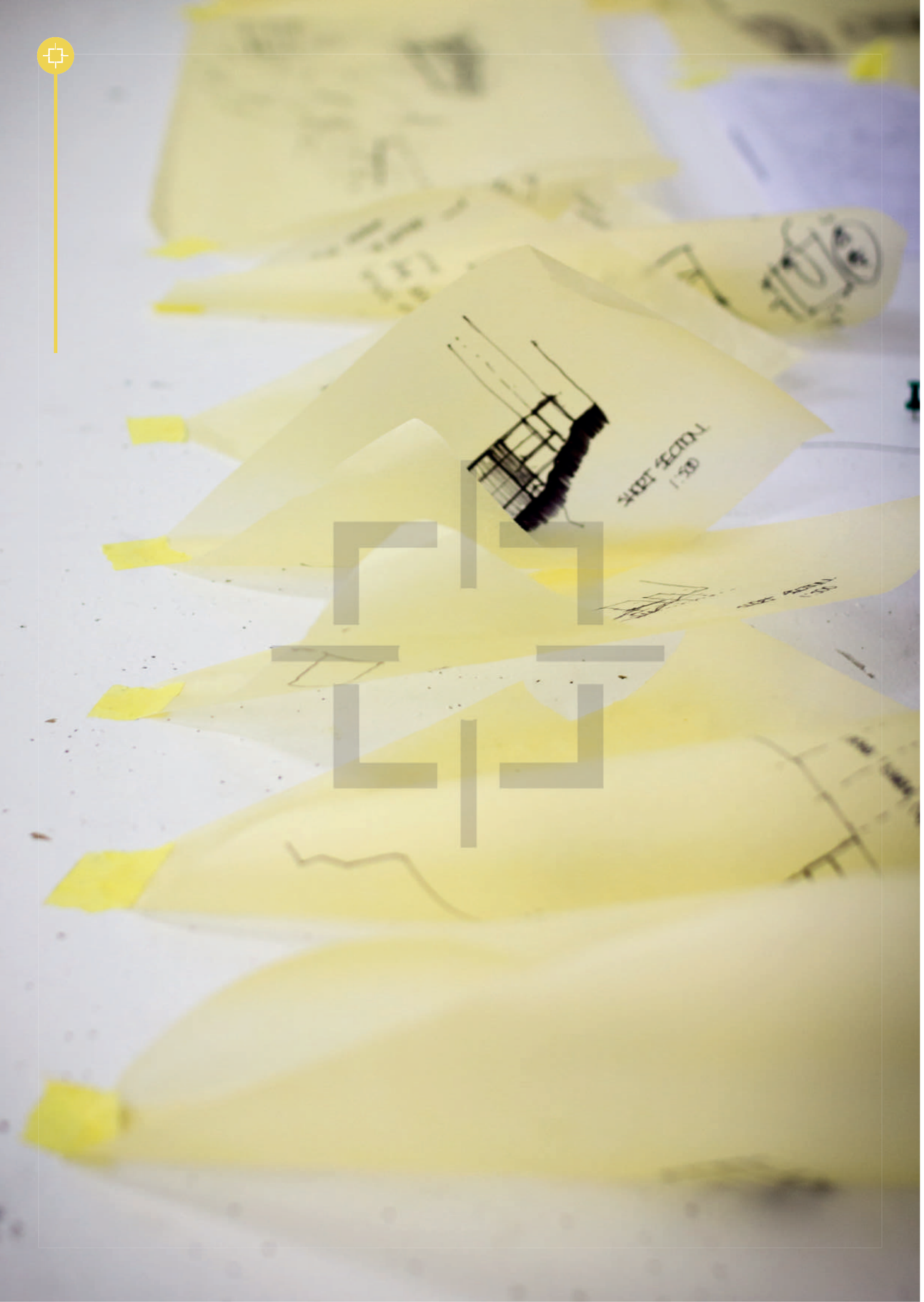
paperspace

THE UNIVERSITY OF BATH DEPARTMENT OF ARCHITECTURE AND CIVIL ENGINEERING

ISSUE THREE
NOV 2014

(R)EVOLUTION

NEWS REVIEW TECHNOLOGY
HISTORY COFFEE BREAK



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Editorial address
Paperspace
Room 6E 4.4
Claverton Down
Bath, BA2 7AY

Editor in Chief
Harry Streuli

Issue Editors
Issy Spence
Bethan Scorey
Ross Ledsham
Aleena Kahn

Artistic Directors
Harry Streuli
Ben Norrish

Staff Writers
Tim Ibell

Illustrators
Bobbie Emilova
Ben Norrish
Lilian Lam
Bethan Scorey

Printer
Colorworks Bath

Writers
Harry Streuli
Konstantinos Voulpiotis
Joe Ridealgh
Sonya Falkovskaia
Dan Duckworth
Ben Norrish
Diana Smiljkovic
Paulina Konkina
Ross Ledsham
Emma Matthews
Issy Spence
Helena Francis
Lauren Carpenter
Yacine Abed
Aleena Khan
Sara Medas
Tiffany Cheung
Joanna Burleigh
Kishan Mulji
Bethan Scorey
Emaad Damda
Arinah Rizal
David Janosi
Bobbie Emilova
Benedict Hignell

Cover
Paperspace team collaboration
Special thanks to Mike Lewis.

Last year was a great year for Paperspace. We had two fantastic issues that were put together by a talented and motivated team of students from across the department, and the results certainly grabbed attention. So when Marie asked me to assume her position as Editor in Chief for this year, I knew I had to step up my game.

We began the process of putting this issue together in much the same way as we had done previously, with many familiar faces turning up to the first meeting. As usual, the first topic on the agenda was to discuss and determine the theme for the first issue. Ideas were chucked around, conversations were had, and possibilities considered. The eventual democratic decision was to go with a theme of (R)evolution - an amalgamation of words each relating to change.

Revolution is essentially drastic change over a short period of time - such ideas are discussed with the proposals at Battersea, and implications of huge construction in the Middle East. Evolution, however, is gradual change over a much longer period of time. Changes that can be seen in the historic buildings of Belgrade, which impart deep connections with the personality of the city itself. Changes also seen in architects, the evolution of which stretches way beyond our imagination. This issue attempts to explore issues surrounding the ever-changing architectural and engineering professions.

However, I thought it would be interesting to apply this theme to the whole idea behind the magazine - where do I want to see this publication in five years? How can we get there?

Marie started the magazine last year as an extension of her involvement with the student magazine at the Technical University of Delft, in The Netherlands. It was to be a student led architectural magazine, covering reviews, opinion, news, and other features. And it worked! It was a wonderful realisation of talent, however, I felt there was one thing missing. A key ingredient of a student publication - the actual work of the students themselves.

Thus, a 'student' section was born, nestled into the magazine to show off the personal journeys of students at our school. Something that may exhibit a glimpse of Bath studio culture to the outside world - to demonstrate what life as an architecture or engineering student at Bath is like.

In five years? The magazine could be a pre-cursor to the yearbook, describing ardous yet emphatic journeys of final year students. It could be an enormous collaborative portfolio of Bath students to prospective employers. It could be a manifesto of design aspiration held not by the school, but by the students themselves. Most importantly, it serves as a vehicle through which the student body can demonstrate their personal ambitions outside of the insular environment of 6E.

We can get there by pushing the boundaries of student involvement outside of the curriculum. Already, a huge leap has been made with the ACE Society, and now we have an opportunity to convey the ethos of the student body. With that, I encourage readers to step forward and join us - whether you are a writer, photographer, thinker, illustrator, poet, artist, or just plain curious. This is the opportunity you have been waiting for.

As always, thanks for reading.

Harry Streuli
Editor in Chief of Paperspace

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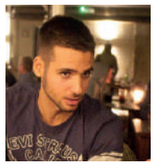
ACE Society: The Family is Bonding

Student involvement has sky-rocketed within the department and the now award-winning ACE Society is leading the way.

By Konstantinos Voulpiotis

18 months after our near-disaffiliation in May 2013, we see the ACE Society growing unprecedentedly, thanks to the continuing efforts of the committee to engage students and the members themselves grabbing the opportunity to meet each other, get inspired and network. In November this year, we saw 5 more committee members joining, all from first year, to make a healthy group of 12 leading students (quadrupled from March 2014!) who will ensure ACE continues to be the best departmental Society on campus! The full committee now are: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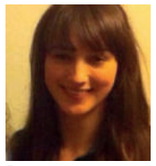
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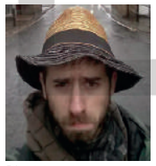
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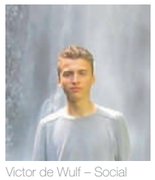

Victor de Wulf – Social Secretary


Tiffany Cheung – Sustainability Rep


Alssa Diallo – 1st Year Architecture Rep


Valentine Loyer – 1st Year Civil Engineering Rep


Introducing Bill Harvey with record attendance, March 2014

In the previous academic year, Bill Harvey came to talk for what was the biggest event of ACE in 2013/2014, attended by 130 people. In October this year, Harbinder Birdi from Hawkins\Brown visited out department and talked about the "Art of Collaboration", a fantastic talk on the core subject of ACE. The year started really well, that was a new record of 150 students attending! In November, Kim Quazi from Arup Associates delivered an inspiring presentation on the relationship of different disciplines from his own projects. All students have the chance to meet with each other and with the speakers in a relaxed environment and with the aid of wine.

Kim Quazi with his simple, yet inspiring views on the three A's of Architecture, November 2014

Undoubtedly the best is to come for the ACE Society. In March we are running the ACE Debate on Sustainability, which is going to be the biggest event of the year – don't miss out! Guests from various practices, staff and students from ACE will form teams and explore the definition of sustainability in the construction industry and how can we be best trained to achieve it.

June 2015 will see the first ACE Trip, which is to be organised in the coming months. The trip will end at the final year show in London to celebrate the end of another fantastic year for ACE!

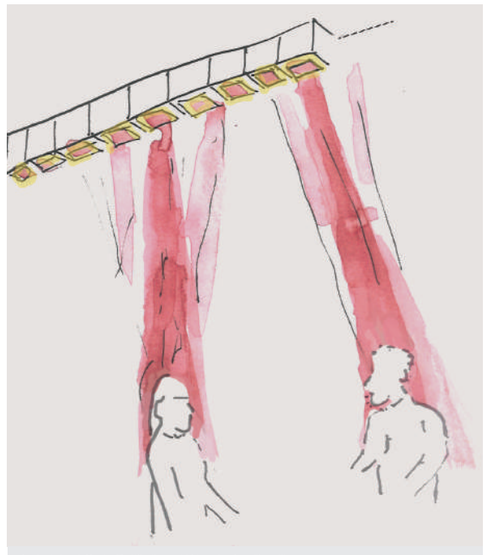
The Venice Biennale: In Review

After Koolhaas' summer long exhibition 'Fundamentals', I look back at my own experience of the event and whether he has succeeded in 'absorbing modernity'.

By Joe Ridealgh

Visitors to this year's Architecture Biennale could mostly be seen staring, frustrated, into the confusing depths of historic urinals. Rem Koolhaas' rejection of the artistic side of architecture is painfully clear. When attempting to 'disconnect from contemporary architecture', he seems to have disconnected from architecture all together. The first 'Fundamentals' exhibition is a mere documentation of the evolution of building elements, leaving little of genuine interest in a sea of catalogues.

Breezing over the masses of historic analysis, some parts of this exhibition dared to step into the world of modernity. This instead, made for an exciting showcase of new technology. Ceiling tiles fired bubbles of heat in Carlo Ratti's project 'Local Warming'. Based on the concept of localised heating, a motion detection sensor allows infrared radiation to surround the person, creating a personalised climate that moves with an individual as they travel through. The Israeli pavilion also provided some refreshing concepts, a floor of sand acting as a canvas for architectural drawings. The grand arm of a machine plotting points and lines as grooves in the sand, working its way slowly around to build up detailed site plans.


A sketch of Carlo Ratti's 'Local Warming' ceiling tiles.

A wall of windows make up part of the 'Fundamentals' exhibition.

Every country involved in the Biennale produces a self-contained response to current architecture. This year's pavilions proved to be the most interesting of all on offer in Venice, with a huge variety of attempts at 'absorbing modernity' allowing counties to revel in their architectural identity. As you entered the 'Office US' American pavilion, you were enveloped in an exact working replica of an architect's office. I felt that I have been absorbed into the office life, the secretary offering coffee on the door, the staff greeting me as if I have worked there for years, a speaker inviting me to sit as they discuss the work of Buckminster Fuller. There was a real buzz in the air; these people were genuinely excited to be involved in architecture. Pavilions like this, which entered whole-heartedly into the Biennale proved the most useful insight into the world of modernity, this I'm sure was Koolhaas' intention.

