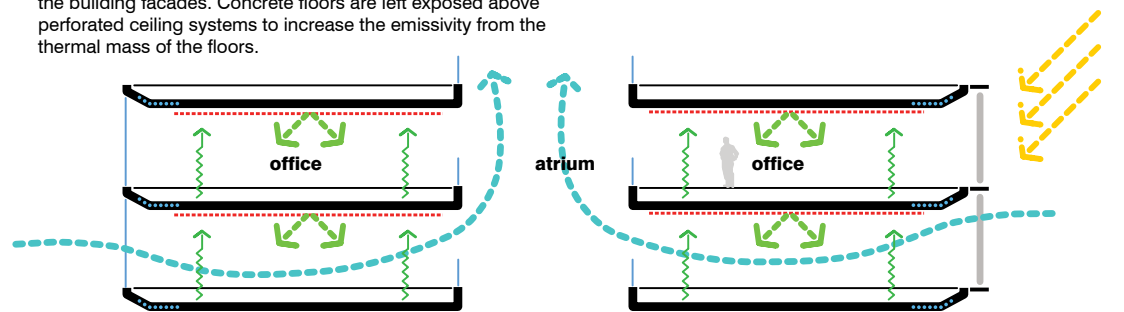


Canberra Project- apartments

The apartments face two ways: the front view, and the rear through conservatory and corridor. Walls between apartments/ conservatory/ corridor/ outside are designed to create controllable vision, ventilation, sun access and ventilation.

The upper diagram shows performance of south-facing apartments. Sun enters from north, radiates into conservatory and apartments. The middle diagram shows natural ventilation, controllable at three interfaces: front glazing, apartment/ conservatory wall and conservatory/ corridor wall. The lower diagram shows performance of north-facing apartments.

T terrace | A apartment | C conservatory | R corridor





capability - process

Architects / practices are asked to demonstrate their capability of completing a project of this size, scale, type or budget, including registration with relevant local boards or authorities. Respondents should also address their capacity to deliver the project in Melbourne, for example, by nomination of the design team and their anticipated contribution to the project, and a statement of processes for engagement with clients and users. Respondents are invited to describe their preferred or intended process of collaboration with the Faculty and the University in delivering an outstanding project. Please include a selection of previous work as well as at least one client reference from a recently completed project.

- > Finding the solution allows the understanding of the problem.
- > Spin off issues from the design process into student research and course work.
- > Create positive feedback loops - the research and course work informs the design process.
- > Lengthen the program to incorporate research?
- > We would work on site
- > The BIM model of the design would be on line at all times as design progresses.
- > Meetings in the round
- > Lead the debate, be inclusive, create a consensus, take responsibility

We design and deliver all of our work, from single houses to 90 storey towers within a city-scale podium.

We are regarded as world leaders in the adoption of BIM processes. All of our projects are delivered using those technologies and have been for the whole of this century.

Our approach is to foster collaboration, and our processes encourage that to happen.

As a Melbourne-based practice we are well located to provide the legibility of process and result that the school can benefit from. Because we are local we are able to provide the collaborative efforts of our office in a manner that does not suffer the tyranny of distance.

It is typically acknowledged that the process of defining the solution allows us to then understand the problem. Accordingly we would see our collaborative processes as being a fertile mix of assessing requirements and proposing solutions so that we can collectively understand better those requirements through iterative explorations.

The project will undoubtedly represent a series of interlocking issues and constraints. While there is a conceptual brief, there will be no definitive statement of the problem and, as we work through the issues, the problems will become better defined.

There will be many stakeholders in the process: the university as an entity, its building department, the faculty as a body, the staff and students, the general staff and student population of the university. This makes the design process fundamentally a social one as well as technical.

