1. built pedagogy

"Planning and building are always a projection into the future, and one of the roles of architecture is to take away the fear of this future not with tranquilising, nostalgic scenarios, but with conscious optimism and intelligence". Matthias Sauerbruch

Sauerbruch Hutton is a leading architectural practice founded twenty years ago in London by Matthias Sauerbruch and Louisa Hutton. A second location was opened in Berlin in 1993, where a team of 90 people operate today. The office provides full architectural, master planning, and interior design services for public and private clients. Our partner, NH Architecture, is a well respected Melbourne practice with a proven track record of designing and delivering a diverse range of project, including civic and institutional projects and environmentally lower-impact buildings.

Sauerbruch Hutton and NH Architecture have established a working relationship over recent years. Developed through a number of design workshops held together in both their Berlin and Melbourne studios respectively, the two studios share a concurrent approach to architecture and have a practical and operating working relationship.

Sauerbruch Hutton

Jessop West University of Sheffield

Sauerbruch Hutton Architects’ recently completed Jessop West Building for the University of Sheffield’s English, History and Law departments has allowed the practice to bring its concerns for a convincing public realm, compelling and functional building form, and innovative sustainable principles into an educational building. This project also relied on a highly collaborative approach and international experience to effectively manage the architectural quality through a range of procurement routes – the success of which has been recognised by recent shortlisting for the 2009 RIBA Awards.

The Jessop West Building demonstrates relevant and recent experience on working within an international design team, educational programming, energy efficient and contextually sensitive building design and innovative construction delivery methods. This experience can be brought to the new Faculty of Architecture, Building and Planning for the University of Melbourne.
2. the academic environment

“A building ought to be able to react intelligently to the needs of its occupants, but the occupants ought to learn to understand the building, too.” Matthias Sauerbruch

Both Matthias Sauerbruch and Louisa Hutton have taught, lectured, listened and learnt in architecture schools for over twenty years, from the AA School in London, to the Technical University in Berlin and more recently at the Harvard University Graduate School of Design. Their first hand experience and knowledge can bring to The University of Melbourne's new Faculty of Architecture, Building and Planning a global perspective as design thinkers and genuine participants.

Allied to these experiences, the practice of Sauerbruch Hutton has designed a range of educational and research facilities which demonstrate an acute sensitivity to the qualities of space, form and materiality.

In the Melbourne context, NH Architecture has concurrently been investigating a range of student, academic and social spaces for the Monash Village project. The proposed campus of university buildings explores the wider dimension and diversity of contemporary student life beyond the single confines of the classroom.

**sauerbruch hutton with NH Architecture**

**Jessop West University of Sheffield**

The decisive figure of the three wings originates from the desire to allow distinct identities for each of the departments within a centralised building. This notion is supported by the colour treatment of the façades as well as that of the interior, such as the corridor walls.

On the ground floor the Visitor Centre lies at the centre of gravity of both the building and the site and as such is clearly visible and easily accessible from both adjacent streets with the café and exhibition area located on the western and eastern sides respectively, animating the public realm.

On all upper levels the ‘Hub’ forms the heart of the building, particularly on level one, where it functions as the private foyer to the departments that have their receptions on this floor. The idea of the communal space in the Hub is to encourage synergy between the departments: there is space to wait and chat as well as the potential of the meeting room on every floor. To allow this generosity of communal space the accommodation of the various departments was planned very efficiently.

**Experimental Factory Magdeburg**

This is a research institution for a whole range of fields, including the methods and processes of production and the technology of coatings. The building consists of a compact combination of three volumes. Along the street there is a five-storey structure for office and laboratory use. The middle building, used for large-scale experiments, is a single-storey hall 8.5m high that is completely separated from the main structure. These heterogeneous elements of the programme are wrapped into a single complex by a large “blanket” in orange, pink and silver stripes. The extruded form of the building takes account of the factory’s position in between a busy four-lane road and the campus on the one hand, and between an existing and a future institute on the other.

**Monash Village, Caulfield Campus, Melbourne**

The Monash Village project is a collection of six new buildings located at Monash University’s Caulfield campus. These buildings will house student apartments, commercial office space, educational facilities, retail tenancies, a supermarket, and car parking. The open space between the buildings is comprised of a new north-south pedestrian street with lanes feeding into it from the existing retail strip to the west and the university campus to the east. The plan links into and reinforces the local streets, campus pathways and connections to public transport.