Although his main exhibition proved more of an exercise in documentation than a stand against the tall glass facades of modernity, the concept of design devolution was more than enough fuel for a clear direction of Koolhaas' exhibition- away from the tedium of modernity to a more diverse future.

Long Distance Collaboration: Travelling vs. Technology

One of the joys of working in large projects is experiencing design integration from teams all around the world.

By Konstantinos Voulpiotis

Construction projects nowadays involve professionals of multiple disciplines, usually scattered in various locations. Multidisciplinary collaboration, the heart of the success in large projects, is now largely challenged by the physical distance between teams.

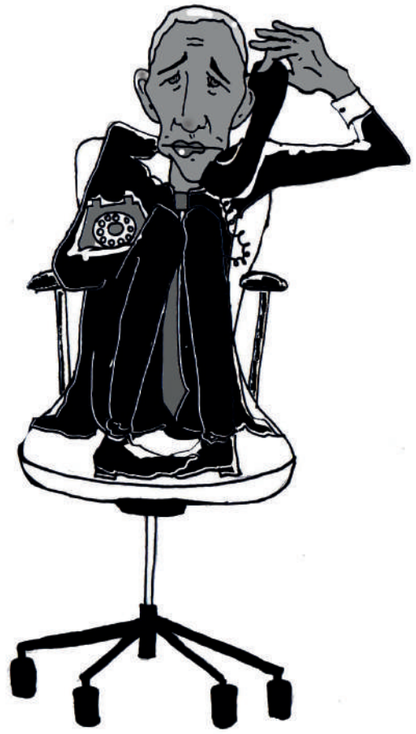
Take for example the Sydney Opera House. Without the internet, Jørn Utzon and his team had to move to Australia to design and supervise the project and he was accompanied by Ove Arup's team. An equivalent modern example is the Stavros Niarchos Foundation, the Athens Opera House, where Architects and Engineers work together from Athens, New York, London, Paris and Dusseldorf. Travelling has been limited radically and BIM has opened new doors in the communication of information across the project.

Technology has took down most of the obstacles when it comes to delivering complex work across the world. Or has it? Two projects from my experience seem in deep contrast when it comes to communication across the team.

The Great Western Electrification Project aims to redevelop the so-busy line from London to Bristol, to run quieter and faster electric trains. I was personally involved in the route clearance study, a large scale feasibility study of all overhead structures, such as bridges, tunnels and signal gantries. Work was carried out from the UK and India, and involved the production of hundreds of drawings. I was in touch with my Indian colleagues on a daily basis, via email, phone and video calls. Simple tasks were efficiently carried out, aided by the time difference when work could be carried out during UK night time. However efficiency dropped dramatically once the tasks in question reached a certain degree of complexity.

Design for the Battersea Redevelopment in London is split between Bath, London and Los Angeles. I was not personally involved in the project, however I worked in the same structures team. Daily communication via email, phone and video calls was again the norm, however Engineers from Bath and Architects from Los Angeles travelled to work alongside in many occasions; the progress rate of the design multiplied during those workshops. In-person collaboration is a lot more constructive than what the best technology can so far deliver, however at a significant added cost, financially as well as environmentally.

How do you balance between efficient communication and money/carbon spent on travelling long distances? Every project is different and has its own budget, requirements and complexity and it seems that the client is the ultimate decision maker. I think such project management aspects should be debated a bit more in the wider design team before a decision is made, as it will ultimately affect the quality of the final deliverables. Or maybe it would be a lot healthier to keep design teams local, in the interest of sustainability, finance and local expertise development.



Sydney Opera House, opened in 1973, was among the first projects to use computers for design, but not for long distance collaboration.

Finding Inspiration in Art and Architecture

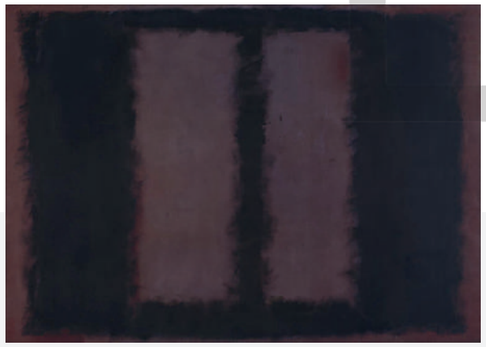
The link of inspiration between Art and Architecture is often overlooked, yet evolves constantly through the production of inspired designs.

By Sonya Falkovskaia

How we seek inspiration, and what we wish to get from it is something that all creative people have in common. However, as I made the transition from an art-student to an architecture-student, I noticed that each discipline seemed to require different approaches towards finding inspiration. Yet, the more I think about finding my own inspiration, the more I wonder whether Art and Architecture do draw inspiration from each other more than I first thought, or more likely more than we would like to think.

Architecture seems to have the power to inspire, through the existence of people in a space, each creates their own unique memories within those spaces. One artist who brings this into his own work is Do Ho Suh, when his intricate but colossal woven sculptures represent spaces he himself has lived in, and how those spaces have inspired him.

Mark Rothko's 'Seagram Murals' is another example of art informing Architecture. Rothko received the highly sought after commission in 1958 and used the money to travel to Europe, where he came across Michelangelo's Laurentian Library.



The blind windows in this magnificent library struck something inside Rothko and he repeated this motif within his paintings, bringing with him the aspect of solidity through his lucid paintings. Michelangelo himself was a sculptor at heart, but his success in creating both masterpieces of Art and Architecture show that perhaps one inspiring the other reaps surprising benefits.

On the other hand, those who go from Art towards Architecture present a unique product which highlights this often unclear relationship between the two spheres. Ivan Mestrovic - a masonry sculptor from Croatia - designed the Cavtat Chapel in Croatia. A small chapel looking over Cavtat appears unassuming at first, but let this not take away from its beauty. The chapel - entirely made out of stone - has the decorative and structural aspects so intertwined that they appear as one. There are clues to the creator being of an artistic background but as a result it makes this example of Architecture to be that much more elegant.

Perhaps Architecture being a separate entity from Art all together has somewhat been misconstrued over time. Architecture is first and foremost its context and its responsibility to the people whilst Art is somewhat more of a 'personal journey'. However, if both Art and Architecture were to draw inspiration from each other more often, and learn from one another, monumental outcomes could be acheived, rather than simply existing.

Sustainable Construction

From design studio to a construction site, some thoughts from a year exploring.

By Dan Duckworth

I have learnt that all too often you have to look back in history to find the solutions. Usually to a time before the prevalence of cheap oil and the invention of plastic. Obvious really when you think that all they had access to back then were natural unprocessed materials. This search has led me to some important facts that I believe you need to be aware of, and also some exciting developments in materials.

Lime for instance can be used in place of cement as a render, mortar, or even for foundations as limecrete. It's breathable so can be used in conjunction with other materials to allow moisture to escape. It's not as hard as cement and so can deal with movement and because of this relative softness will separate from the masonry that it is often combined with, meaning the bricks or blocks can be used again. It also absorbs carbon during its lifetime as it chemically returns to its natural state, resulting in a much lower embodied energy than cement.

According to the Embodied Energy Task Force, 30 - 70% of carbon emissions are produced during the build process. It follows that both the materials used in construction and the energy used in its lifetime are both of great importance. It would therefore be hard to sacrifice one in preference of the other as has become common practice in using man made insulations to achieve high U-values.

One solution to avoid the use of these insulations and achieve 'honest' monolithic construction are Thermoplan clay blocks. They will, when rendered on inside and out, provide a U-value to meet building regulations, no extra insulation needed. They also use far less mortar and are far quicker to lay than normal masonry, thus saving on labour costs. Clay and earth as base materials are now just used for bricks but there is so much to explore: rammed earth, compressed earth blocks, clay plasters and cob for a start.

Materials like straw bales, sheep's wool and hemp seem to all have a slightly hippy status in this country. They are however good insulators and because of their quick 'growing' nature, are in large supply and environmentally sound.

One of the only drawbacks currently with so called 'eco friendly' materials is their inflated cost when compared to others. This is due mainly to economies of scale, so the solution is simple, use them more.

Issues of sustainable building are prevalent in our 'chat' in the department but in my experience are all too often glossed over on the architecture course. They are real and in many ways an exciting problem that we, as designers, should be looking to solve. There is a wealth of knowledge at Bath amongst the departmental staff. Use it whilst you are there.

Reflection, Revit and Revolution

CAD is as necessary to our survival as the air we breathe and food we eat. However, just like out tendency to occasionally snack on junk food - not all software we use is good for us.

By Ben Norrish

We architects are curious things. We are preceded by the stereotype that we do not sleep because we are stuck in studio all day and every day – of course there is a reason for this – because it's true. In light of this, a bitter-sweet irony emerges: as a collective so concerned about sustainability; we promote an extremely unsustainable lifestyle. The cause of this architectural 'mantra' is not the difficulty of the course or individual work ethic; fundamentally it boils down to our inefficiency. A majority of this can be explained by procrastination – that's unavoidable. However, there is an aspect we can control: our work-flow.

As architecture and engineering students, CAD is as necessary to our survival as the air we breathe and food we eat. However, just like our tendency to occasionally snack on junk food – not all software we use is good for us. Knowing that my next statement will no doubt cause controversy and outrage amongst many, I will just come out and say it.

AutoCad and Sketchup suck.

Now don't get me wrong, like the majority of you reading this, I can probably use these programs in my sleep. In fact, the bitter sweet memories of RO SPACE R SPACE CLICK creeping into my dreams during the precious sleep of final year still makes my skin crawl. More to the point, my dissatisfaction is not with these programs specifically, but more accurately the superseded nature of their methodology. Let me explain.

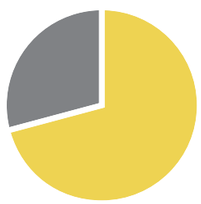
The standard procedure for any project is to draft up the design in AutoCad whilst simultaneously drafting a three-dimensional model in Sketchup. Render, export to Photoshop, and a few textures later – job done. However, design changes are inevitable. Unfortunately, you must update both the linework and model separately. Crit, rinse and repeat. This methodology has two distinct disadvantages; time consumption and the dreaded inconsistency of information – something our critics love to pick up on in our presentations. Fortunately, there is a solution.

Excuse me, do you have a moment to talk about our savior, Revit?

Now hopefully my hypothetical knocking at your door dressed in a suit preaching the benefits of Autodesk's 'Revit' shouldn't be news to your ears – after all the program has been in existence for over a decade. Yet, despite this fact, it is a drastically underused software that students should be taking full advantage of. So what's so good about it?

Autodesk Revit in a nutshell is a tailor-made 3D modelling software for architects and engineers that streamlines the virtual construction of your building. Instantly build entire walls, floors, doors and windows without the painstaking trimming and extending of its primitive ancestor. These tools quickly allow for a design to be created and manipulated both in 2D and 3D simultaneously. However, the true beauty of this program is revealed in its name. 'Revit' stems from the phrase 'Revise instantly', and that is exactly what it does – a change in plan automatically updates in elevation and section.

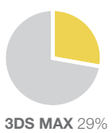
The intelligence of this program doesn't just end there however; all elements have the ability to hold information. Take a wall for example – unlike a homogeneous mass created in Sketchup, Revit has the capacity to show each layer of building material within its construction. This may not seem amazing at first glance, but when you have the ability to take a slice through any part of your building and immediately have a 1:20 detail section, you might think differently! Countless hours saved – you may as well go to bed early!



