

# BLURRING BOUNDARIES

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## ABSTRACT

Adopting an empirical teaching/working experience against an urban design theory backdrop, this paper investigates 'Design Thinking' from a personal view. It explores the interplay between the different design disciplines and offers an interpretation on how the lines between them blur and how they may connect(ED) through teaching programs.

A brief history of urban design introduces the subject, demonstrates the dynamic forces of the city, touches on the ongoing tussle for definition of Urban Design and ultimate recognition of it's distinction from Architecture, Planning & Landscape Architecture as an independent profession.

Once the lines are drawn, it is time to move on and acknowledge the indispensable value of crossing the lines & connecting design fields, a function that recognises; '...that designing is a multi-layered thing, to be learned slowly, layer by layer, but designers must combine all the layers at once, and understand their interaction...' (Venturi2004)

It is this layering that requires a learning experience and the input of a 'thousand designers' in order to create rich and meaningful built environments.

With the advent of information technology the design process has been accelerated and the sharp lines of separation between the design disciplines are blurring. A powerful common visual tool has been created that encourages a cross communication of design ideas and broadens the scope for discovery, invention and connection.

The educational imperative is determined through a program aimed at a holistic approach to urban design, available to students across the design disciplines in the Faculty of the Built Environment.

The philosophy is based on communicating new visual insights, through an interactive participation program that draws on the valuable contribution of personal experiences of students on the course.

The program, as a Seminar offers an appreciation of the complexity of the subject through understanding the parts; as in-situ investigations, readings, discussion, drawing, debate & presentation.

The focus is the fascination of urban design interventions in the 21<sup>st</sup> Century and the propensity for rapid change as part of the dynamic process of cities. Intrinsic to the program are

primary links to Planning, Architecture and Landscape Architecture in addition to diverse design associated activities. '...the new millennium will depend on the creation of bridges that unite conservation technology with an earth-centric philosophy and the capacity of designers to transform these integrated forces into a new visual language' (Wines 2000: 236).

## INTRODUCTION

"The modernist city was a different kind of location...an international urban enclave, where specialists in the arts met other specialists and the arts became their own country... fed by...multivalent images of the city...Culture was disorientated ...fragments were of the essence, and seams of connection grew theoretical and abstract as in 'montage', 'collage', 'post-impressionism', 'cubism'. Art...sought a new epistemology of language and form" (Bradbury1980).



Fig. 1. Intertwined, Rauschenberg's collage, sets the stage for ... Interscape' at UCLA in 2003. Source: Los Angeles Times, May 21st 2006.

This found expression in an urban design language and a changing concept of city space and form.

2007 is a landmark year for urban design, since it marks 50 years since the first conference on urbanism and urban design was held at Harvard University.

Urban design in the mid-20<sup>th</sup> Century was largely a result of demographic changes in cities, unprecedented concentrated urban settlement and advanced technologies.

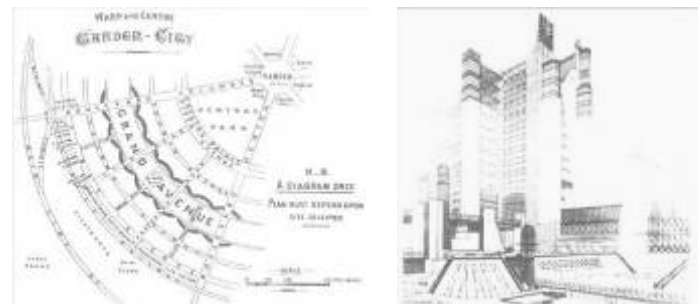


Fig. 2. Top-left: 'Urban Conglomeration' in Sao Paula, Brazil. Source: Author 1990.

Fig. 3. Bottom-left: Los Angeles early highway.

Fig. 4. Top: 'The New Vision'. Source: cited Author 1981.

Fig. 5. Above-right: Howard's 'Garden City' diagram. Source: cited Author 1981.

Fig. 6. Above-left: 'La Citta Nuova' 1941. Saint'Elia's most fully realized perspective. Source: cited Author 1981.

The simultaneous advent of the private car created extraordinary mobility and a concomitant expectation for access; equating to large roads and interstate highways. Vast amounts of land were used for interchanges and additional land was needed for parking lots that led to eroded central city areas and severed communities.

