SUSTAINABLE SKYLINES: BE THAT ARCHITECT

DR JOHN STANISLAV SADAR

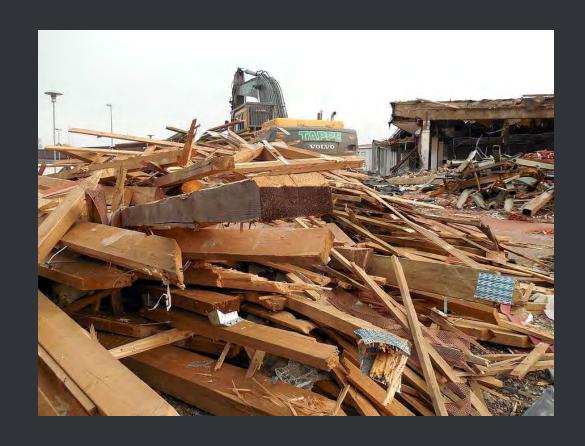




ARCHITECTURE IS ABOUT
WHY, WHERE, WHAT,
AND HOW WE IMAGINE,
CONCEPTUALISE,
ORGANISE, DETAIL AND
CONSTRUCT OUR HABITAT



ARCHITECTURE IS ABOUT
HOW WE LIVE, AND THE
ETHICS EMBEDDED IN
OUR ENVIRONMENTS FOR
LIVING



ARCHITECTURE IS CONCERNED WITH BOTH FORM AND SPACE, PROCESS AND PERFORMANCE, MASS AND LIGHT, PERCEPTION AND COMFORT, VALUES AND EXPECTATIONS





ARCHITECTS THUS MUST LEARN TO THINK AT A VARIETY OF SCALES FROM THE CITY...





... DOWN TO THE INDIVIDUAL HUMAN DOWN TO THE WATER MOLECULE



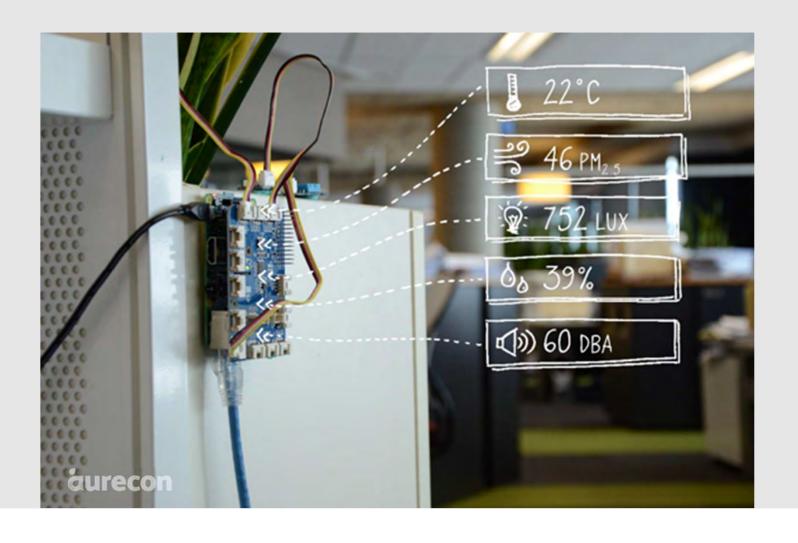


ARCHITECTS ARRANGE MATERIALS IN RESPONSE TO THE FLOW OF FORCES AND THE LOGISTICS OF CONSTRUCTION





ARCHITECTS THINK ABOUT HEALTH AND COMFORT, AND HOW WE MANAGE OUR ENVIRONMENTS





ARCHITECTS THINK IN TERMS OF SYSTEMS





ARCHITECTS MUST ALSO THINK ABOUT PROCESSES: HOW DO WE BUILD? HOW DO WE ORCHESTRATE OFTEN OPPOSITIONAL FORCES TO CREATE USEFUL AND PLEASING WHOLES?