REVIT 71%

AUTOCAD 50%

SKETCHUP 34%



3DS MAX 29%

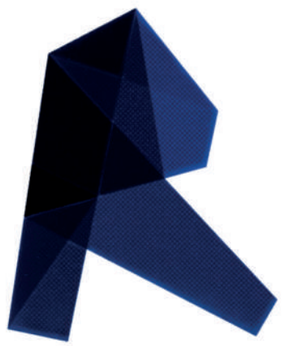
PHOTOSHOP 28%

INDESIGN 20%

RHINO 10%

I could go on forever about the extent of benefits and features that Revit has, unfortunately I have a word limit – so if you're interested or looking for some procrastination material, google can tell you infinitely more. Despite this, there is one critical advantage that Revit possesses that should not be ignored– it's real world potential. An independent survey carried out by **Black Spectacle**[1] shows that Revit skills are a necessity in over 70% of job descriptions within the world's top 50 architecture firms. This statistic can be compared to the 50% that desire AutoCad competence and furthermore the mere 34% that require our old friend Sketchup. The are many factors that influence this division of labour, bar the obvious time is money principle, one such example is the governments initiative that requires all public sector buildings to comply with 3D BIM collaboration by 2016[2] – but my current director in practice sums it up bluntly yet quite accurately:

"Revit is just superior"



TIME OF STUDY	SEMESTER A					SEMESTER B				
	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
FIRST YEAR NAIVE IDEALISTS	I KNOW ABSOLUTELY NOTHING					CAD...WHATS THAT?				
		HAND DRAWING...SO MANY PENS		EXAMS, EXAMS, EXAMS					LAST SUMMER OF FREEDOM	
SECOND YEAR HEAVEN AND HELL	AUTOCAD AND SKETCHUP		3DS MAX	DEADLINES DEADLINES DEADLINES		**MONEY!**				
			HISTORY AND THEORY							
THIRD YEAR ALCOHOL POISONING	EASY					THIS TIME IM GOING TO **SAVE** SOME MONEY!				
	...WHERE DID ALL MY MONEY GO?								THAT SUDDEN REALISATION	
FOURTH YEAR GOODBYE SOCIAL LIFE	HEY...THIS ISNT SO BAD		**ARGHHHHHH!**			WHAT IS...SLEEP?!				
	I SHOULD START MY ESSAYS...		I REALLY SHOULD START...	NO REALLY!!	**FUCK!**					**I NEED A YEAR OUT.**

So considering all the information I have thrown at you, one might question why is Revit and 3D BIM technology not the backbone of our architectural learning whilst at university? A truthful solution to this is not as simple as just changing the curriculum and be done with it – there is far more to learn about architectural design and consideration than can be covered in our arduous, yet short lived four years at Bath. Looking back retrospectively at my experience whilst on the undergraduate course - time is a limited resource - let alone the duration where I was actually competent enough to truly understand the application and benefits of such a tool being thrown at me.

Fortunately, like the theme of this magazine, evolution is in the air. Courtesy of previous student feedback, the university is beginning to implement a Revit module during third year studies. Sandwiching nicely between the first tastes of practice after the hectic deadlines of second year and preceding the uncertain limbo before Basil Spence, this is the perfect time, in my opinion, where students are free to experiment with their individual style and hone their abilities ready for the final push.

Obviously, this news may be begrudging for those that will miss this invaluable lecture series - me included. However vendetta aside, I am personally glad to see Revit beginning to accrue the exposure it deserves, hopefully paving the way for those in the early stages of their architectural development to become better and stronger - and maybe just a pipedream - finally putting the old stereotype to bed for good. After all, that is what evolution is.

1 Black spectacle Survey http://archinect.com

2 Government BIM initiative http://www.bimtaskgroup.org

Book Review: Peter Zumthor - Atmospheres

Peter Zumthor's legendary 'Atmospheres' describes elements necessary for the creation of atmosphere. I take a look at the key ingredients in his analysis.

By Diana Smiljkovic

Phenomenology introduces the idea of how ones environment affects the foundational character of lived experience. Place does not refer to the locality, but consists of factors that together consolidate to form the environment's personality. Human value and engagement is primary to the rationality of design and construction.

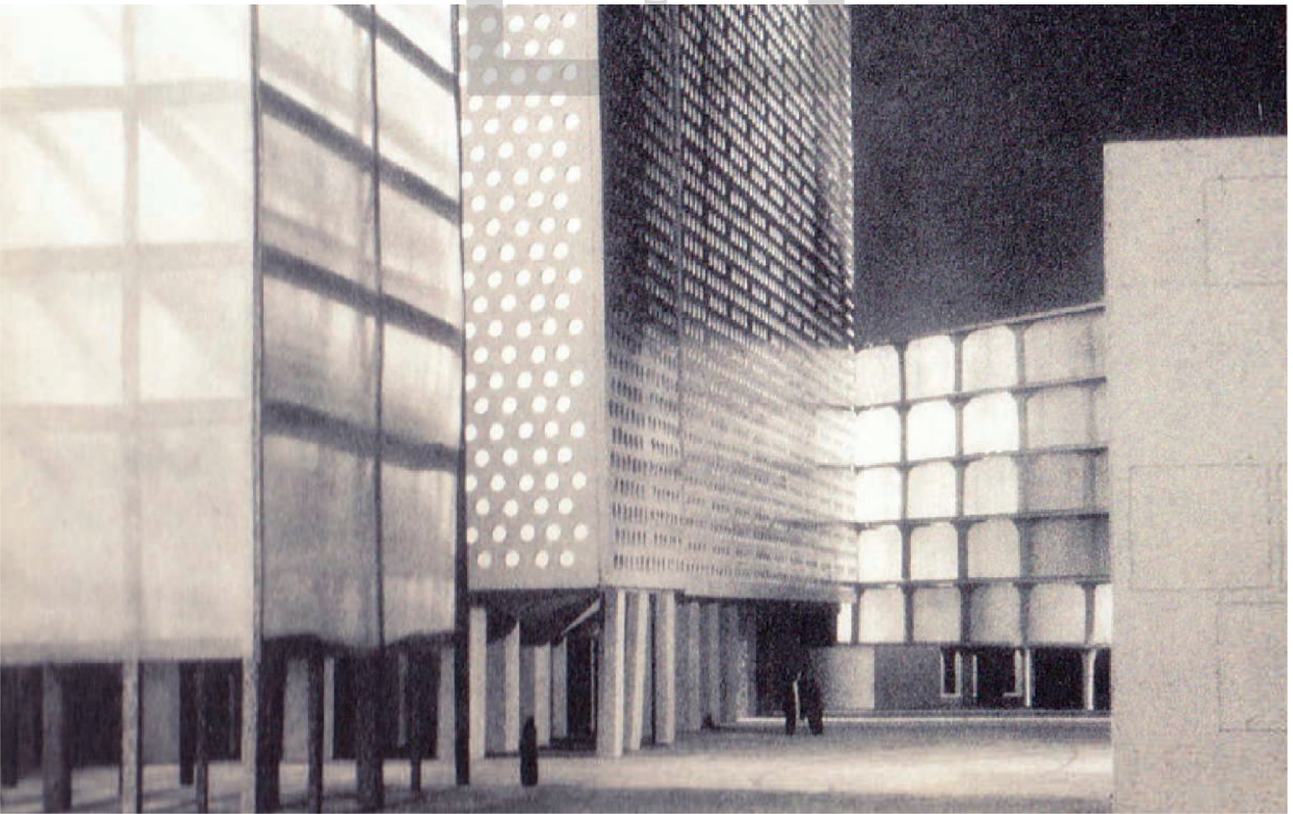
Peter Zumthor emphasises the sensory aspects of architecture. He aims to explore the conceptual and transcendental dimension of meaning in architecture.

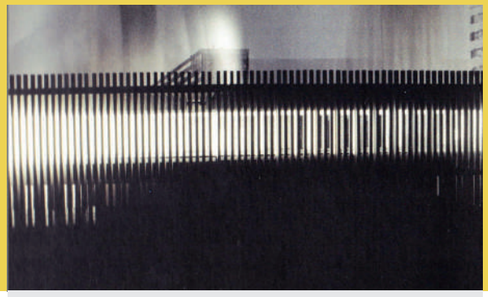
Zumthor achieves to describe the perception of atmospheres, and how one must take into consideration nine different qualities to achieve this. A process of observation and appreciation is crucial as he proceeds to explain that architecture is not merely an automated, apathetic process but one that involves emotive feel and human understanding. It is an art that engages people and highly influences their state of mind, engaging all senses.

Zumthor commences his talk with the Magic of the Real where he describes how the task of creating architectural atmosphere comes down to craft and graft. A great deal of work and thought must go into creating a quality that is harmonious to structure.

The body of architecture; i.e the anatomy of a building is vital in architecture. The exterior is a membrane, and as each component comes together, a body is formed. The material presence of things in a piece of architecture leads us to material compatibility - the ability of turning idea into reality.

> "[…] temperature in this sense is physical, but presumably psychological too. It's in what I see, what I feel, what I touch, even with my feet."





Material Compatibility

Observing the reactions of materials and their boundless possibilities through different compositions allows one to really understand which materials would best compliment a space.

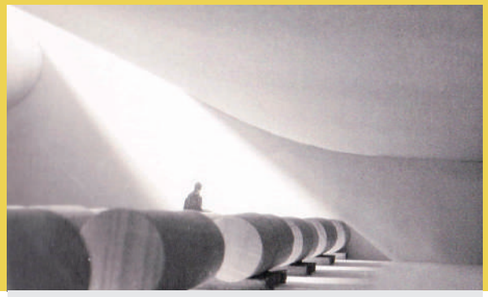
Comfort and familiarness, even if not physically familiar but psychological could make a space that defines an individuals connection with the place. Components that affect this are mentioned to be the sound of space. Interiors (like instruments) collect sound, amplify it and transmit it. The shape of a room and its material composition affects this creation of sound. A familiar sound eases one into their surroundings allowing them to make associations with memory.

The temperature of a space can add or take away from ones perception of a place as it affects ones comfort while surrounding objects and the relationship between objects is what creates a 'sense of home' adding personality and vigour to an area, as well as influencing movement involved in architecture.

> "I don't understand light. It gives me the feeling there is something beyond me, something beyond all understanding."

Will an interior direct you, or seduce you, allowing one to let go and saunter? The ability to make one want to stay, or be drawn round a corner introduces composure and seduction. Creating a voyage of discovery is down to the architect, be it the way the light falls or the halls curve, Zumthor emphasises the importance of composure.

A perfect balance in the tension between interior and exterior is achieved by constructing thresholds deceiving the eye. A transition between inside and outside must create mystery, leading to the levels of intimacy. How the facade speaks is down to the proximity, distance, size, dimension, scale, and the gravity of things. He gives life to architecture by referring to the speech of buildings, bringing great importance to first impressions. How does a building speak to you? What does it say? Does it stand grand and proud, or does it delude you? Its speech is due to the

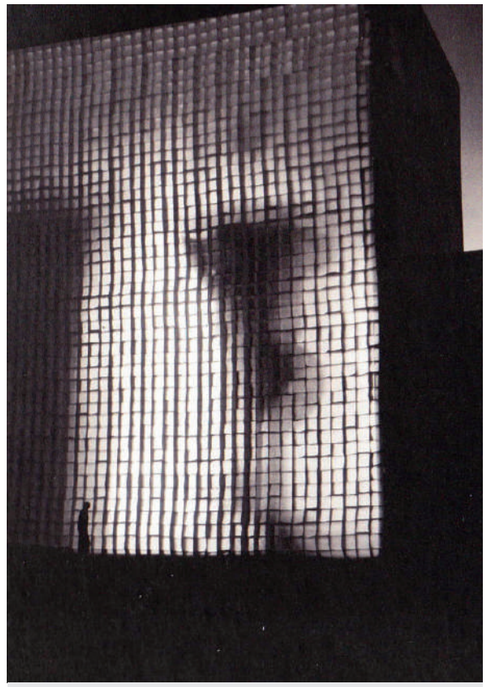


Between Interior and Eterior

form; the difference between interior and exterior, the size and grandeur. Zumthor describe s how some spaces allow you to breath, while others intimidate.

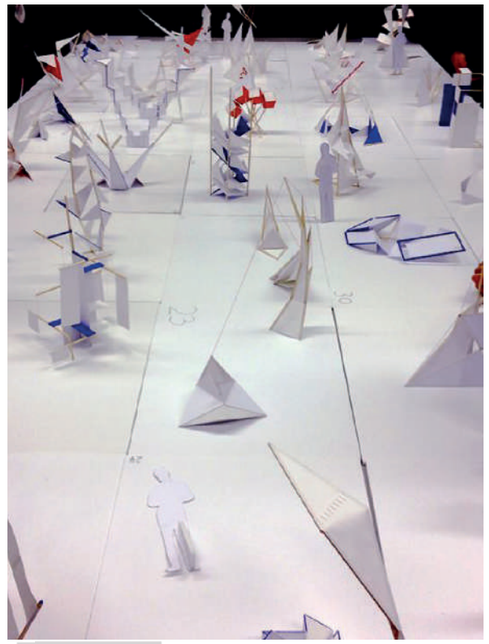
The Light of Things, shadow, and surface quality incorporates itself into this idea of enhancing spacial quality. Zumthor describes this process as hollowing out the darkness from a mass, allowing light to seep in.

Architecture incorporates itself into people's lives. Becoming a part of ones surroundings, it allows interactions to take place and memories to be created. When buildings become coherent "everything refers to everything else and it is impossible to remove a single thing without destroying the whole." From the primary stages of construction and anatomy, where its biology asks for logical fashion, architecture develops to an art that must presumably move the person. It must be beautiful. Its speech, silence, anatomy, but mostly, its atmosphere.



