ARCHITECTURAL SPECULATIONS ON THE LIBRARY OF THE FUTURE

Dr Julian Worrall Associate Professor, Architecture+Urban Design, School of Architecture and Built Environment, University of Adelaide Judy Bailey Research Librarian, Barr Smith Library, University of Adelaide

THE UNIVERSITY of ADELAIDE

PREMISE

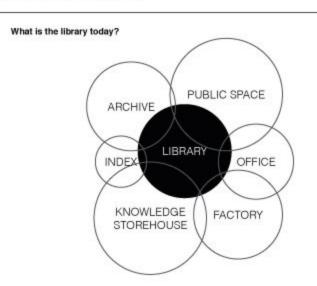
This poster details work from a graduation design studio for M.Architecture students at the University of Adelaide in 2015, and its engagement with the university's central library, the Barr Smith Library, concurrently undertaking its own major review. The central task of the studio was to grapple with the question of "the library of the future". It sought ways of reinventing the library, an institution and a social and architectural typology that is seriously threatened by technological and social changes, chief among them being digitalisation and privatisation. In its idealised manifestation, the library is a mysterious, evocative space. An emblem of knowledge, learning, civilisation itself, Michel Foucault saw the library as one of the defining institutions of modernity, a "heterotopia" devoted to a complete and fully indexed reflection of the world itself.

The book is the atom of the matter of the library - yet under the impact of digitalisation, the internet, and the portable reading device, this atom is disintegrating - becoming perhaps pure intellectual energy, disseminated and consumed virtually.

As a haven, an refuge, a space traditionally free from intrusions of commerce, an end in itself, the library upholds the ideals of an accessible public space. Yet our era is one in which the public realm is splintering, atrophying, and being slowly starved of funds; while divided and diverse private domains expand to fill the void.

In response to this situation, the studio asked its participants: what new hybrid configurations, scenarios, programs, and typologies are plausible to sustaining the promise of the library?

PROMPTS + METHOD



Themes linked to the contemporary library

2. Metaphors 3. Precedents 4. Elements 5. Possibilities 6. Agenda this research is then crystallised into a

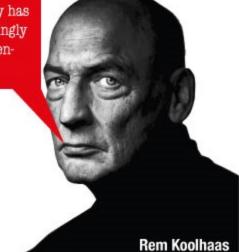
detailed program, upon a concrete site,

using an elaborated set of techniques.

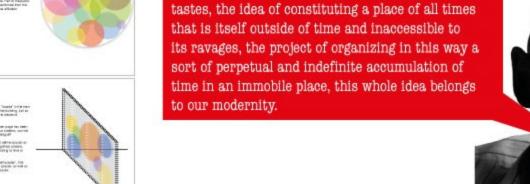
last of the uncontested moral universes: communal accommodations for 'good' (or necessary) activities... The moral goodness of the Library is intimately connected to the value of the book: the Library is its fortress, librarians are its guardians...

The Library represents, maybe with the prison, the

The Library's insistence on one kind of literacy has blinded it to other emerging forms that increasingly dominate our culture, especially the huge efficiencies (and pleasures) of visual intelligence.



METAPHORS OF THE LIBRARY **ELEMENTS POSSIBILITIES** The idea of accumulating everything, of establishing a sort of general archive, the will to enclose in one place all times, all epochs, all forms, all



PROCESS

The studio was conducted over a 14-week period between August and November 2015. Nine students developed individual projects, defining their own specific questions, themes, sites, and content in response to the overarching premise. The design process involved a structured sequence of steps, engram analysis; design development; and finally preparation of presentation outputs, such as drawings, renderings and models. The studio included a period of groupwork: a collective investigation involved an initial three week period of framing research exploring the situation, metaphors, precedents, and elements of the library, which was assembled into a 50-page research book for shared reference. The remainder of the period was devoted to developing student's own individual proposals. These were exhibited to the university community and wider public at the School's annual Graduation Exhibition,

Engagement with staff from the Barr Smith Library occured tion in Week 14. Through interactions with working librarians, students were given insight into the elements, organisation, and the real-world challenges faced by the university library under changing technological and financial circumstances. Ultimately, as befits a capstone project at the conclusion of their professional education, students were free to determine the extent to which they engaged the specifics of the Barr Smith Library's own process of organisational change. The resulting projects were diverse in type, location, purpose, and design, with only one student, Joshua Marchant, explicitly developing a potential evolution of the Barr Smith Library.

compassing framing research; precedent studies; site and prowhich opened on 4 December 2015.

during the early briefing stages, during a progress review in the middle of the semester; and at during the final formal presenta-

With her Library of Cultivation, sited on a lakefront in an Arcadithe demise of the physical book and its replacement with robust digital media and devices could, counter-intuitively, facilitate a closer connection to nature. Her scheme is a collection of primal, geometrically rigorous spaces bringing readers in contact with wind, trees, earth, water, and sky, restoring ballast and sensation to the pallid world of virtual information.