Modern buildings, many of them misunderstood interpretations of Le Corbusier's ideas, replaced traditional buildings and dominated inner cities, at a cost to valued human scale environments.

#### HARVARD CONFERENCE 1957

The Harvard conference was convened to address these issues. The conference raised more questions than answers and although the contributors arrived at a list of urban design definitions the mood of the meeting was summed up by Jonathan Barnett with his tongue-in-cheek suggestion that, 'Urban design is practicing architecture without a license' (Barnett1957) a misnomer that continues to be perpetuated.

#### THE VISIONARIES

From the turn of the 20th century Visionary designers around the world, were exercising their imaginations in the exploitation of new materials and new city form.

Ebenezer Howard's garden city movement concept created new visions of how people could live & work, away from the

blight of the old industrial cities. The success of his experiments introduced a new concept into planning and design that continues to quietly reverberate throughout the western world, in the form of 'garden' city suburbs.

Saint'Elia, imaginative drawings in the 1920's of the 'Futurist City' extended spatial boundaries. He was prescient in his prediction that: '...our houses will last less time than we do and every generation will have to make their own...' (Cited in Segal 1981).

And in the art world Cubism lay at the foundation of the visual spatial revolution, implicit was Einstein's Theory of Relativity that identified a change in cognitive space: '...relative to a moving point of reference not as the absolute and static entity of the Baroque system of Newton, and in modern art [and urban design] for the first time since the Renaissance, a new conception of space led to a self-conscious enlargement of our way of perceiving space' (Giedeon1967:355).

These altered spatial perceptions resonated in design circles internationally and stimulated an interchange of ideas. Visionary groups explored urban images that would transform entire environments and there appeared to be no obstacles to the practical application of their fantasies.

In the nineteen thirties Le Corbusier, et al established the Congres Internationaux d'Architecture Moderne (C.I.A.M.) and introduced innovative concepts of space & building types, while in London, in the nineteen forties Paul & Percival Goodman created the MARS Group and by 1950ties Frank Lloyd Wright had designed his Utopian 'Broadacre City' while Paolo Soleri was focusing on social changes based on personal perceptions of people.

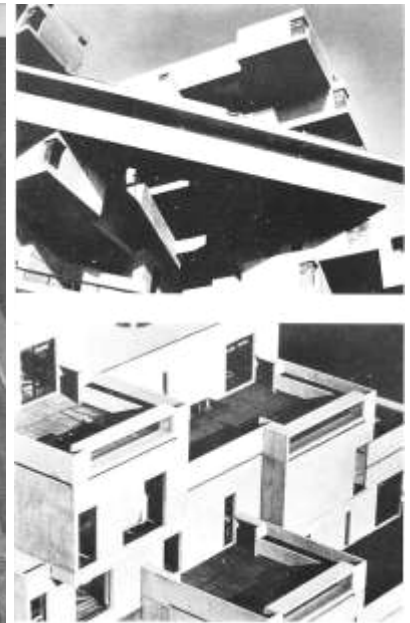
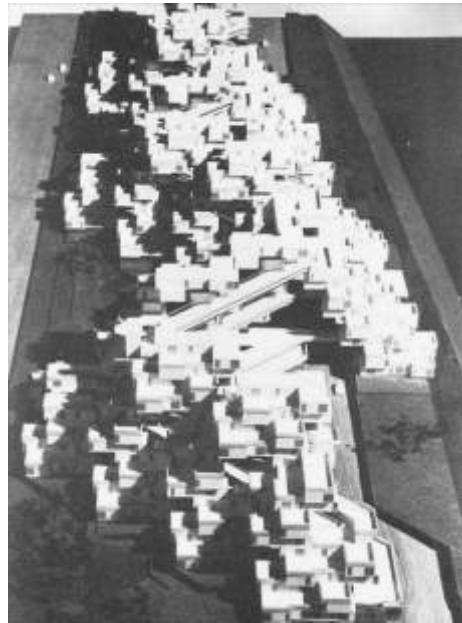


Fig. 7. Picasso 'Les Femmes d'Alger (O. J.)', 1925, regarded as the first Cubist painting. Different facets of the same object fractured the picture plane. Source: cited Author 1981.

Fig. 8. a Habitat Model, b & c Habitat Interiorscapes. Source: Banham1976: 107-108.