The light of things

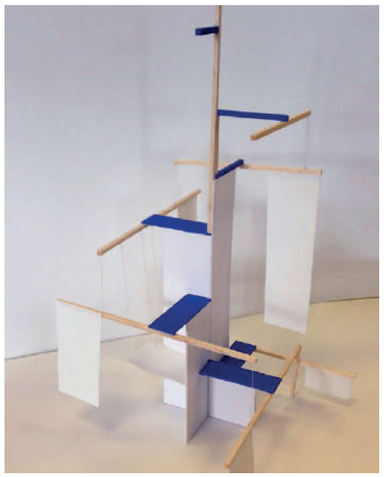
The First Year Project 1 Review



A detailed look at how 1st year students coped with their first project - Kinosythis.

By Paulina Konkina

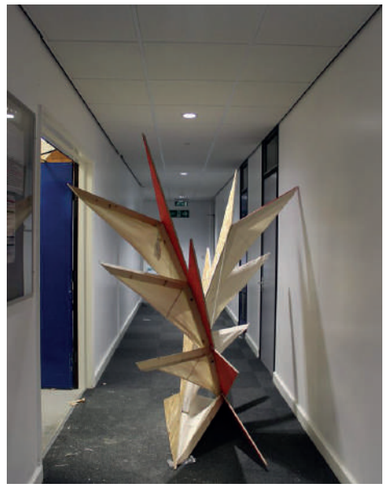
The First Year of Architecture and Civil Engineering School were asked to design a sculpture that would represent the given theme - 'Kinosythis'. The groups of 5-6 people had 2 weeks to come up with a 1:10 scaled model of their design, However, students were not told that they will have to reproduce the sculptures at 1:1 scale, only using given materials - timber, canvas and strings. How have groups adapted their designs when building the real-sized model?



Callum Taylor
Thomas Foster
Agata Nguyen Chuong
Lamia Grine
Diana Smijikovic

The real-sized model is very similar to the 1:10 scaled model. This means that the design was very well thought through, with all calculations carried out before.

The strings and canvas both work in tension better in the real sculpture than in the little model, because the weights of the real materials is different in proportions to substitutes used in the model.



Madeleine Wellham,
Phil Humphrey,
Tim Scott,
Egle Kaleckaité,
James Thien

This model is very interesting as you don't realise that the triangular timber pieces form a base of the model. The string and canvas both work in tension, where the timber frame pulls supports the model in compression.

The red colour adds extra dynamic, as it choosing either red or blue colour was one of the requirement.

Kieran Tate
Ben Giles
Marina Mylonadis
Gordon Siew
Alex Fernandez

The sculpture seems to levitate despite the significant weight (it takes at least two or three people to lift it up).

The A-frames add extra stability to the structure, as the wood works better in compression. The joints should be very strong to hold the structure up, yet elegant not to subtract from the beauty of the design.

The Life of a Quads Resident

I live in the newly opened Quads, and I feel it's time to quash some of the rumours that have been bandied around about this accommodation, and the people who live in it.

By Ross Ledsham

Contrary to the preconceptions you are likely to have, I do not have a bed of fine Egyptian cotton sheets. I do not shower myself in money. I do not even open my window and stifle a laugh at the sight of students in less well finished and furnished apartments.

I have French linen sheets, I shower in my en suite, and I laugh openly at others. In other words: I'm just like you!

As a student in my fifth year of university education, I am something of an oddity in campus accommodation. Having been through the student halls experience once before, I feel strangely separate from my fellow Quads-mates. It is almost as though I am a fly on the wall, an observer, not truly partaking in the experience. I see the glow of excitement in their faces about this new venture, but do not share it. I see them making the same choices, learning the same lessons, and succumbing to the same bout of food poisoning as I once did.

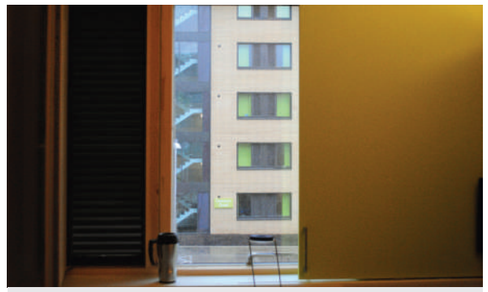
My experience also allows me to speak somewhat objectively about the quality of Quads accommodation. My previous

> "I have French linen sheets, I shower in my en suite, and I laugh openly at others. In other words: I'm just like you!"

accommodation was half as expensive, and could be compared, in terms of facilities, to Westwood houses on this campus. Unsurprisingly, I feel the Quads are of far superior quality.

From an architecture student's perspective, the most significant factors of any home are surely space, light and air. A combined window and ventilation panel unit have been installed in every Quads room, ensuring that light and air are accounted for. However, the rooms are undoubtedly lacking in space. There is sufficient room to swing a kitten, but not a cat – unless you remove its tail. I have tried.

On the subject of light, I have enough electric lights in my room to stage a small dramatic performance. There are two situated in the en suite, another two main lights in the room, a bedside light, desk lamp and nine electricity sockets in case further illumination should be required. And of course we mustn't overlook the infamous 'mood lighting'.



Window and ventilation panel unit

I say infamous, as it has been a subject of considerable discussion and ridicule amongst first years. I refer to a set of LEDs that can change to any colour, selected on a small touch-sensitive pad mounted beside the bed. Personally, I find it has no effect on my mood; perhaps I am less emotional than the average student. I can imagine this kind of gimmick is the result of a study that has determined that students work more productively given certain lighting conditions. However the 'mood' one creates is around the bed, not around the desk, so we are left to ponder what exactly the intentions are… And where exactly does this leave the colour-blind? Spare a thought for their moods too!

Moving outside my room, there are kitchen facilities and communal spaces with various mod cons. The communal areas are reasonably quiet during the week; yet they liven up as pre-drinking hubs at the weekend. Kitchens are hazardous places that should not be entered without appropriate protective clothing.

The exterior aesthetics of the buildings have been divisive. Personally, I think the façades of purple-black metal and light Roman brick are reasonably innocuous. Admittedly, in a university with such an acclaimed school of architecture we should probably be striving for something greater than innocuity. The stairwells – often an overlooked and dingy part of any student accommodation – have full-height glazing, and the ability to observe people moving on these stairs helps to inject some Tschumi-esque dynamism into the frontages.

> "…there is a certain romance in student housing that is lost amongst the brilliant white walls and high definition televisions."

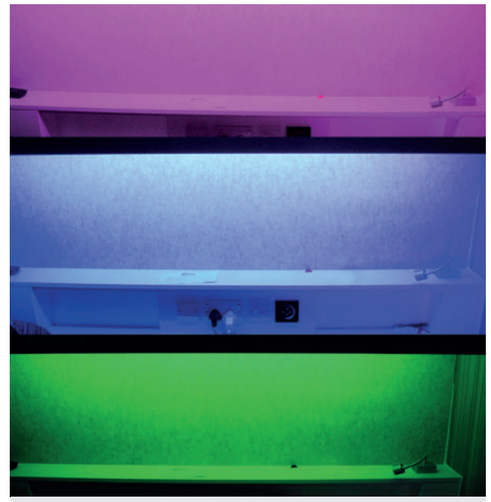
All considered, Quads has certain facilities of which I would have been jealous as a fresher, in my old and tattered halls.

Corridors of Quads

Of course, all tattered accommodation was new and fresh once, which leads me to consider the future of Quads. The floor of my block has been already been flooded by someone passing out drunk in their shower, which proves there is nothing that can quite prepare the fabric of a building for the yearly onslaught of student inhabitation. However, I believe these buildings will grow old quite gracefully. The materiality is sensibly selected – all durable wipe-clean surfaces and flooring. There will be no ominously stained carpeting here!

Quads accommodation may be of a generally good standard, but as I think back to my first year I feel it lacks something.

It has some of the fundamental staples of university halls: the 2 day-old kebab mouldering on the table, the girl living below who listens endlessly to Green Day. Yet there is a certain romance in student housing that is lost amongst the brilliant white walls and high definition televisions. I recall the level of fraternity that developed in more austere accommodation, with seven people sharing a toilet. An 'us and them' attitude develops in such conditions, and this is to be celebrated. Unfortunately, it is my turn to be 'them', and I feel the family atmosphere does not grow as naturally in such an environment. The corridors of doors convey an image of Hotel Quads, which ultimately I feel do not reflect the essence of the university experience.



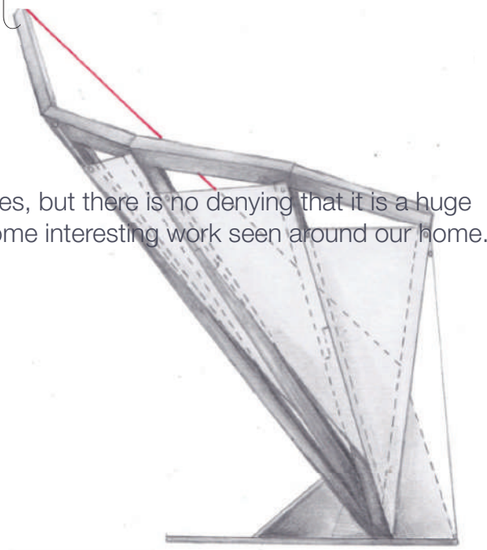
Mood lighting

6E Studio Spotlight

The studio culture in 6E can be pretty insane at times, but there is no denying that it is a huge source of inspiration. We shine the ‘spotlight’ on some interesting work seen around our home.

By Emma Matthews

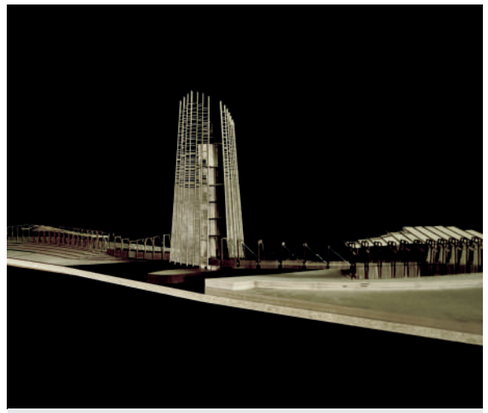
Wall of inspiration, Anonymous 4th Year Studio



Sculpture, Year 1
Louisa Kastner

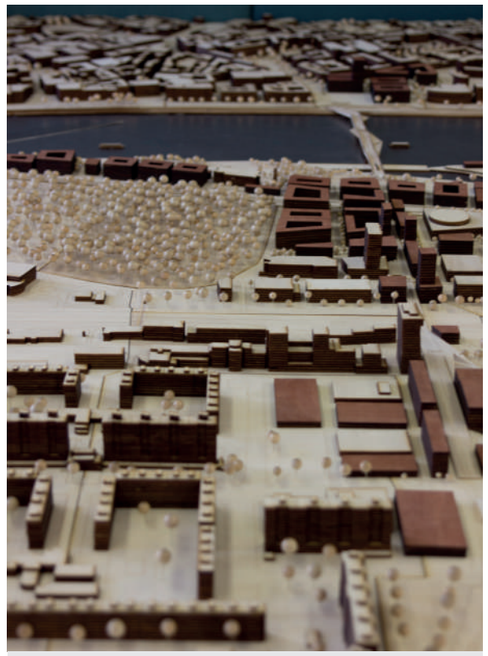
Village Hall, Year 2. Amy Gaudion

Hyde Park Pavillion, Year 3, Joanna Burleigh, Megan Cumming, Ruoming Song, Jack Eddy and Krish Shah