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3. the design studio

“Teaching is, in one sense, something like a social duty; you want to make the effort to pass on what you yourself have been given by others. For real teaching (and I don’t mean the mechanical repetition of unchanging “specialist knowledge”) is a generous gift—and by the way, one you can receive not only in a university, but also when working in a practice. The teacher passes on to others the sum of his or her (usually hard-won) experience, only to find him or herself in competition with former pupils a short time afterwards.” Matthias Sauerbruch

The new project for the Faculty of Architecture, Building and Planning will finally release future students from the tyranny of the design studios in the existing building which have, (as the brief suggests), reached the “end of their serviceable life.”

Recent examples at the newly established Monash University architecture school and RMIT University’s new “off-campus” design studio annex have reopened the debate on the nature of design studios - how big, how small, how flexible?

This project has the opportunity to blend the experience of an international perspective with the understanding and knowledge of a Melbourne practice embedded in the local network of ideas.

Sauerbruch Hutton with NH Architecture

School of Design Development, Hong Kong

An extremely flexible building with a deep plan and high ceilings with light penetration well into the floor plate allows for many internal fit-out variations. The principal accommodation can be split into two types of space: double storey clear height studios and large open plan office/research areas and single storey high office/meeting and cellular accommodation which is organized as perimeter ‘shelves’ to the east and west, enabling high ‘clerestory’ light to the studios.

The podium level plan is based on the concept of one continuous space and offers a similar openness and flexibility as the studio levels. The large central spans mean there are generous columnfree zones with unbroken views from one space to another. Considerable curatorial freedom is therefore offered for the principle exhibition and museum spaces and the communal entrance space can be equally used for exhibiting work and hosting events.

Sauerbruch Hutton
School of Design Development, studio level view

The architectural impact is revealed in the project’s capacity to quickly transform from being able to host large scale conferences to smaller workshops. The central auditorium (5,000 seats) has been designed with the ability to subdivide into three separate halls each able to accommodate simultaneous events – acoustically and functionally. The large span operable walls which divide the auditorium are the most advanced in the world and must perform at the highest acoustic level. Similarly the meeting room and seminar spaces within the complex also incorporate the latest thinking in flexible infrastructure and technology, allowing each space to be reconfigured into multiple arrangements.

Sauerbruch Hutton with NH Architecture

Sauerbruch Hutton School of Design Development, studio level view

NH Architecture Melbourne Convention Centre

The lecture halls and design studio space in the new building for the Faculty of Architecture Building and Planning has an established precedent in NHArchitecture’s recently completed Melbourne Convention Centre. It is a project which encompasses a global understanding of the types of spaces which encourage the exchange of ideas and can adapt to a wide range of seminar and conference platforms. The architectural impact is revealed in the project’s capacity to quickly transform from being able to host large scale conferences to smaller workshops. The central auditorium (5,000 seats) has been designed with the ability to subdivide into three separate halls each able to accommodate simultaneous events – acoustically and functionally. The large span operable walls which divide the auditorium are the most advanced in the world and must perform at the highest acoustic level.

Similarly the meeting room and seminar spaces within the complex also incorporate the latest thinking in flexible infrastructure and technology, allowing each space to be reconfigured into multiple arrangements.
4. the living building

“One phenomenon of our age’s culture that cries out to be physically manifested, since it is so present in everyone’s consciousness, is without doubt our interest in sustainability and ecology. This interest stems from a concern about the wasteful and careless treatment of the natural environment, as well as a worry about the survival of the planet and its population.” Matthias Sauerbruch

Sauerbruch Hutton has been at the vanguard of the debate on sustainable architecture beginning with their design for the GSW tower in Berlin. Their applied research and built outcomes have consistently explored a considered proposition, combining environmental science with the search for a contemporary language for sustainable architecture. They continue to set the global benchmark and see the proposed new Faculty project as an opportunity to participate in a demonstration project for sustainable architecture.

Similarly NH Architecture shares this aspiration within the Australian context and was awarded the 2008 National Award for sustainable Architecture.

**sauerbruch hutton**

**Federal Environmental Agency Dessau**

In 2005, Sauerbruch Hutton completed the 40,000m² offices for the Federal Environmental Agency, a compelling case study for sustainable building. In particular, it benefits from the use of a large geothermal heat exchange system and solar panels. Building materials were chosen according to their ecological suitability, the most visible element being a facade made entirely of timber, which is prototypical for Germany.