Tooling for bespoke bending of plywood



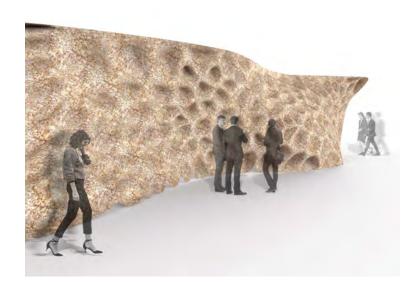
ARCHITECTS MUST EVEN THINK ABOUT THE MATERIALS WE USE TO BUILD



Mycelium study
Intensive Workshop: IaaC GSS Biodigital
Futures: From Coding to Cultivating



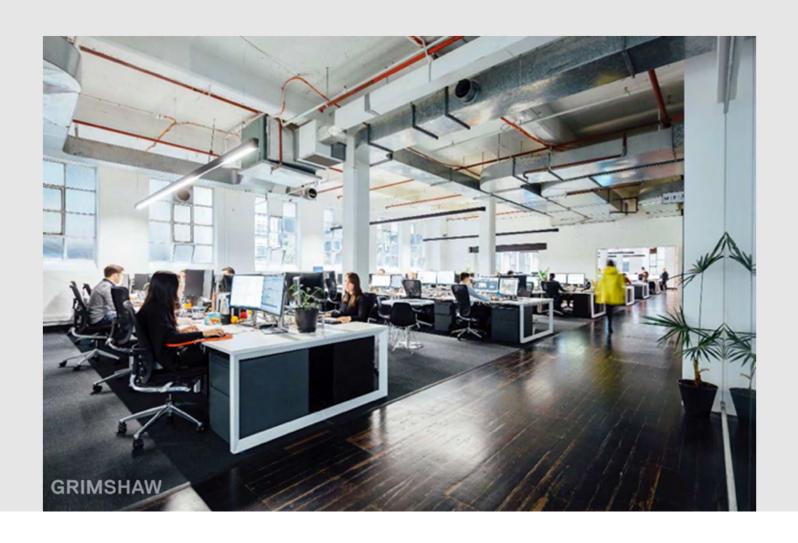
ARCHITECTS MUST THINK ABOUT CHANGING THE PARADIGMS OF PRACTICE



Mycoustic project
Intensive Workshop: IaaC GSS Biodigital
Futures: From Coding to Cultivating



ARCHITECTS WORK IN SPACES LIKE THIS





ARCHITECTURAL EDUCATION: 3 + 2 STRUCTURE

- Architectural education consists of two parts
- 3 year undergraduate degree
- 2 year postgraduate degree
- Both are needed for the professional qualification
- Education is only one part of professional qualification as an architect
- Professional qualification also requires work experience, an exam and an interview



ARCHITECTURE KEY FACTS



Bachelor of Design (Architecture) foundation for Master of Architecture

- Hawthorn Campus
- 3 years full-time
- Guaranteed Entry ATAR: 80

Course Content:

- Design Studio
- Construction
- Communication
- Contextual Studies (History/Theory)
- Electives (possible minor)



COURSE INFORMATION



Master of Architecture

- Hawthorn Campus
- 2 years full-time

Master of Urban Design

- Hawthorn Campus
- 2 years full-time

Master of Architecture and Urban Design

- Hawthorn Campus
- 2 years full-time



OUR LEARNING TAKES A VARIETY OF FORMS AND HAPPENS IN A VARIETY OF PLACES, FROM CLASSROOM TO WORKSHOP...





...TO THE DESIGN STUDIO





STUDYING ARCHITECTURE AT SWINBURNE

Face-to-face, project-based learning including:

- lectures
- seminars
- studios
- maximum 24 students: 1 instructor

Active, participatory learning

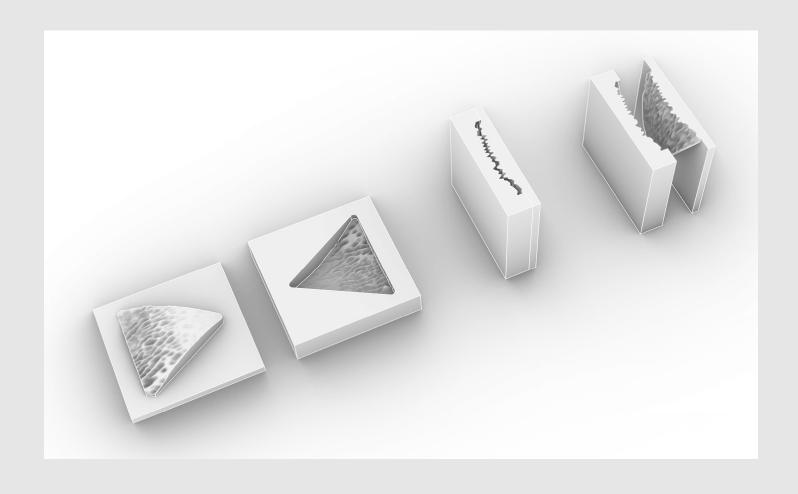
Studio-based learning

- students work on practical projects
- learn to develop cohesive proposals out of often disparate, complex, competing interests
- propose ideas verbally, graphically, and three-dimensionally
- receive immediate verbal feedback from a panel of jurors