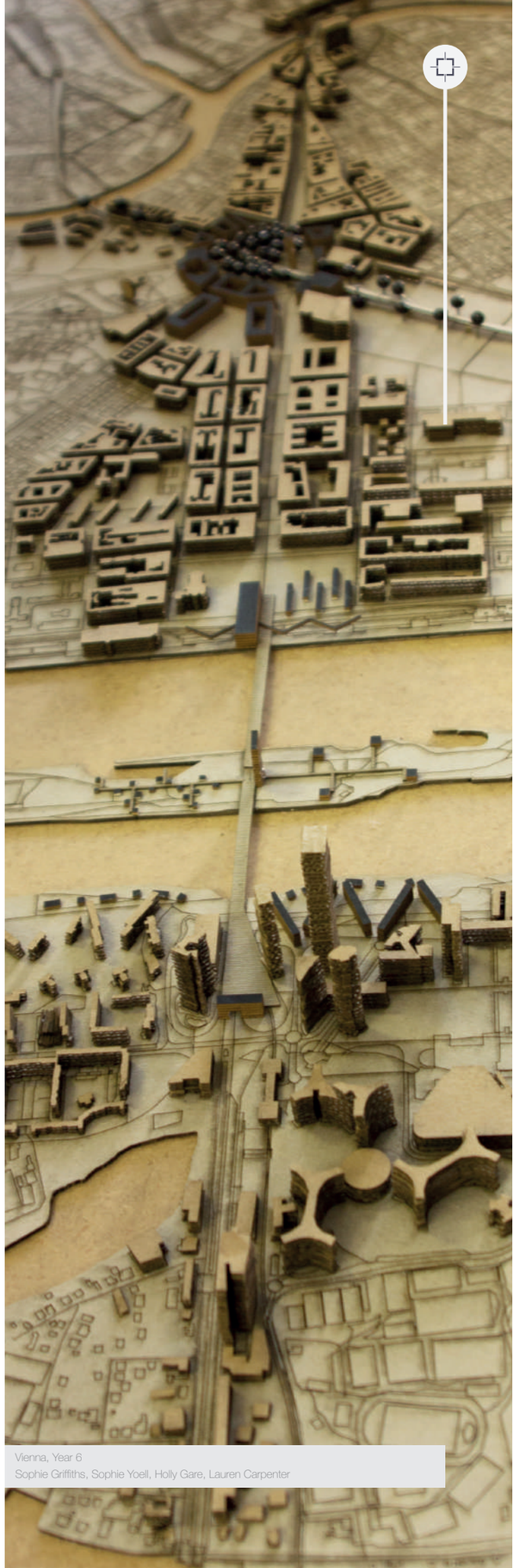


Basil Spence, Year 4
Luke Gordon, Natalie Stas, Paul Jordan, Konstantinos Voulpiotis, Maggie But

Basil Spence, Year 4
Fraser Wallis, Daniel Wilson, Fay Comber



Bratislava, Year 6
Emaad Damda, Emily Jones, Sioned Holland, Nadia Grudinina, Alvin Cheng



Vienna, Year 6
Sophie Griffiths, Sophie Yoell, Holly Gare, Lauren Carpenter

Interview:
A Degree that Opens Many Doors

"So you study architecture. What kind of architect do you want to be?"
"Actually, I might not want to be an architect"

By Issy Spence and Helena Francis

When we interviewed undergraduate students it became clear that, despite popular opinion, our career paths are not rigidly defined by our degree. Though it may appear highly vocational, an Architecture degree encompasses such a range of disciplines that it is logical for students academic interests to evolve beyond our set peripheries:

WHAT DO YOU LIKE ABOUT THE COURSE?
It's real
Satisfying when it goes right and you're pleased with yourself
Yeah, I did that
pre-crit adrenaline rush
I like having an idea and producing a real result

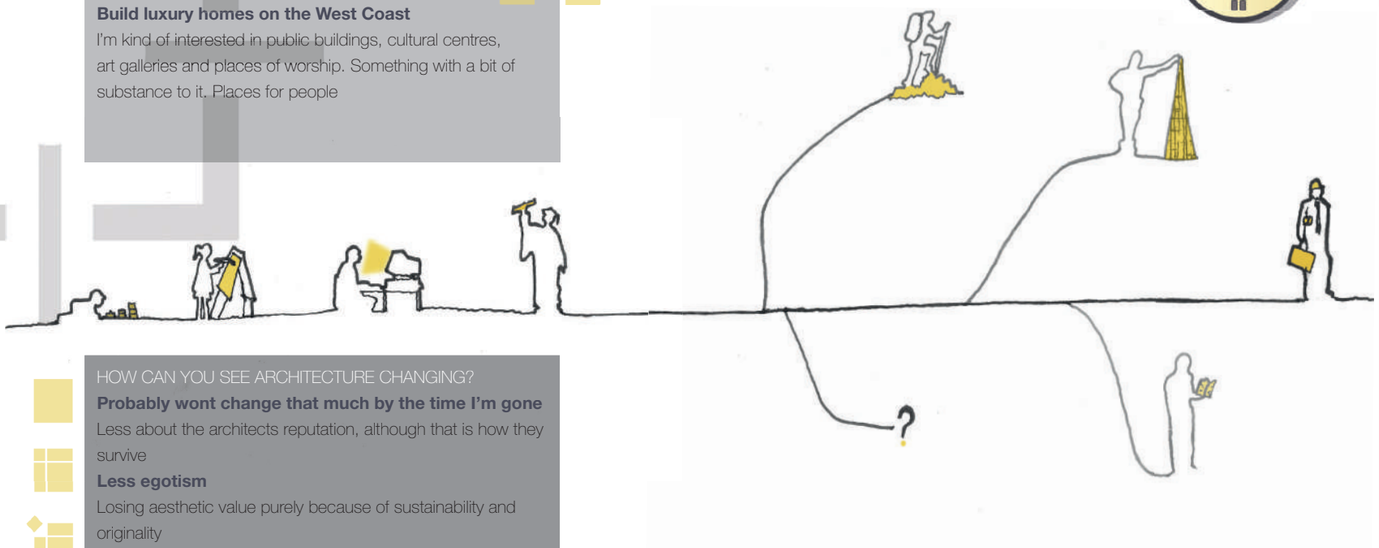
WHAT OTHER INTERESTS/TALENTS DO YOU HAVE?
Photography
Psychology
History of art
Music. I can whistle.
Travel – You learn so much more from travelling than sitting around.
Skiing
Football
English literature
Astronomy
Philosophy

WHAT KIND OF ARCHITECTURE COULD YOU SEE YOURSELF WORKING ON?
Quite Domestic – not too big – I like the personal side
The main aim is to have a small practice with small projects
Residential – Accordia is incredible
Own a practice of different fields: architecture, photography, graphic design
Commercial
Build luxury homes on the West Coast
I'm kind of interested in public buildings, cultural centres, art galleries and places of worship. Something with a bit of substance to it. Places for people

WHAT DO YOU LIKE LEAST?
Plotters
Lack of sleep. I wish I had more: everything looks better with sleep.
I always get it [the project] too late and never have enough time to present it
Way too much work
Technology failure
The work is never finished, the design is never finished. You will never be completely happy.
We don't get rewarded enough
There's no time to read
I really don't like it when someone asks you what you've been up to the last few weeks and you have nothing interesting to say because you have spent all your time eating, sleeping or studio-ing

HOW CAN YOU SEE ARCHITECTURE CHANGING?
Probably wont change that much by the time I'm gone
Less about the architects reputation, although that is how they survive
Less egotism
Losing aesthetic value purely because of sustainability and originality
The rise of money and the fall of design

WHERE WOULD YOU LIKE TO GO IN THE WORLD?
India, again. And maybe go up to the Pakistan Border.
Road trip round South America
Rest of America, South America, Japan
Canadian Great Lakes
Africa



DO YOU WANT TO BE A STARCHITECT AND CHANGE THE WORLD?
Not really, I cant even sort myself out and struggle to make lunch in the mornings.
I don't have the aspiration.
There's a difference between successful and famous.
Not at all, I want to be useful and bring a change, and if I get recognition I wont mind it.
I want to be the big fish that all the stupid *** (idiots) have heard of**
Id rather be appreciated by architecture students than really well known

WHERE DO YOU SEE YOURSELF IN 10 YEARS?
Id probably be 30
Freshly qualified and ready to take on the world of Architecture
Jesus that's a long time. Still studying. Still without sleep, in a dark room staring at a computer screen
A hairy hobbit hole architect, with an office dog, that's the dream

HAVE YOU HAD ANY MOMENTS OF DOUBT?
3rd year placement, sitting in an office thinking you're wasting your life. I think careers take over lives.
Everyday
The fourth day in a row, without sleep, when you're shaking from excess consumption of caffeine and you cant focus on the screen because your eyes are so tired
Every project its like What the hell am I doing? I have drawn a monstrosity, oh my gosh, this is all over.

IF YOU COULDN'T BE AN ARCHITECT WHAT WOULD YOU LIKE TO DO /BE?
Industrial Design
Property development
News reporting journalist
Architectural Journalist
Music journalist
Teacher
Sculptor
Personal Trainer
Natural science/physics to understand the world
Ski instructor
Psychologist
Take photos of the galaxy from the Hubble telescope
Lawyer/Banker
Zoo guy picking up fallen penguins
Advertising
Writer
Construction
70s TV presenter
3D Design in TV/Film sets and exhibitions
Art teacher
David Attenborough
A priest (but I haven't found God yet so that's a harder path to follow)

WHAT DO YOU WANT TO DO AFTER PART 1?
Keep it up – after the four years decide what to do
I'm going to just try pass the first bit – not really thought beyond, cant say yet
Couldn't do part 2 straight away, there's no rush to do it
Maybe a masters in Building Conservation
I could sack it all in, go travelling and become a ski instructor
I don't know whether I want to be an architect. I dont know what I want. I'm too young to really decide.
If the work was anything like the degree Id do it.
When you become high enough up you manage more and have less time actually designing.
Do what I feel like: Go on a nice holiday, get a job in London, work a few years, study a few years.
Maybe get a placement in Berlin. Its a creative and open-minded place.
Depends on what comes my way
I want to do a joint Philosophy and History of art degree
Property development so I can boss you archis around
Jump straight into my masters. But maybe take a year out and indulge in some creative sh*t and loosen up a bit. Or like Tiger conservation, love tigers man

Evolution of an Architecture Student

One persons experience from first to sixth year, which has been a rollercoaster!

By Lauren Carpenter

I began as a naïve 18 year old, feeling like I was drowning in a sea of unknown. I didn't know what a section was, who Le Corbusier was, how to use Photoshop. Trying to juggle studying architecture and learning to cook and clean, and living with 12 other first years was a challenge. I still have no idea how I made it those 8.15am structures lectures after clubbing the night before. (I would never manage that now!)

Moving into second year there were further unknowns, trying to grasp the ideas of site context and analysis, learning how to render, getting that elusive job in the middle of the recession. The juggling of studio and a multitude of lectures and coursework ensued. Stress levels rose, but everything was completed and passed. The placement I eventually found was a personal turning point. Architecture finally started to make sense!

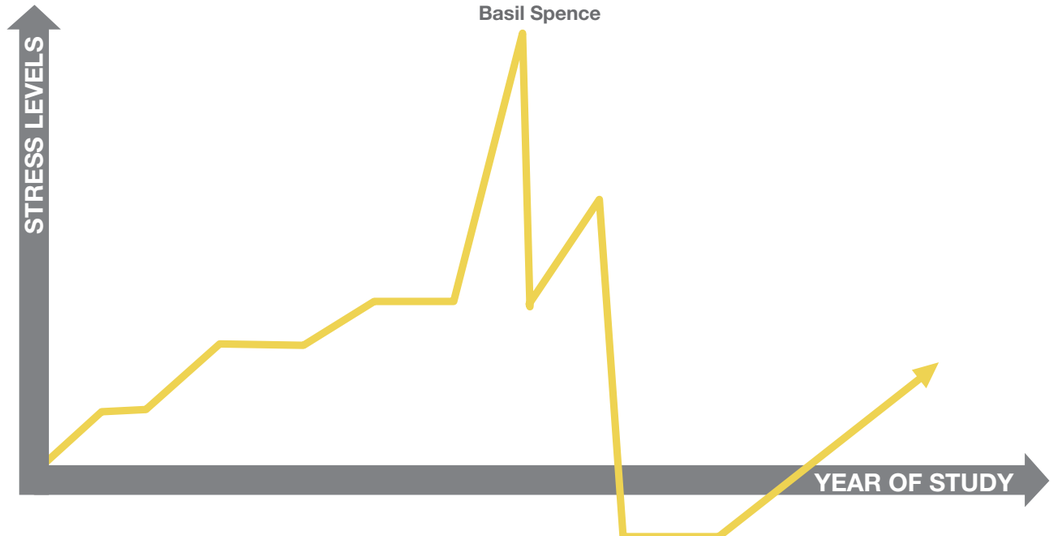
Then I returned for third year. The trip to Istanbul was incredible, and the rest of the semester was spent trying to grasp the idea of a concept and spending 2 weeks making 1:20 Corten panels from sandpaper and cardboard. I even managed to survive the horrifying moment where 1kg of slate was accidentally dropped onto my laptop from a great height, and for 24 hours I was certain I had lost the entire semester's work. Luckily a Computer Science studying friend managed to save all of my files, a hard way to learn the lesson; always back up.