The Archigram Group in the U.K. discovered different structures that could support massive buildings and in Japan the Metabolists explored new plug-in walking & disposable cities. (Lang1994:74). New urban forms were envisaged with capsules within which to live, and work, sky links were used to connect towers horizontally while elevators provided vertically connections The Visionaries were fascinated by the potential of extraordinary structures but seem to hold a common limited understanding of human purpose.

#### MEGACITY MONTREAL EXPOSITION 1967

The Visionary designs that emerged on the international stage had metamorphosed into a new typology, 'Megastructure' these buildings commonly comprised, 'structural frameworks of great size that were capable of ... 'unlimited' extension ... into which smaller structural units like houses could be built [pre-cast]... plugged in or clipped on [in situ]...they often used modular units' (Wilcoxon1968).

They were showcased at the 'Megacity Montreal Exposition' a year that produced the nearest ever promise of Metabolism and Moshe Safdie's 'Habitat Housing' was an expression of architectonic cubism that attracted extensive media coverage (Banham1976:107). This development continues to attract attention, as a 'living' example of megastructure.

Designers were interpreting architecture through art that became integral to their expression of form. Design fields shared the ethics and aesthetics of new abstract spatial concepts.

These were the embryonic inspirations for the next generation of mega structure; iconic buildings, high-rise residential densities and access connections; into the next millennium.

'The kinship between the various branches of the visual arts was so close... it would be more accurate to describe them as only different media for expressing the same truth' (Rykwert1975: 55).

During the 1960's David Crane recognised the human need for wholeness. His concern was with deeper intangible qualities and he considered the design professionals philosophically bankrupt.

His approach took account of time as a forth dimension and he left a legacy of interpreting the street as a three dimensional movement channel that encompassed: 'Four Faces of Movement' '[He]...described the street as a city builder, a giver of access, a [city] room and a communicator of information' (1960:283).

He established an urban design vocabulary and advocated a context for individual creativity; the City of a Thousand Designers. He recognized the development opportunity of public infrastructure that comprised almost half the built environment, and described this as Capital Web, Crane mentored many students, including Denise Scott Brown, and his influence resonates in Venturi & Scott Brown's contemporary 'mannerist architecture'. 'Mannerism is in its primary sense, the acceptance of manner rather than it's meaning' (Fleming1974: 184).

Venturi & Scott Brown have interpreted architecture as a 'sign' with its concomitant symbolism and meaning involving iconography and recently electronics that engage digital media as significant elements of architecture.

Crane's contemporaries, Appleyard & Lynch's study of 'The view from the road' extended visual perceptions and added new concepts to urban design language, including: Paths, Edges, Districts, Nodes and Landmarks.



304, 305, 306, 307. Recent developments in the technology of LED have gone far beyond where we started in Las Vegas. We are amazed at what has been achieved on and near Times Square.



Fig. 9. A building as a sign. Source: Venturi 2004:169

Lynch believed that, ‘...The environment should be perceived as meaningful ... [it] is an enormous communication device people read it, they seek practical information, they are curious, they are moved by what they see...’ (Lynch1972).



Fig. 10. Family group. Source: Author 1997.

These mirror the atmosphere of the time that was expressed in the pendulum swing between the imaginative physical potential of visionary design and socio/political/economic oriented design that held sway for how people of the ‘innovative environments’ would live, work and play.

#### URBAN DESIGN AS A DISCIPLINE

It was in this milieu that urban design emerged as an independent design component to serve the built environment in a more holistically way.

The diversity of urban design theory may be seen as a result of both the complexity of the subject and the dynamic nature

of the city. The city may be compared to an organism in a state of flux, where parts degenerate while others regenerate; in response to the variables of the cultural climate. And it is at these junctions that urban design intervention has its place.

Cuthbert, in ‘The Form of Cities’ selects 40 classic texts in urban design from 1960-2003 that cover different approaches in the theoretical field through:

history, architecture, planning, image of the city, city form, structure, traffic, streets, nature, ecology, human environment, people behaviour, creative process, genius loci, environmental geometry, defensible space, public space, theories of urban design, morphology, townscape, planning patterns and more recently the evolution of urban design.

It is noteworthy how wide and varied the approaches are, re-emphasizing the complexity of the subject, the richness of its content and the blurring of boundaries between urban design and other design disciplines.