There is the potential for some of the design parameters to change over time. The creative nature of this endeavour means that the process will be iterative rather than linear. It is also a process where the full range of creative thinking can be encapsulated, at both technical and social levels. The technical is to use our BIM systems to describe graphically and non-graphically the aspirations and solution. The social is to use meetings, workshops and other gatherings to generate, record and disseminate ideas and issues. Communication will be an essential component of the solution.

Communication is something we are very good at. For the whole of this century we have been using building information modelling processes as a core design and documentation tool. Those tools allow us certainty of built outcome, but they also provide an excellent means of non-technical communication of technical concepts.

Research will beget the design. The design will beget research. The design/ research iterative loop will be a focus of the collaboration.

This building and its processes will be a great opportunity for the University of Melbourne to influence the evolution of design process through digital means. The realm of virtual and parametric modelling tools could be expanded to include a variety of parameters, such as energy, light, acoustics, air quality, material properties, sustainability, aesthetic and psychological effects, and cost. If introduced at an early stage in the design process, such an approach could be used to inform the blocking and stacking and form-making of concept design, leading toward more focused investigations of mood, atmosphere, and environmental quality in the detailed design.

Through research undertaken between the project design team, the faculty and students the design process could provide a new methodology and suite of tools for intelligent contemporary practice.

Faculty and students could work with the design team to establish research projects around virtual and parametric modelling. The design team could work intensely with the research studio to translate research virtual models into building form.

REFERENCE

Email from David Sutherland (FKA) to Nectar Efkarpidis (Molonglo Group) 30th April 2009

As part of the EOI we require a client reference. While I don't normally like to put words in other people's mouths, what I was thinking are words along the line of:

"Molonglo Group have been working with Fender Katsalidis Architects since 2001 on the first two stages of our award-winning and highly successful NewActon Precinct. We are currently collaborating with them on the documentation and construction of the third stage of the precinct, and on the schematic design of a mixed use building which will be the fourth stage.

We have enjoyed our ongoing collaboration with Fender Katsalidis at a number of levels. As a practice they have the capability to design, document and deliver large and complex buildings. Their engagement with us as clients, other consultants, planning and building authorities and the community in general is generous and inclusive. They are excellent listeners as well as communicators. The firm has a culture of pro-active service which permeates through the practice.

We have no hesitation in recommending Fender Katsalidis Architects to the University.

Nectar Efkarpidis
Managing Director
Molonglo Group Pty Ltd
Unit 4, 15 NewActon Pavilion
Canberra, ACT
T +61 2 6126 1300"

Kind regards, David

Email response from Nectar to David, 30th April 2009:

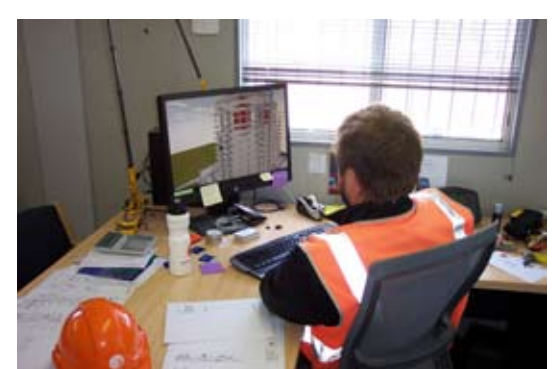
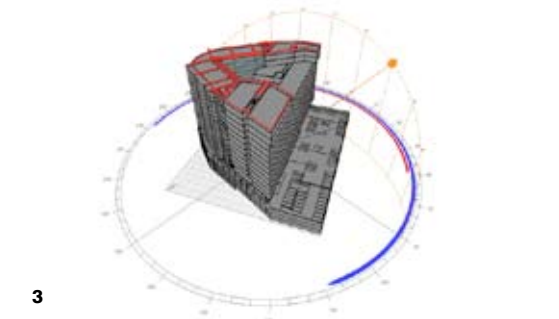
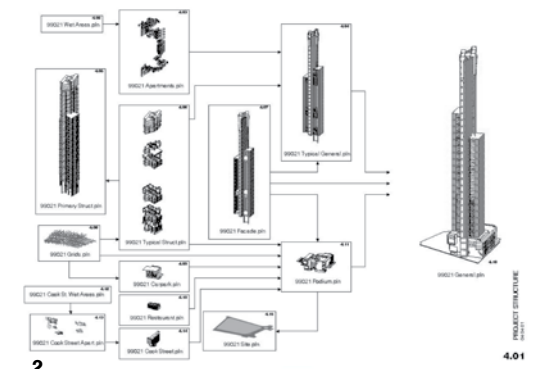
Hi David,