I had finally reached the dreaded Basil Spence project. I learnt to lasercut, revisited solar geometry, and learnt how to work (not very efficiently) within a group. Basil Spence was definitely a steep learning curve, and our working hours spiralled out of control. The final year individual project was very long and draining and felt like crit after crit after crit. Then came the prod moment of the end of year show, and the realisation that my parents still didn't have a clue what I was doing at university (they still don't). Then came the agonising wait to see what mark I had achieved. Had I got back into Bath for the MArch?

I felt relief and joy to have gained a place for the MArch at Bath, and swiftly moved back to the unstressful world of placement. Fifth year was full of experiments; with concrete, landscape and my sanity. The highlight was visiting Madrid for a week long siesta.

I have at long last reached sixth year, and do I still feel like I am drowning? Yes I do, currently trying to get to grips with masterplanning a 4km stretch of Vienna.

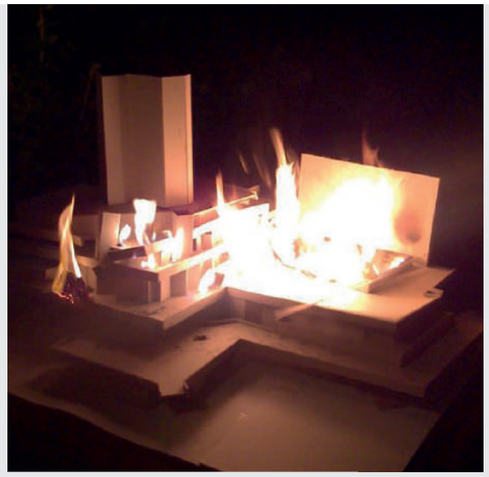
Every new project is a step up in size and complexity, and I constantly feel like I have been thrown into the deep end. It would be interesting to mix it up a bit; give the fourth years a house to design, or see what kind of a masterplan a group of first years could produce. Maybe if we were to design a sculpture in sixth year, we would realise how much we have actually learnt!



There have been many ups and downs throughout my time in Bath, trips to Istanbul, Madrid and Vienna have been amazing, ungodly hours in the studio, crits from hell, and lasercutting disasters have been some of the low points. Building a 1:100 model of the National Theatre for Basil Spence until 5am was a particular low point, whereas celebrating the end of 4th year by burning that model in my back garden with my team mates was a particular high point.

Although it has been a bumpy ride, it has been worth it. The education we receive at Bath prepares us incredibly well for the world of work, and I am certain that we will all make a great architects. Although I am positive that whatever stage I reach in the architecture profession, part of me will always feel like I am drowning.

'Balance' First Year Sculpture Project



Burning the National Theatre

Fourth Year End of Year Pin Up

Siesta in Madrid

Creativity and Fun in Engineering Education

The University of Bath is taking leaps forward in engineering education. Tim Ibell, 2015 IStructE President and past Head of Department, lays his thoughts on the matter.

By Tim Ibell

If you get the chance, take a look at the historic boards on display in our great Professional Engineering Institutions, such as the Institution of Structural Engineers or the Institution of Civil Engineers. You will find on these boards the names of each institution's winners of their Gold Medal going back far into the depths of history. It has long struck me that it is not the mathematical- or physics-based skills of these extraordinary engineers which place them apart from most others in the Institution. It is their creativity. It is true that their mechanics-based skills are outstanding too, but without the creative aspects of their make-up they would not have been gold medallists.

Why, then, if the soul of our profession is creativity do we not (across the world) put this attribute at the centre of all of our education, starting from school kids (to tell them about engineering as a profession), through to students and the general public? It is my strong belief that academics and practitioners have a responsibility to enthuse school kids, students and others about engineering by pointing to the fun bits of what we do. It is true that those of your reading this article already have this mind set, because you have chosen to study in a joint Department of Architecture and Civil Engineering, which signals a creative environment. I want this relationship with the greatest of architectural education traditions to ooze out into all engineering education worldwide.

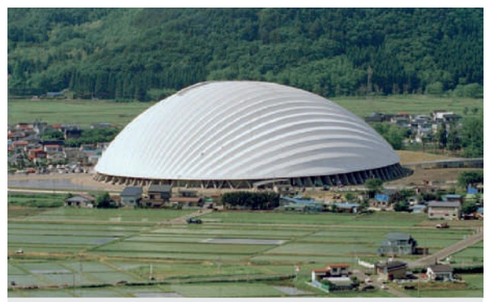
> "…engineering is not about hard hats, high-vis jackets or even playing with numbers, but rather about creativity, enhancing society and making a real difference."

All throughout my own undergraduate career, I wanted to know how an egg worked, and I wanted to know why we weren't being taught to take advantage of such a brilliant structure. I worry that the very necessary creativity, fun and intuition involved in world-leading structural engineering is sometimes sucked out of engineering degree programmes such that a graduate considers the entire language of

How does an egg work?

structural engineering to be columns, beams and slabs. It remains a central theme to me that intuition, exploitation of materials and creativity lie at the heart of great engineering. If you have not yet seen the TED lecture by Sir Ken Robinson on the importance of creativity in education, take a look at http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity. Through wonderful wit it makes a convincing case why we must allow students to feel able and willing to make mistakes during their formative years. Without the freedom to experiment in a supportive atmosphere, we are otherwise stifling their creativity. Given that we really have no idea what our engineering students of today will need to have mastered for their day-to-day activities in 20 to 40 years' time, our education system needs to capture the essence of learning how to learn in a motivational setting.

So, if you agree with any or all of the above, please go back to your original school for a day and give a talk to school kids on the creativity and fun which are inherent in a problem-solving career, namely civil engineering. Your efforts will be hugely beneficial, as our society requires the message to be clearly understood by all that engineering is not about hard hats, high-vis jackets or even playing with numbers, but rather about creativity, enhancing society and making a real difference. We need a diversity of talent in this endeavour, and our focus on finding this talent should be much broader than merely STEM.



Exploitation of geometry

The Good, the Bad, and the Graffiti

Your building's fresh and complete? Make sure you quickly snap a few pictures for your portfolio and run away before people start using it.

By Yacine Abed

Amongst the many aspects of architecture's ageing process, vandalism is arguably the big daddy. And with it comes its best friend: graffiti. Ask a sociologist about graffiti, and they will give you pages upon pages on the subject. Ask an architect about it, and they will ask you to repeat the question. Graffiti is a direct result of society, and architecture is its canvas. So why do architects ignore the potential of artwork being added to their own artwork? And more importantly, when does graffiti kill the architecture? Or when does it reinvigorate it?

Belgian visual artist Xavier Delory envisioned the iconic Villa Savoye desecrated by street artists. Would its strong architectural values still inspire in such a state?

Contemporary graffiti truly came to life in the 60s as an expressive accompaniment to revolutions of all sorts. The new bleak, modernist facades provided a perfect surface for this expression, not only for their physical banality but also because they were the toys of an era's political powers. Older architecture could have been targeted, but its usual ornate and material quality proved too powerful for the spray paint. Here's a fact: when something is truly beautiful, everyone works hard to protect it.

Would this facade look any more welcoming without the graffiti? I think not.

Graffiti on modernism quickly went on to become a trend and was no longer only associated to revolution, but to urban creativity, self-expression, and in some cases, boredom. Whatever the reasons, it undoubtedly distracts the eye from the architecture and becomes a focal point. "That building with the elegant glazing" becomes "that building with a smiley face smoking a joint". Too often does it give a place a negative stereotype, a sense of crime and poverty. If a graffiti artist can spray paint on a wall surely they can spray your blood onto it too? If we zoom out a little though, maybe the architecture itself is the criminal. I wouldn't tell the difference between an 80s council estate with graffiti to an 80s council estate without. The dark cellular blocks with pokey windows and sadistic balconies make me look away before I've even noticed the cryptic letters of what could be a swear word or somebody's exotic name. When the graffiti is ugly, the architect should probably take note that their work failed to impress.

Banksy, along with many others, present the positive potentials of spray paint. This once bleak corner is now the source of 380,000 Google search results.

There is a rare breed of graffiti artist however, the witty lone rangers who plan it weeks ahead. The dark horses of street art. The ones who make you smile rather than do a U-turn. They pinpoint the most boring walls in the city and transform them into vibrant hipster hotspots. They add quirky twists to the most humdrum civic amenities and make fire exits look cool. They transform low budget brick walls into million pound artworks. This healthy coexistence between street art and architecture should be sought after and conserved, to everyone's benefit. Not a social revolution, but a social evolution.

Visualising Architecture

Architectural Hand Drawing VS Architectural Rendering. A personal experiment exploring the merits of traditional and computer generated images.

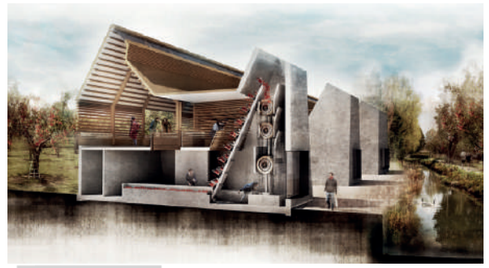
By Paulina Konkina
(and a very big thank you to Sophie Beagles)

Architectural illustration, is the art of creating two-dimensional images or animations that representa a building in a realistic setting. However, until 3D computer modelling became common, most architectural renderings were created by hand. There are still many architectural illustrators who create renderings entirely by hand. Many successful architects use a combination of hand and computer work.

I have always found it fascinating how architects can create a photorealistic image. However, it can be very difficult for a student especially if you don't know more advanced rendering programs such as 3DS Max or don't have essential Photoshop skills. It seems that architecture students rely on the computer softwares an awful lot, and the art of architectural hand drawing started to disappear. However, I want to proove that it's not true and try to promote the hand drawing.

Sophie Beagles, who is in the fifth year of our Architecture School, kindly provided me with a few of her own renders, produced during her final last year. I am going to do a personal experiment and see if I can produce hand drawings that will be as powerful and convincing as these beautiful renders by reproducing the same scenes with watercolours. I am going to treat as a personal experiment.

When describing her experience of doing this render, Sophie



mentioned that all the images for this project were a big struggle. The Sketch Up Model was very, very detailed, so naturally Sophie's computer crashed as soon as she tried to start rendering. However, when finished, the render looks amazing!

Sophie says that the image below also caused a few technical difficulties, as the finished photoshop file was over 2 GB. However, the image is very well composed, and conveys the atmosphere and mood of the design, selling the scheme off very well.

> "I think the original photo is what really makes the image, it was just naturally a good composition."

Experiment: I want to see if I could create a powerful drawing not spending an awful lot time, therefore, there will be a set 20 minute limit per a drawing - a reproduction of Sophie's renders. Then I will discuss what I think is good about each drawing.

I think the bottom drawing works quite well as a quick representation of what a building is like. The watercolours conveys the general atmosphere of a scene, the fluidity of the sky that slowly flows ilea's into the water. The rhythm also is very clear in this image, that leads your eye into the centre of the drawing. The watercolours are very good at quickly painting the water and the sky. The painting feels much more translucent and airy. However, I feel that the image does not feel as complete as the render due to the lack of the contrast, and variety of colours.

The render also feels to have more depth to it that the painting as it is much more detailed than the painting. The paints allowed me to show the shape of the building, however, twenty minutes were not enough to convey every detail as the render does.

However, I am not pleased with the other drawing, as I feel its not as successful as the first one. The strength of this render is in how detailed it is. However, I did not managed to convey the beauty of the forms and the relationship of spaces. I have spend more time in trying to bring in more colour variety in this , and redraw the details so i did not manage to finish off the drawing.

The fluidity of the watercolour let me 'bleed' the image of the page, however, the whole image could work better if I chose another medium, such as pens or pencil that would allow me more control to bring ion more depth to the image.

Conclusion: The watercolours did not work as well as I hoped, especially the second one. I now feel that the computer visualisation work better for a final visual when you need to convey every detail of your building and the atmosphere of a scene. The renders also seem to work when you want to make a sectional perspective as it is quite hard and time consuming to represent every detail.

However, the watercolours worked very well when I wanted to quickly represent what a building could look like in a perspective. It means that you can create a convincing image in less than half an hour, instead of sitting in front of the computer, desperately trying to make a 3D model. The hand drawing can also be very fun and help you to relax without stopping to work. The different medium drawings could be improved in photoshop without ruining the original image.

A Night at the Studio: Studio Culture at Bath

A personal experiment to explore if, and how, students ‘evolve’ from exposure to studio culture throughout their degree.

By Harry Streuli

In the whirlwind of the undergraduate degree, it is hard to find the opportunity for a reflection on the course, and how it has changed you. As I am now in my fifth year, and on placement in Bristol, I suddenly have a huge amount of time on my hands. Given the theme of this issue, I thought it would be fun to use some of this time to wander around the studios, and explore the different attitudes and expectations students have in each year group. Just to add to the amusement, all my visits were on pre-crit nights - the only way to truly get to know someone!