There exists a sound pragmatic theoretical background to urban design, although as Cuthbert contends, many areas still require substantive research: ‘...an urban design knowledge should involve nothing less that the study of how the global built environment achieves its physical form and how it materializes through design’ (2006:262).

#### DEFINITION OF URBAN DESIGN

It is clear that definition of urban design, so long debated, cannot respond to a single set formula, since it is multifarious by nature and recognized by its many facets. To follow the definition debate requires a separate forum that is not relevant to this paper, suffice to note as Toni Morrison, wrote, ‘Definitions belong[ed] to the definers- not the defined’.

Being the definer I believe that it is necessary to provide my definition as a context for discussion: ‘The role of the urban designer is to arrive at a rational, imaginative visual concept that recognizes the cultural context of a given area; through a rigorous investigative process that results in an urban design framework for strategic development’.

And essential to the experience is working with a multi-disciplinary team in order to gain mutual benefits, from diverse concepts, creative inputs and inspiring interaction.

The idea is to lose yourself in the project so that the lines between the different disciplines begin to blur. The focus is shared learning of interesting new angles in familiar territories and the joy of forever changing perceptions of what is well-known.

#### URBAN DESIGN EDUCATION

As a multidisciplinary practice urban design is on the cutting edge of boundaries because of its close relationship to architecture, landscape architecture, planning (physical/strategic/policy), traffic engineering and the visual arts. Once the urban design line has been drawn it is time to move on and acknowledge the indispensable value of crossing the line and connecting design fields, a function that acknowledges:

‘...that designing is a multi-layered thing, to be learned slowly, layer by layer, but designers must combine all the layers at once, and understand their interaction...’(Venturi & Scott Brown2004:167).

It is this layering that requires a learning experience and the input of a ‘thousand designers’ to create rich and meaningful built environments. It is a function of the overlays that imaginatively link the complex components of cities so that it’s often difficult to discern where urban design ends and landscape begins, whether it’s architecture or urban design that define street spaces, if the strategy is urban design or planning, whether the incentives are political or policy driven through urban design directives; the urban designer’s mandate is to create a brief for the strategic development of a selected area, that pays attention to identifying the nature of the culture and enhances the built and natural environment. It logically requires a multi-disciplinary team.

The conference title ConnectED is a perfect foil to describe the precise relationship between the study of urban design and its connection to other disciplines through Education and Practice.

The educational imperative is determined through a program aimed at a holistic approach to urban design, available to students across the design disciplines in the Faculty of the Built Environment.

The urban design program involves an investigative process that includes, where relevant, the following broad aspects:

Political, economic and social history; an underlying philosophy of ‘why this project here?’; identify stakeholders & individuals who influence the project; who is the ‘driver’ of the process and which government agencies are involved in the scheme; what is the strategy for the development proposal; the economic components, funding & feasibility; administrative context ‘who is control of what?’; metro and local council policies; what are the critical development thresholds; is there an urban design theory base?

The product is based on the investigative process and an interpretation of the physical layers of the urban design outcomes including:

Context; Topography; Urban Morphology; Movement Patterns; Edges, nodes, junctions, pathways; Typology of buildings & streets; Views, skylines, landmarks; Urban & natural features; Landscape formal & informal.

Although these are important aspects of any urban design study, they should not be regarded as an exhaustive list. Each of these components have many sub-headings that need to be extended to suit specific urban design projects and these often and inevitably overlap with other design disciplines.

The teaching philosophy is based on communicating new visual insights, through an interactive participation program that draws on the valuable contribution of personal experiences of students on the course.

The program, as a Seminar or Post Graduate studio offers an appreciation of the complexity of the subject through understanding the parts; as lectures, in-situ investigations, readings, discussion, drawing, graphic design, debate and visual verbal presentations.