Re reference - absolutely. It would be an honour and a privilege. In my view the words don't go far enough to express our gratitude, respect and relationship. Everything we have done and are doing would not be possible without your unrelenting love, commitment and passion for our projects.

I think you sell yourselves short by not saying something about this and about being intimately but not limited to design, strategy, art, culture and the like.

I'd love them to call me and tell them all about you.

Speak soon
Nectar



Communication and technology

Various strands of communication both human and technological:

- 1 We present and analyse our projects interactively with others. It is the way we wish to work. We wish to draw into our designs the knowledge, thoughts as ideas of others as the resultant design is correspondingly enriched. This is a photo from 2003 of architect/ client interaction over a 3D design image from our BIM systems of a project being projected onto a whiteboard. | 2 This is the page from our Eureka Tower BIM manual illustrating how the various project components are combined to create the full construction documentation model. The date on this is 2001- by that time we had achieved a world-wide reputation for designing and documenting this 90 storey building using BIM technologies- well before the acronym was coined. | 3 Analysis of Canberra project for sunlight penetration by Arup using the BIM design model produced by FKA, and translated in IFC format. | 4 Consequent analyses produced by Arup from that model to inform design. | 5 Builder on NewActon South studying the primary structure of that building as derived from our BIM construction documentation model. The information is provided to the builder with an embedded gaming engine to allow exploration and interrogation of the model.





merit

Architects / practices are asked to demonstrate their capacity to produce works of outstanding architectural merit, including recognition of that approach demonstrated through prizes, awards, publication in significant architectural journals, other published essays and reviews in print, film or digital media.

'It is an urban marker announcing the New Acton precinct, a sculptural addition to the skyline silhouette. It encourages street activity through its retail, cafe and access functions permeating the ground floor'

ACT Architecture awards 2008 RAI

'The architecture is the primary element of an holistic design approach incorporating landscape, public art and graphic design. Together these create legibility and permeability of the precinct and incorporate an active presence of contemporary art and design in the every day living and working spaces an essential aspect of urban place making'

ACT Architecture awards 2008 RAI

'NFKs work is distinguished by its expressed buildibility: it's almost an architecture for architects' culture'

Norman Day - Architecture Australia jan/feb 2000

'Melbourne University has a gallery to do its art collection justice.'

Shaunagh O'Connor, Herald Sun - Ian Potter museum

'the Argus Center is typical of Nonda Katsalidis's richly sculptural urban structures.'

Philip Goad - Guide to Melbourne Architecture

'With this exciting urban hulk, Katsalidis offers the vibrancy of mixed use and a taste of decorative excess.'

Philip Goad - Guide to Melbourne Architecture

'It's a gigantic urban sculpture... Eureka holds already a place in world architecture as a compelling, ingeniously carved object.'

Norman Day - Architecture Review

'A landmark on Melbourne's landscape... while heralding a gold standard for tower living.'

Peter Corrigan - Monument

'A dynamic residential development in the heart of the city.'

Living the modern Australian Architecture - Claudia Perren

'There's a sense of clean lines but plenty of variety - it unfolds through all its different angles in a quite delightful way.'