Active and passive strategies for the reduction of energy consumption and carbon dioxide production were realized in an architecture that combines spatial and material economy with a deliberate stimulation of the senses. The new building combines a compact volume and a high degree of thermal insulation with strategies of intelligent engineering and the use of renewable energy sources.

**1. minimised heat loss at the outer skin**
- compact building shape and formation of the Atrium as a thermal buffer zone
- high building airtightness
- waste heat recovery
- pre-heating of winter supply air through the geothermal heat exchange system

**2. minimised ventilation heat losses**
- high building air-tightness
- waste heat recovery
- pre-heating of winter supply air through the geothermal heat exchange system
- night cooling with fresh air using thermal storage capacity of the primary construction

**3. optimised heat protection**
- pre-cooling of fresh air via earth canals
- effective interior shading in the glazed roof surfaces
- night cooling with fresh air using thermal storage capacity of the primary construction
- night cooling with fresh air using thermal storage capacity of the primary construction

**4. maximised passive solar energy use**
- flexible sun protection in front of the facade spaces (deep penetration of winter sunshine into the rooms)
- use of active solar energy by means of thermal solar collectors
- photovoltaic system

**5. climate control by using the Atrium**
- use of active solar energy by means of thermal solar collectors
- photovoltaic system

**6. optimised use of daylight**
- a relatively narrow building plan
- a high degree of thermal insulation
- day-light guided into the interior in part through the use of reflecting surfaces

**7. additional ecological measures**
- use of biomass power plant
- use of recycling materials and ecological, biodegradable, re-usable building materials
- roof planting

**NH Architecture**

**The Melbourne Convention Centre**

Located on the banks of the Yarra River in inner-city Melbourne is the city’s brand new convention centre, one of the most impressive architectural and environmentally sound buildings in Australia and the first and only “6 Star Green Star” convention centre in the world. The achievement of a “6 Star Green Star” environmental rating is based on a mix of initiatives that create a natural environment, reducing overall energy use and using minimal non-renewable sources.

**RSPCA**

The new RSPCA redeveloped facility was awarded the 2008 Australian Institute of Architects National award for sustainable Architecture. The building is a model of excellence in animal care, providing an exemplary experience for users and visitors alike. The first stage of the redevelopment recently completed is five buildings housing 200 quarantine dog kennels.
5. capability and process

“There is no question that architecture is an art form – but architects are not artists (or at least not only artists). Working in the service of clients, they bring their artistic skills to bear on the project in such a way that in the end one has a beautiful building which contributes so positively to its environment that its presence is a definite plus. Ideally the problems have been solved so well – both those of the client or user and those of the urban situation – that in the end one is unaware of what they may have been in the first place.” - Louisa Hutton

Sauerbruch Hutton and NH Architecture have formed a team in response to the Faculty's aspirations for a “once-in-a-lifetime” opportunity and a project of “international architectural merit,” whilst also acknowledging the complex issues of delivering an ambitious project in the local context.

Sauerbruch Hutton and NH Architecture have developed a close working relationship through a number of continuing professional connections and can offer a mix of international and local skill. Both practices have confronted and resolved the dilemmas inherent in the global exchange of ideas and the translation of design and documentation in dual studios. This team can confidently say it has an established joint-working model which has enlivened both studios.

Architectural Design Competition, New Building for the Faculty of Architecture Building and Planning, University of Melbourne
“There's something else that has to be understood clearly: a great number of people play a part in the success of an architectural design, not just a lone architect sketching an idea on paper with a thick pencil, but a client open to new ideas, a banker who takes an interest, a bureaucrat who uses his brain, a craftsman who has standards, and a user who respects the design. They all contribute to the success of a building, which is not something that comes as soon as construction work is complete, but rather evolves over the years that follow.” Matthias Sauerbruch

Sauerbruch Hutton is recognised as an architectural practice with an international reputation and supported by a portfolio of work across the world. Their studio has developed a critical position in the midst of contemporary urbanism and is leading the agenda on environmental and sustainable architecture.

Both Matthias Sauerbruch and Louisa Hutton have written and taught over many years, their publications influencing a second generation of followers.

Within the Melbourne context NH Architecture has established themselves as a dynamic participant in the debate on the role of the public collective in the formation of contemporary public/private architecture. Their work covers a wide range of building typologies and scales.

For the complete list of selected publications and other information please visit our websites:

http://www.sauerbruchhutton.com
http://www.nharchitecture.net

publications:
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