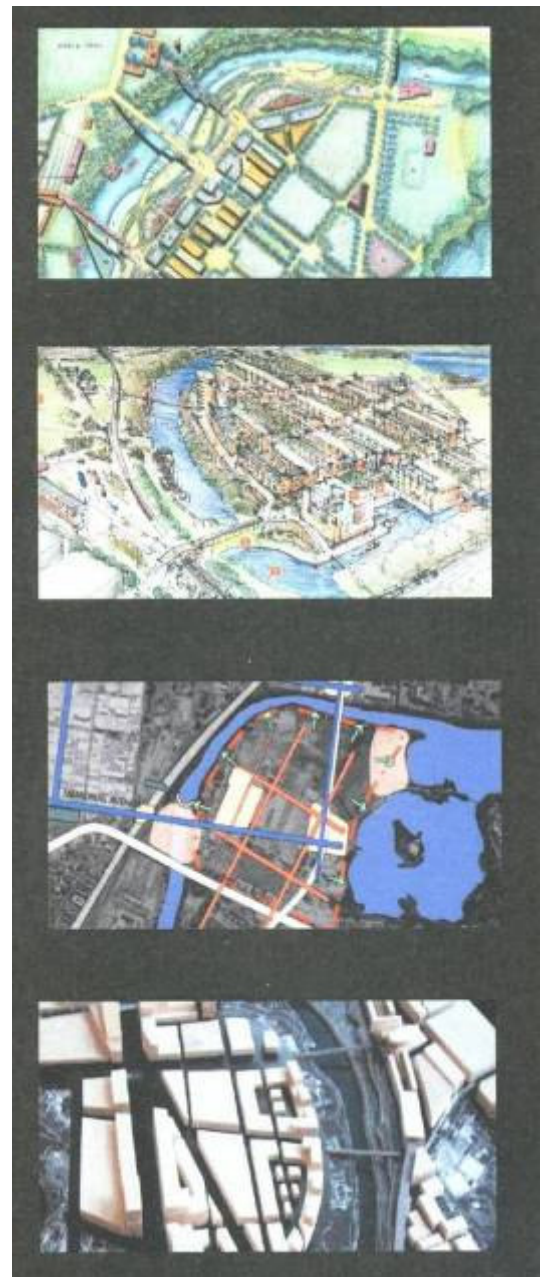
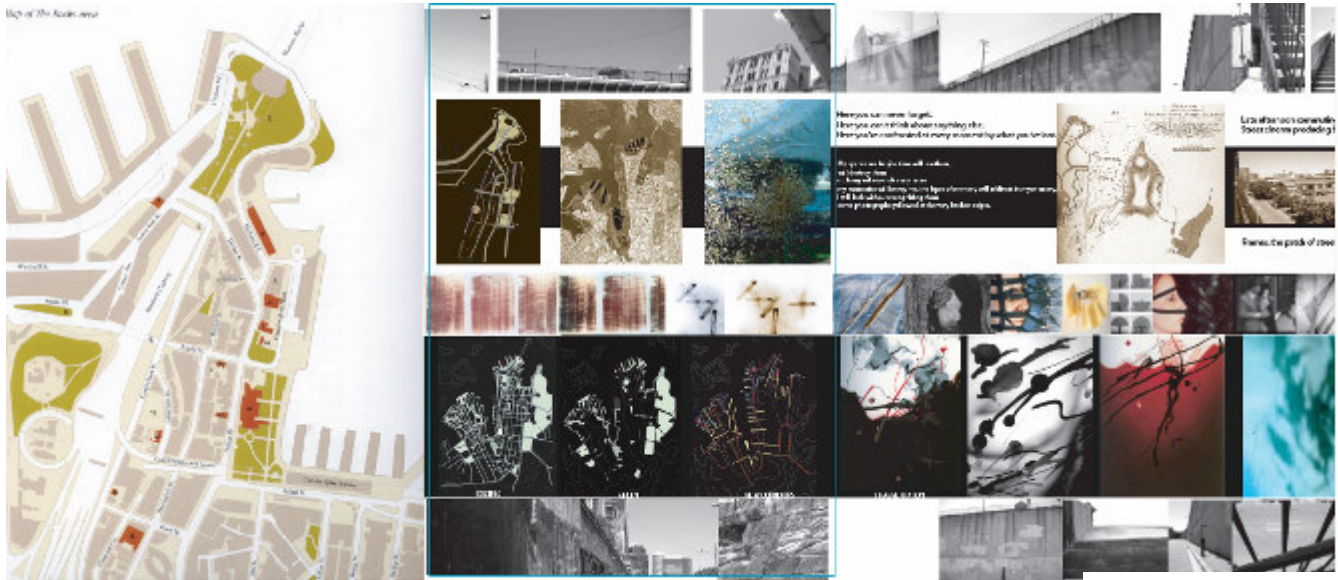


Fig. 11. Sydney University Students / Liverpool Project, 2003. Similar UD Framework different solutions. Source: Author.