Frances Lindsey (Ian Potter museum director) Fin Review

'What Acton really represents is an exercise in urban design; more than architecture writ large or the space between buildings, it is urban design skills, the business of putting a city together that have been sorely lacking since Burley Griffin'

Robert Bevan - The Australian Financial Review

The practice of Fender Katsalidis Architects has throughout its history consistently been the recipient of design awards. Those awards are listed on the right of this page.

Some of our buildings evoke popular responses. For example, Eureka Tower has been adopted as a popular symbol of Melbourne, appearing as backdrop for news programs on television and even as the "Tower of Power" graphic representing voting swings on national television coverage of the most recent Federal Elections. The Adelaide Advertiser building in Adelaide has appeared in television advertisements, and the NewActon Precinct is so popular as a venue for advertising and product launches that we are considering creating permanent accommodation for those activities.

Some of our buildings become a rich part of the fabric of our society. For example, the knee of a Peter Corlett sculpture at Melbourne Terrace is a regular fixture in "good luck" rites for wedding parties.

Other buildings create a publicity that assists the visibility of the user. For example our Ian Potter Museum of Art generated significant publicity for that institution through the articles written about it in popular and specialist press.



NEW ACTON EAST

- 2008 RAI ACT Canberra Medallion Award
- 2008 RAI ACT Residential Architecture-Multiple Housing Award
- 2008 RAI ACT Commercial Architecture Award
- 2008 RAI ACT Art in Architecture Award
- 2008 RAI National Award for Commercial Architecture
- 2008 Planning Institute of Australia - President's Award
- 2008 Planning Institute of Australia - Planning Excellence in Urban Design, Ideas and Achievement
- 2008 Australian Property Institute John Bradley Award

ICE - PLOT 9H MARINA

- 2008 CNBC Arabia Property Awards - Best High-Rise Architecture



EUREKA TOWER

- 2007 RAI National Harry Seidler Award for Commercial Architecture
- 2007 RAI Victorian Chapter Best Overall Award for Residential Architecture - Multiple Housing
- 2007 RAI Victorian Chapter Joseph Reed Award for Urban Design



THE ESPLANADE APARTMENTS, MELBOURNE

- 2008 HIA-CSR Australian Housing Awards - Apartment Project of the Year
- 2007 City of Port Phillip Design Development Awards Best New Development
- 2007 Victorian HIA-CSR Award for Apartment (High Density Housing)

THE ADVERTISER AND SUNDAY MAIL, ADELAIDE

- 2006 RAI Merit Award for Commercial Architecture

MELBOURNE DOCKLANDS NEW QUAY PRECINCT

- 2003 RAI Victorian Chapter Commercial Award (in association with SJB)



BENDIGO ART GALLERY

- 2002 RAI Victorian Chapter Regional Architectural Prize

SIDNEY MYER ASIA CENTRE

- 2002 RAI Victorian Chapter Best New Institutional Award

IAN POTTER MUSEUM OF ART

- 1999 RAI Victorian Chapter Architecture Gold Medal Award
- 1999 RAI Victorian Chapter William Wardell Award Institutional Category
- 1999 RAI Victorian Chapter Melbourne Prize Award



ST LEONARDS APARTMENTS, ST KILDA

- 1997 RAI Victorian Chapter Merit Award for Multiple Residential Architecture

MELBOURNE TERRACE APARTMENTS

- 1995 Melbourne City Council Post Code 3000 Award
- 1994 RAI Victorian Chapter Commendation for Residential Multiple (Stage 1)
- 1994 RAI Victorian Chapter Award of Merit for Interior Architecture - Karalis Apartment - (Stage 1)



SYDNEY CIRCULAR QUAY

- 1995 First Prize, Sydney Circular Quay Redevelopment Design Competition (with Tract Consultants)

171 LATROBE STREET, MELBOURNE

- 1992 RAI Merit Award for Commercial Architecture

ST ANDREWS BEACH HOUSE RESIDENCE

- 1992 RAI Merit Award for Residential Architecture