Kaixiang Xue's Urban Memoir, set in London adjacent to the Tower Bridge and City Hall, is an elaboration of the proposition that the metropolis itself - with its historical strata, rhythmical life-patterns, enduring monuments, and palimpsest of memories - is the ultimate archetype of the library. His project weaves urban sight-lines, pedestrian pathways, and ghosted volumes of former structures into a confident synthesis - inviting us to consider the library as a giant lens focussing the his-

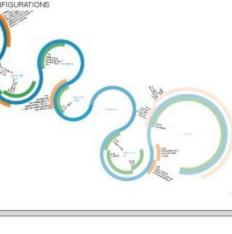
The program of the forthcoming Barack Obama Presidential Library, set in Chicago, provided Yujia Jiang an opportunity to develop her City of Cultivating Hopes. A rich and colourful program of archival, educational, and experiential spaces is held in suspension amidst layered three-dimensional grids – employed as a polyphonic emblem of the American frontier; Chicago urbanism; Miesian architecture; and the constructive hopes intrinsic to construction sites – the ultimate architectural

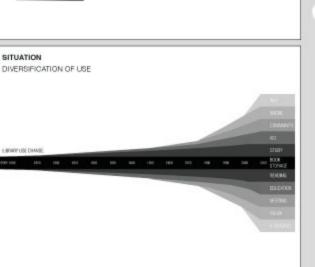
While the above three reframe, augment, and reinforce the library typology through close connection to their sites and contexts, the projects of both Jie Zhang and Cheng Cheng proposed hybrid formations in response to the studio chal-

Zhang's Knowledge Interchange combines a transit interchange for trains and buses in Western Sydney with library elements in the audacious form of inverted conical volumes or "book spirals", such that the library partakes of the contempo-

Magic Mountain at Glenelg – that lost icon of pure fun for a generation of Adelaide kids -brings the splash and laughter of a water park to the staid confines of a council library. With its sea-side "Book Bar" animated by waterslides and transparent pools, the project proposes that with its capacity to inspire gathering and play, it is the beach – that archetypal Australian public space - that may yet be the saviour of that other arche-

FRAMING RESEARCH





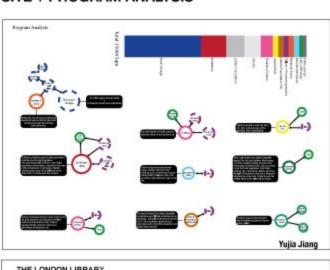
PRECEDENT STUDIES

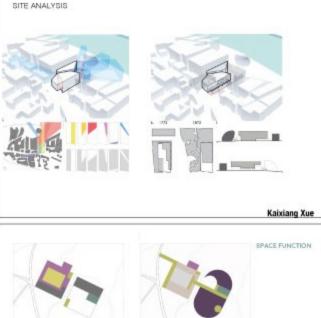


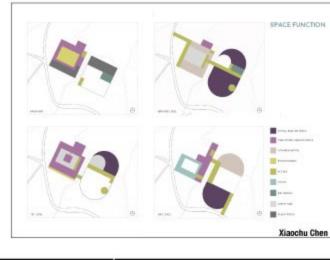




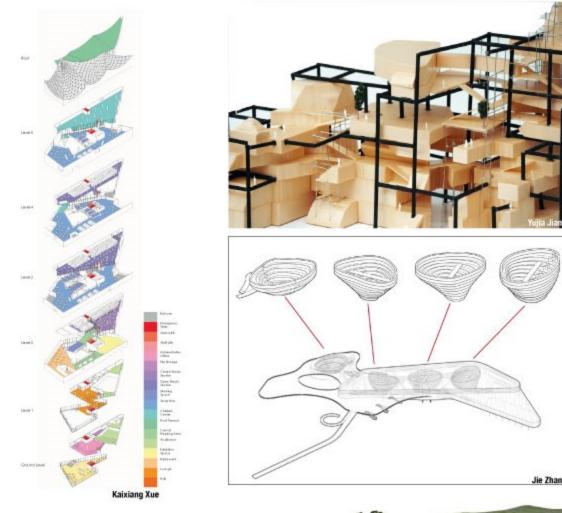
SITE + PROGRAM ANALYSIS







DESIGN DEVELOPMENT+PRESENTATION





PROPOSALS

an landscape in the Adelaide Hills, Xiaochu Chen suggests that

tories, energies, and knowledges of the city.

symbol of "a more perfect (American) union".

rary urban condition of a "space of flows."