Integral to understanding urban design is a three dimensional mapping process that interprets the visual patterns underlying the history, form, and culture of the city. The base information gathered through the investigative studies referred above.

There are a number of different layers that yield information and give insight to the meaning of the study area; from the purely physical analysis, to activity focused mapping, to non-place realm connections. Once complete, the disseminated parts are overlaid and extraordinary synergies are discovered in the re-assembled layers. This process is the key to the study and provides the design clues for development. Each team works separately, on the same study area often producing, similar urban design frameworks. The design solutions are however, rarely the same, but all have validity. See figure11. This is indicative of a rigorous urban design process that supports diverse imaginations.



Ssource: Aljukic 2003.

Fig. 12. A student describes her urban design investigation as a poetic photomontage;  
 ‘... It is the door to the city, passage, an empty shell, the edge.  
 My territory. Place I live, love, absorb and traverse...  
 Mental landscape unfolding.  
 My intimate geography ...’

Whatever the brief, the interactive process requires the expertise of many different professionals, often way beyond the three usually associated with urban design.

With the advent of intelligent & digital technology a powerful visual tool has been created that enhances the cross fertilization of design ideas and broadens imaginative scope. In the graphic fields, the use of the same media for creative expression softens the lines of separation between the design disciplines and provides an aesthetic, shared visual expression.

Designers of the built environment are finding common ground in their urban subject matter expressed in similar formats that extend into the arts and film. The use of electronic technology has literally spilled into the built environment as public art, installations, as verbal & visual information systems, as kinetic components that enlarge the dimensions of city life and add vibrancy to night life.

A trend is growing in large developments that indicate context is being considered and multi disciplinary teams are taking a lead in sustainable green buildings.

‘...The mission now in architecture [urban design] as in all human endeavours is to recover the fragile threads of connectedness with nature that have been lost... Globalisation has altered values and has changed perceptions of space, time and motion.’(Wines2000:236)

The implications of globalization are resonating throughout the planet and are shaking fixed ideologies of nations from developing countries to highly sophisticated economies. This world view has a significant impact on cities, making it possible to visualize a shared generic city that will shape future urban design; with the knowledge that each city will always maintain its own unique cultural identity.

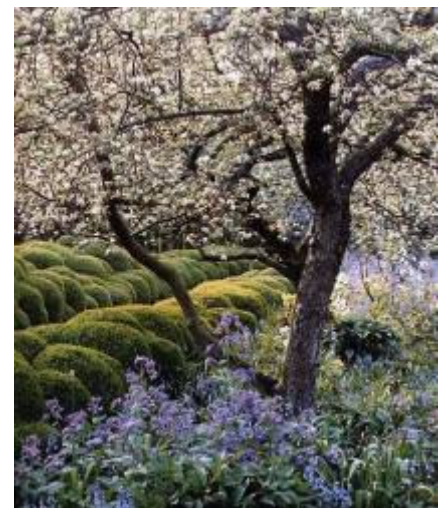


Fig. 13. Fragile threads.

Fig. 14. A Generic City. UNSW MUDD Students Project, 2002- 2003. Source: Author.



To conclude I would like to share some visual interpretations of blurring boundaries.

Fig. 15 a & b. Source: NYTmagazine, May 2004, 'TheConstant Gardener' Pilar Viladas . Wirtz's own garden, boxwood hedges, in Schoten, Belgium. Photograph Alfred Seiland.

**LANDSCAPE AS ARCHITECTURE**

Top-left: The gentle sloping plain has been shaped through a formal row of tightly trimmed terraced hedges of architectural form beautifully contrasted with natural shrubbery affirming the symmetry of the hedge pattern.

Top-right: A topiary Arch flanked by low 'hedge walls' direct the eye through the archway into the garden beyond, defining the play of space, light and form.



Fig.16. Source:NYT 2006.

Fig.17. Source: SMH 2007.

Fig.18. Source : Author 2000

**ARCHITECTURE AS SCULPTURE**

Top-left: The proposed performing Arts center for an island in Abu Dhabi overhangs the waters edge. A 'giant dragonfly' alighting on the shore. Zaha Hadid the designer says 'it's an inspiration from nature and organic design'.