Almost vacant studios are patrolled by a couple of keen freshers...

Naturally, I started with the first years, which was an eye-(re) opening experience - studios littered splinters of wood and dribbles of paint, but deadly quiet. Just an echo of the days activity.

Second year was broadly the same as I remember. A much more relaxed affair, and the students certainly began to show an air of confidence. other than the odd cry of roof detail woes, football and banter was rife - sketchup was not.

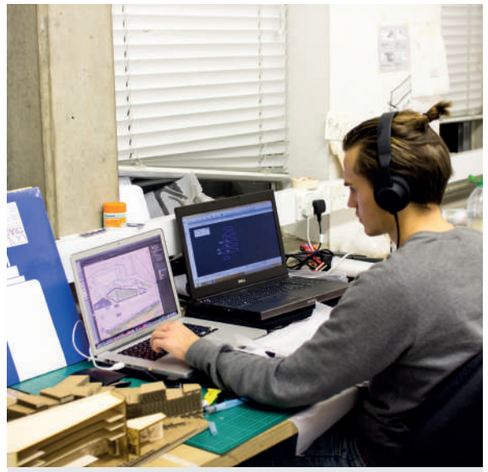
Strangely, I found the third year studios to be fairly empty. But what work was happening was efficient - double computer power! Clearly, some time in practice is teaching these kids something!

My last visit to the studios was the night before the Basil Spence crits. This struck pretty close to the bone as I am still reeling from the effects of fourth year. The studios were heaving, and everything was happening at once - experimenting with concrete, renders, finishing models, trimming drawings, renders, renders, renders. That oh so familiar face of confusion when presented with an empty wall and a stack of drawings.

Fourth year studio is a different beast. Relatively casual working gives way to intense activity. People are everywhere. The pressure is on. This pressure from your peers provides a drive that I didn’t witness in any of the other year groups.

I theorise that studio culture is a complex equation. It feeds on sleep deprivation and pot noodle, but the more you put in, the more you get out. I think that it is only by commiting to design studio that students will truly ‘evolve’ during their design edication.

Despite the looming deadline, second year students still find time to chill out

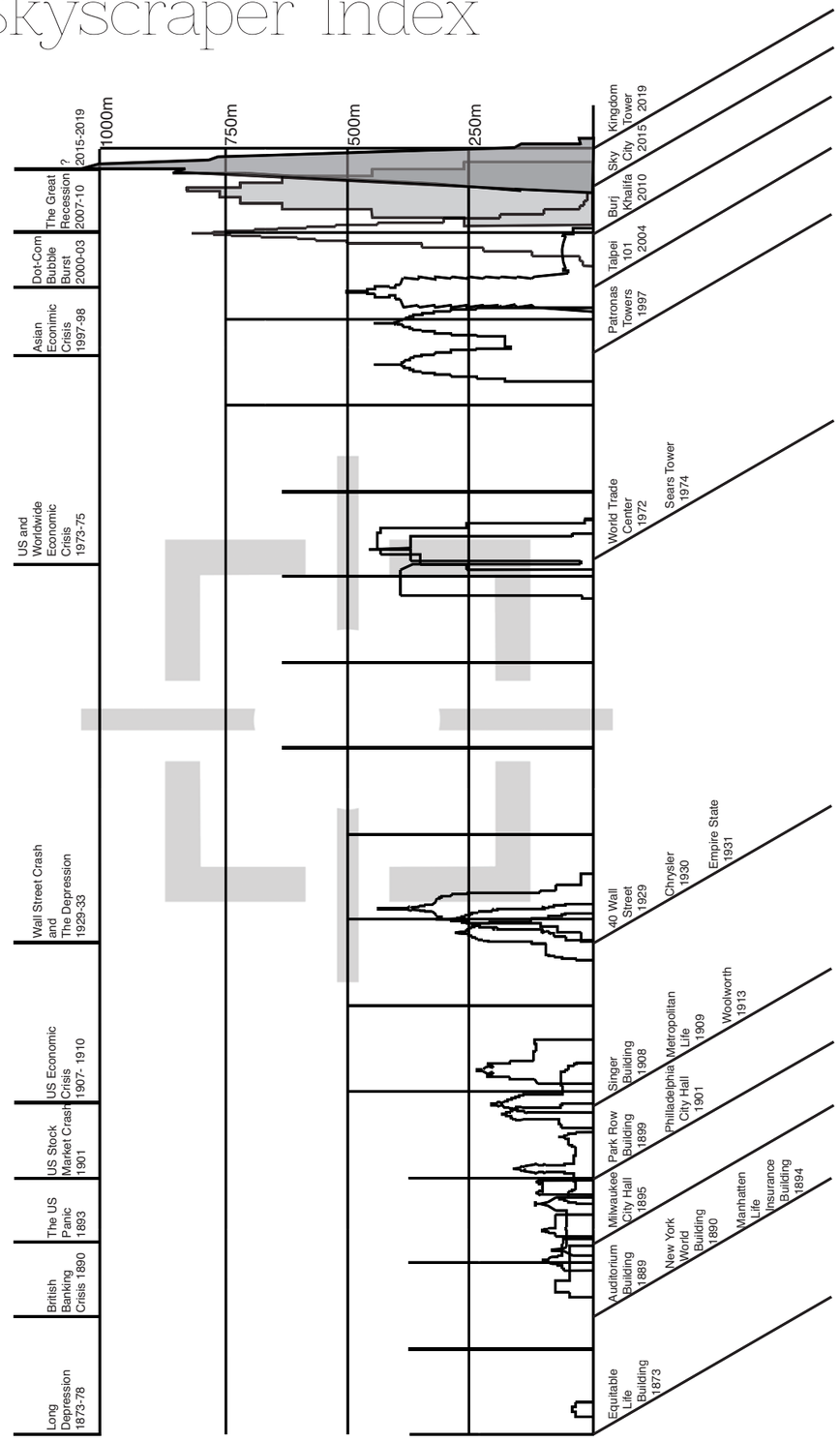


The story is different with the third years... Two computers, twice the output!

Finishing touches are put to an intricate Basil Spence model... Stepping it up a gear.

Summing up the entire Basil Spence process. A whirlwind of intense work culminates with just a few bits of paper on the floor!

The Skyscraper Index



By Benenedict Hignell

In 1999 Andrew Lawrence, a property analysist, proposed the concept that the construction of the world tallest building is imanantly followed by an economic crisis. This theory holds true for almost every record breaking building and economic crisis, including the Wall street crash in 1929 matching the construction of the Crysler and Empire State buildings and the recent Great Recession beggining shortly after the Burj Khalifa got under construction.

The White Elephant of the Middle East

We live in a world where a country's ambition is measured by its tallest building - but it seems bigger does not always mean better, and Saudi Arabia has yet to receive the memo.

By Aleena Khan

There is no doubt of the sheer wonder that architects everywhere have achieved. From Barcelona to Tokyo, each city has left its mark, be it a Norman Foster or a local talent. But a new consumerist race has emerged, one where countries compete for the title of tallest structure - and in this race, there is a risk of eradicating their architectural integrity. One possible measure, you could say, of this is the country's preservation of the past and its vision for the future.

It has become common knowledge of Saudi Arabia's construction of a 1km high skyscraper – the 'Kingdom Tower'. Located in Jeddah, along the coast of the Red Sea and costing a grand total of £780 million – alongside a £13bn Kingdom City for which it stands as its centerpiece - the finished building will cover a total area of over 500,000 square meters and have 200 floors.

Economically, the tower is expected to be quite the investment given its significant contribution to the rising value of surrounding real estate. Similar to Dubai's Burj Khalifa, the Kingdom Tower will draw eyes to Saudi Arabia, enhancing tourist attraction and presenting the country as a regional and monumental role model.

So why am I against it?

Saudi Arabia's most significant historical sites are – or were – found in Makkah, the holy city. In 2002, the Saudi government destroyed the Ottoman Ajyad Fortress, built in the late 18th century, for the construction of Abraj Al Bait, the third tallest building in the world. This sparked both Turkish and International criticism, which pales to the outcry over the demolition of religiously significant sites across the country. Over 300 have been removed in the last 50 years, with 95% in Makkah alone. They are officially a part of the ever-growing expansion of the Masjid al-Haram (Holy Mosque) in Makkah and the Prophet's Mosque in Medina, in an effort to accommodate the vast numbers of pilgrims. Whilst Saudi Arabia has succeeded – for now – one could argue that upscale hotels, luxury accommodation, shopping malls and restaurants cross into the over-commercialization territory.

An aerial view of Makkah. Observe how Abraj Al Bait towers over the city, particularly the Grand Mosque in the centre. [MSNBC]

The Kingdom Tower, our latest project, demonstrates the country's shift towards green development using modern technology, possibly incurring a financial success in the long run. For example, the Tower will feature a high-performance exterior wall system that will minimize energy consumption by reducing thermal loads.

But as of late, it seems to be no more than a white elephant, supposedly being, "an iconic marker of Jeddah's historic importance as the traditional gateway to the holy city of Makkah." [Talal al Maiman, board member of Kingdom Holding Company and Jeddah Economic Company.] Anyone who has visited Makkah will see that this architecture simply defies the very cultural heritage of the city, and such statements are simply a mockery of everything it represents.

Saudi Arabia appears to be sacrificing its culture and heritage for a symbol of hubris – in a country where education levels are likened to that of a developing nation. Despite having the lowest poverty rate in the Middle East, it still remains relatively high for a country that is ready to spend over £13bn on an entirely new city.

But hey, we'll break the record for the tallest building in the world. What else could anyone possibly want?

Proprosal of the Kingdom Tower. [MSNBC]

Is architecture still honest to itself?

"Content precedes design. Design in the absence of content is not design. It's decoration"

Jeffrey Zeldmann

By Sara Medas

Today more than in the past, it seems that the boundary between art and architecture is much more subtle, sometimes even non existent. As a consequence, far too many times buildings are designed as pieces of art and they seem to have lost that deep and subtle relationship with the surroundings that once characterized them. While a piece of art is a stand alone object which could be placed either in a museum or in an art gallery without changing its artistic meaning, a building is far away from all that. Buildings should always belong to the places in which they are built and dynamically relate to what surrounds them, be it nature or other dwellings. This is the essence of contextualization.

The sense of belonging to a place should always be the result of deep natural, cultural and historical analysis all carried on from the early stage of every design process. For a building to belong to a place, context driven design is the key. Architecture was in the past far more rooted in nature than it seems to be today. This was possible because architecture was almost generated from, and by the place. This does not mean at all that man was not part of the design process, but on the contrary there seemed to be a deeper sensibility to the surrounding environment. This strong relationship with land was also due to the materials used and to the building techniques : for instance, whenever possible and to save costs , stone was extracted from quarries opened ad hoc in situ (a typical case were the Combe Down quarries , in Bath).

> "For a building to belong to a place , context driven design is the key"

An interesting approach to contextualization can be found in "Architecture Without Architects" , by Bernard Rudofsky. The author tries to step back from the common architectural point of view, narrowly focusing on Western architecture, presenting the beauty of what we call primitive vernacular architecture. His book aims to give a broad panorama of such examples from all places and times. The iconography of the book is accurately chosen to show us that, far before the development of modern technologies, vernacular architecture had achieved a deep sense of belonging to the place as it was harmonically and respectfully inserted into it.

In Rudofsky's own words:

"The wisdom to be derived goes beyond economic and esthetic considerations, for it touches the far tougher and increasingly troublesome problem of how to live and let live, how to keep peace with one's neighbors, both in the parochial and universal sense." [1]

The problem arises urgently, also by a social point of view, in the blocks of flats in the suburbs of great modern towns : huge anonymous buildings that depersonalize its inhabitants. When observing at vernacular architecture, it is almost impossible to recognize the architect who designed it, if there was even one, as the predominant characteristic is how the building responds to the environment - how it fits into nature. On the other hand, the artistic footprint of the modern architect seems to play by far a dominant role. Architects seem to put first their design and to ignore the site it belongs to, hence producing an architecture that has lost its harmonious relationship to the surrounding context. This is particularly striking in public buildings.

One of the most controversial pieces of modern architecture is the Guggenheim Museum in Bilbao , by Frank Gehry. Since its early conception it has been the object of a heated debate, from both a cultural and architectural perspective. While standing in front of it, with the late XIX century buildings in the background, the Museum is mesmerising. With its unique design, at first sight it distracts the viewer from the surrounding buildings, preventing him to realize that it is alien to them.