Meanwhile Cheng's Magic Mountain Library, on the site of typal public space, the library.

Library of Cultivation

Magic Mountain Library Cheng Cheng



City of Cultivating Hopes

Joshua Marchant

Bastarde Smith Cultural Condenser

Kaixiang Xue



Knowledge Interchange

aditional libraries often tend to isolate all the natural ts such as rain, sunlight and wind in order to collections. However, with the development talization, our way of reading has changed a t. In the future, the reading environment can be rse, and our libraries can be totally different too

he design concept of this project is to create a library that is well merged into nature, to create a place that allows people to feel and touch nature while reading. It is a place that is distant from noisy urban crowds, a quiet and relaxing, peaceful and placid place that helps individuals to calm themelves, meditate and enjoy reading.

he Library of Cultivation is located at the Mount ofty Botanic Garden, 14km from Adelaide city. The irban areas, but within an easily accessible istance, ensuring transportation options and suffiient potential visitors. The garden is around a lake, and the library is located beside the lake, surround-

want to provide for both traditional and digital ways | quadrants, divided by two movement axes across of reading, so my initial idea was to split the library the site. The major axis connects the city and the nto traditional and digital zones with different formal ogics (rectangular and circular). Within this overall form, I designed a number of specific spaces that provide different combinations of experiences that advance my overriding goal of linking reading closer to nature. These include the following: The Waterfall Reading Room; The Tree Pathway Reading Space; The Underwater Reading Room; The Wind Reading Room; The Swimming Reading Room; The Underground Reading Room; The Projection Room; and The Sky Reading Room.

hrough various forms of immersion in the environment - being behind a waterfall, elevated among rees; washed by dappled underwater light; soothe by lakeshore breezes; floating in water; buried among tree roots; and opened up to the daytime and nighttime skies - these spaces bring readers in close connection to nature. Through such means, the library is reconfigured as a space for the cultivation of both oneself and one's relationship the wider

In this project I develop the possibility of a "holiday library". This sees the future library as a new kind of entertainment place. A place designed for people who love books. A library like a club or a bar, a place that fosters discussion and community through books. A library that has food, drink and beach unshine. A library suited to a sense of holiday and

The proposal is located at Glenelg, the most famous holiday beach in Adelaide, on the site of the former "Magic Mountain", which closed in 2004 after being n operation for 22 years. This was a theme park that provided many remarkable memories for a generation of Adelaide children, who have now grown up. The new library recalls the history of the site while adding something quite new.

The design has been developed in response to a number of factors, including: the flow of people across the site, the site memory of Magic Mountain, and the water park as a leisure element.

The basic ground level plan is formed into four beach. The minor one guides people from the tram station and the park into the site.

The built form is based on landscape elements drawn that evoke the elements of mountains. For example, the real mountains have curved contour lines, canyons and caves. I transferred these elements into architectural language to derive the

The new water park recalls the old water park of Magic Mountain. It is positioned as a kind of "canyon" between the two built "mountains" of the library volumes. The swimming pool recalls the waters of a lake, while the water slide is the river.

An important interior spaces is the Bookbar. This is a place designed for people who love reading to form communities and discuss books. Here people can easily find friends and have fun, discussing books with drinks and music. A slide descending from each level arrives here. People can take a book from an upper level and slides down into the Bookbar, buy a drink, then go to the beach enjoy the sun.

"A building that speaks, to the hopes of all. Stand on the past, to construct tomorrow."

The proposed library will spread the story of Mr. Obama's presidency across the globe as well as be a model for America by empowering individuals to cross the bridge of race and head towards a harmo nious and equitable future. Essentially, it will still serve as an archive for docu-

ments relating to Obama's Presidency, consistent with the historical purpose of a presidential library. However, the bigger vision for Obama's library is that t will provide access to a more open, generally accessible space and will have more interaction with the visitor. The library will function as a story teller by displaying and educating visitors of the exploits of Obama presidential life, Chicago and the American culture. And the building itself, also tells a story about Chicago's urban development, Americas race issue and the president's hopes. The library provide a stage for people from different communities and disciplines to learn, create knowledge and share in furtherance of creating new approaches to solving the world's biggest challenges.

o represent the development of grid style urban planning in the United States, the library is designed based on the Chicago plan with the overlapping and fragmentation of the grid of Chicago, to separate and develop the different volumes of the building, creating a city view for the library.