**ART IS ARCHITECTURE & ARCHITECTURE IS ART**

Bottom left: The Bilbao Guggenheim Museum floats above the mist as an extraordinary piece of sculpture while Louise Bourgeois' huge Spider strides across the courtyard her legs describing a series of architectural arches.

**LE DEFENCE THE SQUARE AS A CANVAS. ARCHES ON AXIS**

Right: The Square is experienced as the unrolling of a large painted canvas. The Grand Arch on axis with the Arch de Triomf as a planned linked landmark.

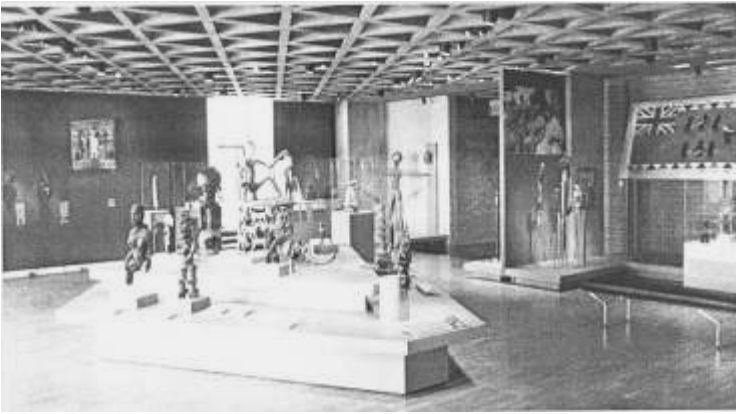


Fig. 19. Interior as public space blurring inside and outside. Recently renovated Kahn's Yale University Art Gallery. Source: NYT 2007.

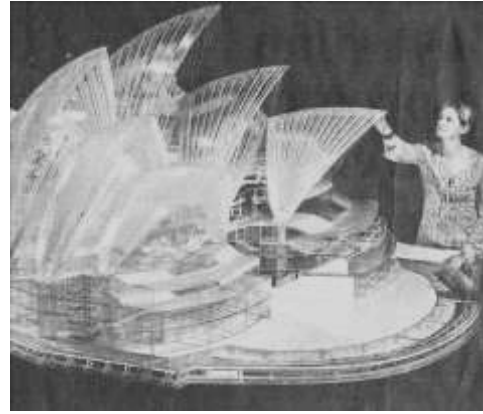


Fig. 20. Rediscovery of the original icon. Sydney Opera House. Source: SMH 2006.

### INTERIOR AS PUBLIC SPACE BLURRING INSIDE & OUTSIDE

The gallery space opens out in all directions through large picture windows with the 'leitmotif' of Kahn's coffered ceilings. The interior space has been designed to function as would an outdoor public space.

### REDISCOVERY OF THE ORIGINAL ICON

The inspirational iconic Sydney Opera House, an exquisite geometry rediscovered as architecture, as art and as sculpture the round.

'[Urban] Design is an adventurous journey that should be allowed to have a surprising end point: arriving perhaps at a wild, unexpected beauty; or an agonized one, as when the situations are dire and imagination draws hard truth from difficult reality. This serious beauty may lie in what you see and can't at first accept' (Veturi & Scott Brown 2004: 224)

### ACKNOWLEDGMENT

Figure11, Studio coordinator Shelton, B & Segal, A. University of Sydney, Master of Urban Design Program, Liverpool, 2003.

Student participators: Eva Flegman, Ji Yu Ji, Kaniz Khaleda, Wendy Smith, Hugh Chen, Tom Jones, Giles Thomson, Stephen Manton, Hannaa Adam, Andrew Spenser, Kelly Van der Zanden, Naomi Ruker, Steven Hammond.

Figure12, Fourth year student 'World Case Studies' FBE, UNSW, final project 2003. Project Co-coordinator Arlene Segal.

Figure 14, Studio coordinator Cuthbert, A University of New South Wales MUDD Program, Hong Kong, 2001.

Student Group: Sean Galloway, Andri Irandri, Ana Lage, Vincent Lam, Truc Anh Nguyen, Phu Duc Tu, Stephanie Wang.

Rashid Mamun, PhD Research Scholar, University New South Wales. Formatting of Images and Text for 'Blurring Boundaries.'

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