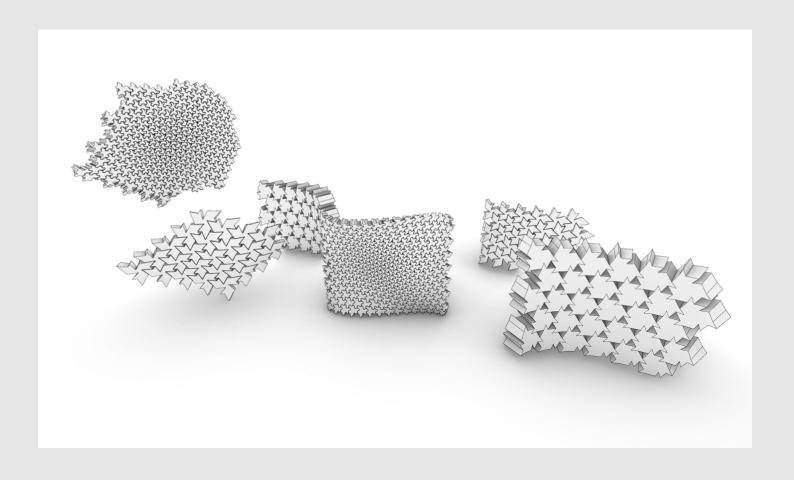


WE USE A VARIETY OF MEDIA AND METHODS...



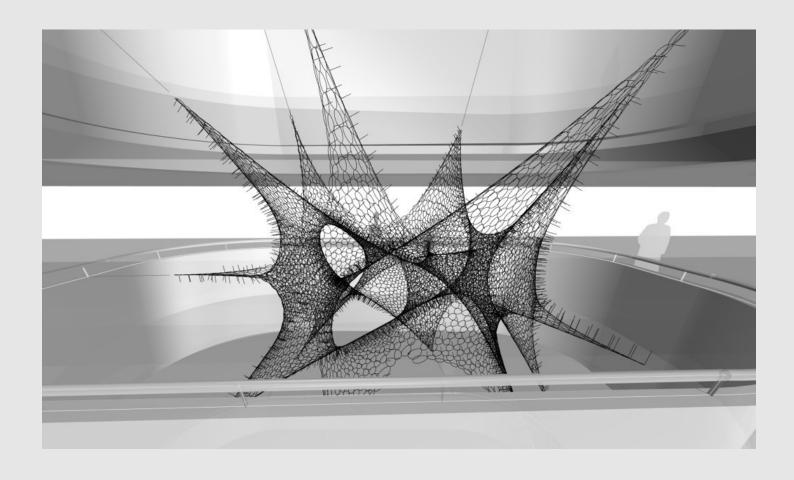


FROM COMPUTATION...





TO VISUALISATION...





TO DRAWINGS AND TEMPLATES...



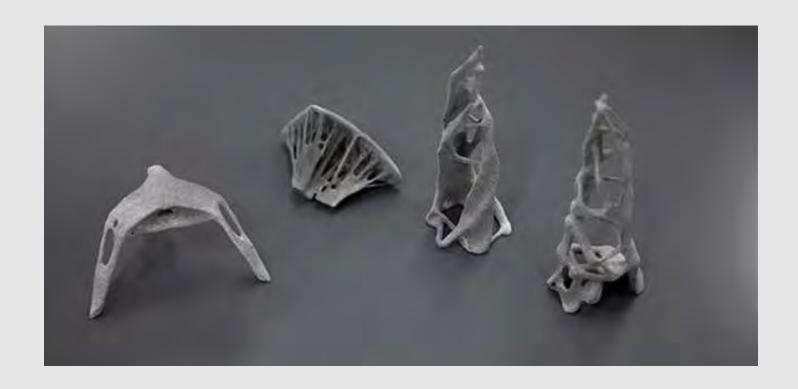


TO MANUAL MAKING...





TO DIGITAL FABRICATION





THESE ARE OUR EXAMS... WE CALL THEM CRITS



Students present their proposals, and receive real-time feedback on them, from their peers and a panel of experts including academics and professionals.