Also, from the history of Chicago to today, African Americans have mostly lived in the South Side, and a few of them are in the Middle Western area. These two areas are also the "problem areas" (poverty and violence) are represented on the base map of the building by denser grids. The denser grids are mainly used for stairs and public spaces, which gives the hopeful meaning that the people in those area will be able to spread and walk to other parts and balance society. As African Americans are an essential part of American society it is paramount that a greater level

The library of hopes will be the great inspirational and educational legacy that an American president left for his citizens, and also for people from all over This project proposes an evolution to Adelaide University's Barr Smith Library, where public space becomes the focus. The Barr Smith's existing collections would be relocated to the new city library on the Festival Plaza, and made accessible to the public. The proposal aims to emphasise the importance of the library as a social symbol - a centre of community interaction and as a place to celebrate earning. It recognises that the library is a place for

The building is made up of two volumes. A plaza composed of stairs separates them. Beneath the olaza lies a conventional program adopted by contemporary libraries, but integrating an indoor lap pool, a homage to the rich history of the site as the former location Adelaide's public baths. This is one element of a 'cultural condenser,' whereby people come to meet, and all social classes can mix, communicate and learn from each other. The plan juxtacoses the library and pool, programs that wouldn't conventionally mix, separated by a café

The volume above the plaza represents the potential of the future library. In contemporary libraries, books nowever, people are instead grouped together based on subjects that interest them.

Collaboration within these spaces will encourage continual change and evolution among the people who inhabit it. This realises the promise of social networks, except rather than the sterile so-called utopia created by the internet, it fosters tangible connection and interaction with other people from all

The library today is an institution under threat. With the proliferation of information technology since the end of the last century, libraries have been facing the challenges of digitalization. Stories that were once told through well-thumbed books on the library shelves are now told with the aid of mobile digital devices anywhere in the world. Libraries are no longer physical repositories of the knowledge in our society; and consequently the architecture of the library is no longer primarily about housing the book.

This project responds to this challenge with the idea. that the city itself is the originary library. Like a library, the city is a vast repository of information and vidence, forever updating itself with new knowledge and stories for future generations. By creating an architecture that embeds the histories of a city within its own urban fabric, the library could become a living machine, capturing the essence of the city's past through its lenses and contributing to unfolding the narratives of a city to its future.

The Knowledge Interchange is located adjacent to a iver and a railway station and bus station in Wester Sydney. Even though these neighbouring construc ions occupy a critical location on site and act as th unctional connectors, they have no architectural presence and little civic grace. The project attempts o integrate and connect the interchange facilities to create cultural atmosphere, and provide continuity educational precinct. Additionally, the steady stream of visitors passing through the interchange will bring more people to the library. For the whole site, there is not merely the pedestrian flow but a flow of books and knowledge. The vision of the project is that anyone who walks through the library will observe it bustling with cultural life, and hungry readers will be offered with the right atmosphere to blossom.

The building's volume is lifted above a completely open ground floor to extend the riverbank's landscape directly into the site. Four "book spirals", larg funnel-like components, constitute the primary space for the library's collections. These form atriun spaces which serve as orientation points, light shaft and vertical circulation. They create a variety of The elevators and fire escape stairs are evenly spaced throughout the building and adjacent to the atrium spaces, ensuring that every part of the library is easily accessible to all members of the public.

Overall, the library is structured by a system of offse rings that vary in depth and width to provide qualitie on both sides of an organic surface to create oppor tunities for light, view and shelving. It is a fun place for public life and bring the cultural atmosphere to the site. Everything on the site is flowing, people, books, knowledge, river and birds.

OUTCOMES

The propositions emerging from this studio bring creative vigour and an open-minded approach to the contemporary challenges facing libraries. Students' engagement with, yet productive distance from, the intricacies and tensions of processes of organisational change allow for reframing perceived threats and crises as opportunities for positive change and

evolution in the definition, function, and meaning of libraries.

This exercise also represents a demonstration of the potential for mutually productive engagements between the academic and professional service components of the university. Still sometimes perceived as operating at a remove from "real world" contexts and constraints, initiatives such as this see the university itself as an inviting experimental site, a rich social and political field, a mountain of real-world evidence, and a ready and (generally) receptive test-bed for new ideas. Such engagements have the potential to deepen understanding and a sense of shared endeavour across the artificial borders that divide the constituents of the contemporary university.

Final Review, with invited critics.

Kaixiang Xue showing a model of his project. Xiaochu Chen with her prize-winning design. M.Arch Graduation Exhibition 2015