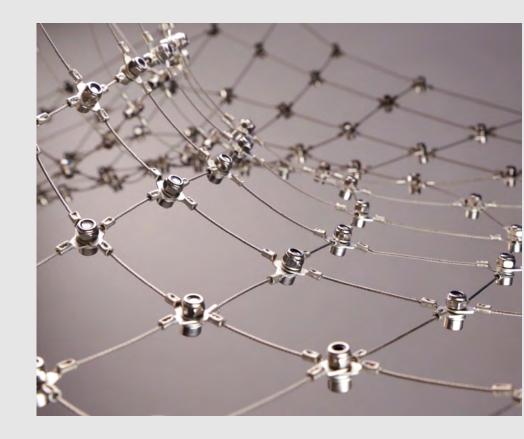
ARCHITECTURAL GRADUATES

Have the ability to:

 Critically and creatively think; conceptualise, represent and analyse built environments; correlate diverse and often discrepant demands and interests, manage diverse teams of experts and stakeholders

Can attain roles as:

- Architects in large and medium-sized practices
- Sole proprietors of architectural practices
- Architects within government and nongovernment agencies
- Academics/Researchers/Educators





WHY ARCHITECTURE AT SWINBURNE?

- Studio-centric curriculum with opportunities to focus on particular research topics that align with student interest
- World class technology and facilities
- Opportunity to learn about all scales from the fabrication of the detail to the interface with the city
- Industry engagement in day-to-day teaching, regular critiques, and invited lectures
- Preparation for the future of practice locally and globally, such as Industry 4.0
- Potential to work with the Design Factory Melbourne and its global network through electives



WORLD RANKINGS

Rated among the top 1/5 of design schools in the world

Rated among the highest for student experience in the country

Rated the highest for student experience in Architecture and Built Environment in Victoria



FABRICATION FACILITIES



Soft prototyping lab with robotic, laser and additive fabrication and physical computing facilities



INTERDISCIPLINARY COLLABORATION



Mycelium studies in collaboration with biological sciences
Intensive Workshop: IaaC GSS Biodigital Futures: From Coding to Cultivating



CAREER OUTCOMES



- Professional architectural practice
- Multi-disciplinary building services practices
- Government advisor
- Regulatory agencies
- Non-government organisations
- Set design
- Designers of virtual environments
- Fabrication
- Project management



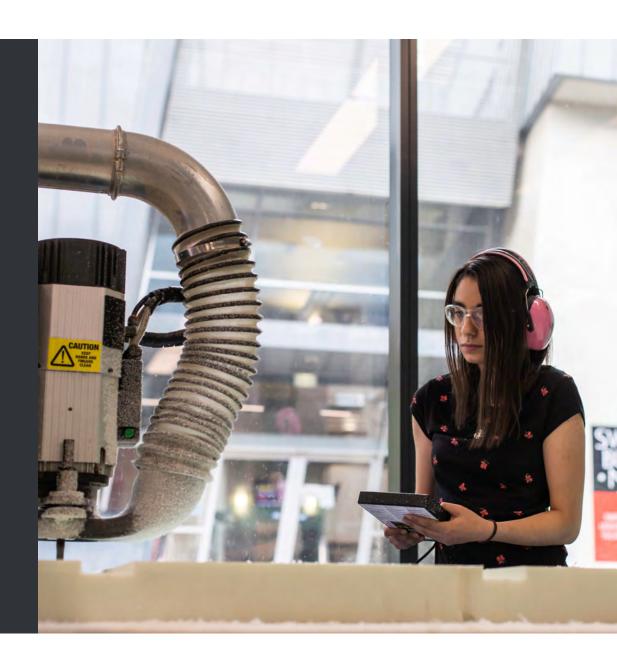
QUESTIONS?





AMY NUCCIO

BACHELOR OF DESIGN (ARCHITECTURE) ALUMNI



HIGHLIGHTS FROM AMY'S SWINBURNE EXPERIENCE



38.8 3D Printed Model



Hang-over: FESTA Installation



The Void: AMDC Installation



Chennai: Slum Relocation Project



FINAL NOTES

- Architecture is not always about designing buildings
- Take every opportunity that is presented
- Accept the challenges and the hard work
- You get out of it, what you put into it



THANK YOU

UGTEAM@SWIN.EDU.AU
SWIN.EDU.AU/ARCHITECTURE