We can accept the extraneousness of the Museum to the environment only looking at it as an evidence of Gehry's originality, and so decontextualizing its design. The Museum was meant to be a symbol of the identity of the city of Bilbao and of the Basque culture. For this purpose the Nationalist Party officials opted for a design which broke radically with the surrounding architecture.

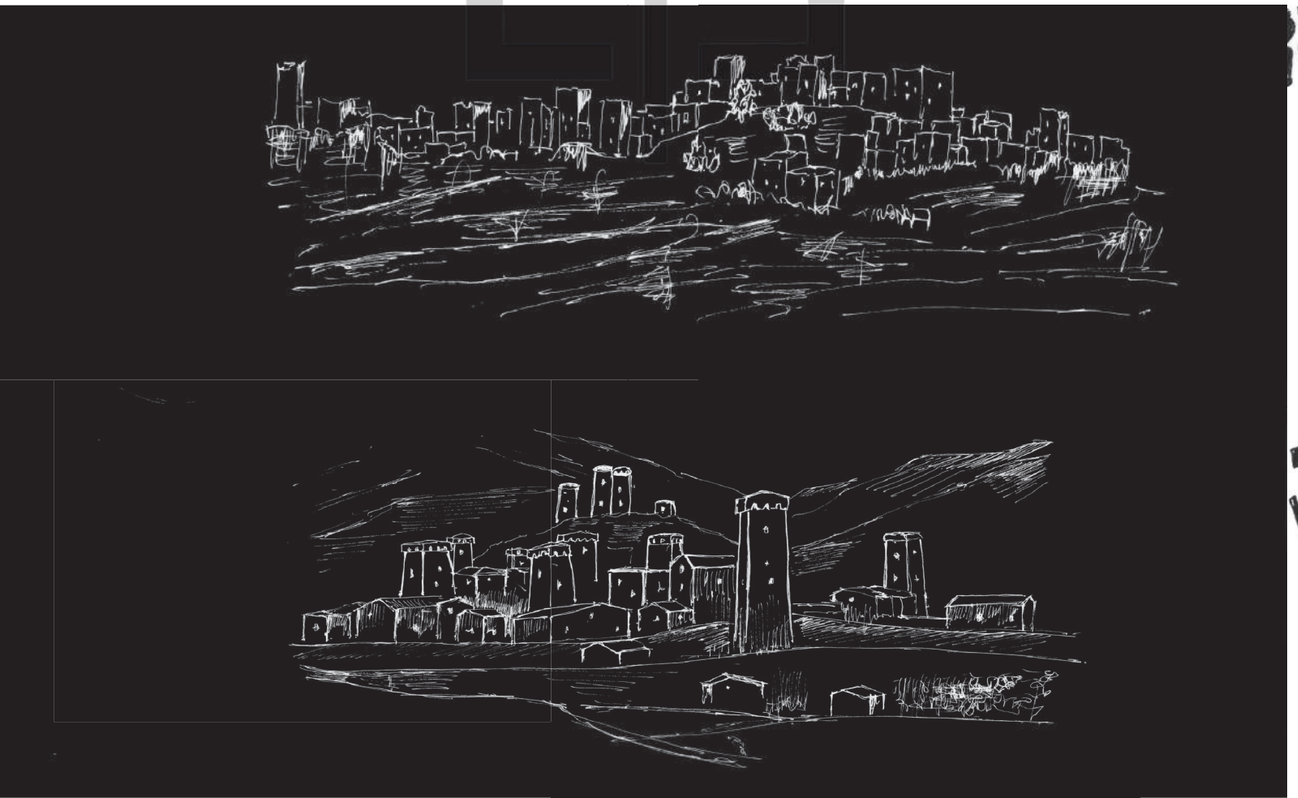
In my opinion, we need today to come back to an architecture more respectful of the local traditions and environment which does not mean at all to break the relationship between art and architecture. Considering the building as a piece of art is one of the many architectural approaches and this should not prevent the architect from contextualizing it. Looking at the past does not necessarily mean to passively copy it, but instead both to look at what has previously been designed in a successful way and dynamically reinterpreting those principles according to our times and contexts.

Every architect should wonder what a building is really meant to be and in my opinion the answer should not just be a piece of art.

Bibliography:

Rudofsky, Bernard, Architecture without Architects (Albuquerque: University of New Mexico Press, 1987).

The drawings are a personal interpretation of the pictures found in Rudofsky, Bernard, Architecture without Architect (Albuquerque: University of New Mexico Press,1987).



The Personality of a city: Belgrade

Through architecture, mankind aims to eliminate the fragility of human memory. Structures reveal the timeline of a country's history: the reason for what stays and what goes has been sought out by many.

Diana Smiljkovic

In The 7 Lamps of Architecture Ruskin states that "there are two strong conquerors of the forgetfulness of men… of the two architecture is superior because it presented not only what men have thought and felt, but what their hands have handled and their strength wrought, and their eyes beheld what are alone offered was the memory of human work, both manual and mental."

Passion, wounds, triumphs, all becomes apparent through transmuting rows of enduring structures and their boundless, meandering streets.

Undergoing influences from the Roman Empire, the Serbian medieval state, the Ottoman Empire, the Habsburg Monarchy, the Serbian monarchy, and the socialist rule; Belgrade has become a visual timeline as fragments of each past protrude into its present. It stands proud, luring the traveller not with a question but with a statement, "let me tell you my story."

"Memory is the consciousness of the city." - Aldo Rossi.

Byzantine fortresses transitioning into Baroque churches barricaded by interminable rows of a socialist utopia present a city whose potent strength persistently resists the dominance of forgetfulness, by living through society and its creations.

Kalemegdan sits proudly overlooking the Great War Island and the confluence of the Sava River with the Danube, with its archaic bricks ascending from its foundation to form the medieval fortress and citadel. Around it is what we know as the 'Old city' - an area whose walls commemorate the transition through centuries.

It follows the central grid layout of the ancient Roman city of Singidum, however undergoes alterations during Ottoman occupation, into gardens, drinking-fountains and mosques along the street. Yet it gains its physiognomy and content only after the beginning of the 19th century. Each building shaped in the same manner, a transitional style from romanticism to renaissance which exhibits its rich spacial dramatics and tympanums.

Sacral monuments furnish the city serving as a symbol of endurance and as a national identity. The orthodox church emphasises how the Serbian-Byzantine tradition has been preserved through centuries without significant external influence. The architectural qualities of the church vary as Byzantine culture induced rectangular foundations with major domes, whilst Austro-Hungarian inspired churches held characteristics of baroque churches; all of which are covered with frescos illustrating stories and events. The church stands as a representative of defiance towards oppression due to its strong hold throughout different occupations.

It is not religion itself but the potent strength established proving Serbian identity to endure centuries of cultural isolation under Ottoman rule, alongside episodes of Austro-Hungarian rule followed by the religious suppression of the Socialist regime.

Vernacular architecture floods the outskirts as empty surfaces alternate amongst the full ones; whitewashed bricks combined with dark-coloured woodwork. Wooden skeletons hold a stability for the construction of natural materials. Vernacular architecture focuses on local materials and local craft, but it does not eliminate aesthetics. Detailed woodwork subtly placed to raise the beauty of the dwelling accentuate the light-coloured facade and together harmoniously converge into the surroundings

Brutal, autocratically monumental, emotionless blocks compose what is known as Novi Beograd, or 'New Belgrade.' It was built as a representation of a clean slate, one of power and ambition, welcoming a new radically modern socialist regime. Many view this architecture as one that lacks sympathy towards the ornate Renaissance townhouses and Neoclassical floral flourishes and soft, sloping arches whose narrow, cobbled streets compose a certain warmth; however the two do communicate.

Uniformity and monotonous synchronicity define the relentlessly repeating rows of efficient structures.

It is not that they lack sympathy, but they emit understanding.

Novi Beograd is composed of silent, identical buildings which accept their loss of power however they still do serve their purpose; their function; housing each occupant of Belgrade and therefore they take a noble stand alongside their ancestry.

A prime example of evolution, Belgrade presents its ancestry whilst welcoming its descendants. A constant demand for innovation and construction is clear, allowing the city to expand architecturally. It does not restrain its borders to that of its past, but consents them to the opportunities of modern design.

Representing a synthesis of several metropolises, it demises its own fragility as it proves that the ephemeral qualities of architectural aspects extend to that of the value they hold to society.

The 20th Century Evolution: Americanism

The era that spanned the first thirty years of the twentieth century gave America an identity in the world of architecture, orchestrating a style in the image of freedom.

By Tiffany Cheung

As America ascended as a new strong power, its architecture embodied and reflected both the lavish, bold and business centred era felt in New York City and Chicago, as well as the vast open spaced land that was taken for granted and used unsparingly. The slower paced way of life of countryfolks, people who had farmed the land and grew up in close knit communities, shifted in a birth of a new generation. The new youth believed in an everyday office life in the big cities and they came to work in these iconic buildings.

The new century undoubtedly experienced the most drastic change that can be observed in human history, in all fields of knowledge and all at the same time. The discoveries in science, the troubles of world politics, new ideology, mixed cultures, economics, and the foundations of society all fought for space atop the crumbling pillars of past ideals. As history was brought out to be questioned, challenged and improved upon, in light of architecture it too had to evolve in order to accommodate the social revolution that took place, and so this lead to the celebrated contemporary open planned homes and the first great age of modern skyscraper building.

> "and the foundations of society all fought for space atop the crumbling pillars of past ideals."

The start of the 20th century began with a transcontinental rail link in place. Linking the knowledge and resources between the East and the West, industry and science together provided the new media in which the new style will be built out of, comparable to the way the discovery of cement by the Romans lead to intricate networks of aqueducts to be built over rivers. The new technology promoted steel framing which consists of vertical steel columns connected with bolts (or in the past rivets) to horizontal I-beams and the use of light weight terra cotta to cover the walls as it was fireproof. This technique relieved the walls of the weight of the building and permitted for the first time large plate glass windows to be fitted. Allowing more natural light and ventilation resulted in a new modern simplicity.

Frank Lloyd Wright manifested the spacious characteristics of America into designing open planned living areas, emphasising the natural direction of the landscape with horizontal lines and lived by the philosophy of organic architecture; to work with nature, not against it. These ideals formed the basis of the Prairie School. In terms of homes, it was unlike the small roomed, spire pierced Gothic, Victorian houses and in terms of large buildings it steered away from the Greek Classic Revival Style which monuments like the Lincoln Memorial had been sculpted out of. To build his structures Wright chose materials that were indigenous to the area, conforming to nature in order to cultivate a sense of comfort and familiarity. For his first Taliesin house (followed by many due to unfortunate fires) Wright used yellow limestones that came from a quarry on a nearby hill. With the help of local farmers, the stones were moved onto the Taliesin Hill and fitted onto the walls. And when he built the Imperial Hotel in Japan he fronted the building with carved Japanese Ōya stones: igneous rock made from lava and ash.

As the effects and hardships of the European war (as WWI was called then by America) were left behind in the corners of shadows and dust, the rich embraced the roaring twenties, the decade that was a time of wealth and excess, built upon the post-war optimism.

The resurgence of imperialism around the world significantly impacted the American culture. The rise of neo-colonialism from old powers such as the British Empire, Germany, the Russian Empire, France, Japan and China pushed America to reaffirm their belief in freedom and democracy in the new country. But at a time when America established themselves politically, they were still in search of an identity; as there really was no American style. The

The Empire State Building

Lewis Hine, Workers atop the Empire State Building.

free world was open for creativity. Manifested and expressed into everyday life and into the art and culture, the restricted baroque traditions and classical ballet were rebelled against with modern dance and the creation of tango. Jazz and blues filled the streets of America, expressive and free flowing, framing the buildings that encapsulated the same culture as the voice of the people.

> "Jazz and blues filled the streets of America, framing the buildings that encapsulated the same culture as the voice of the people."

Towards 1930 a race had begun in New York to be the first to build the world's tallest building. The curves and colours of the art deco would spread from France, draping the grand entrances of American buildings with rich and glorious geometric ornaments. With fierce competition, just one week after 40 Wall Street thought they secured the title, the Chrysler, built to symbolise the status of owner Walter Chrysler, exceeded the then tallest structure in the world, the Eiffel Tower. (Afterwards, in 1957 additional antennas added height and reversed the rankings of the two buildings.)

The decorations for the interiors and exteriors were chosen carefully as they were embracing a style that represented the modern times. The gargoyles which had been designed like Chrysler car ornaments perching on the 319m building, will watch from their pedestals as the next skyscraper in New York stands as the tallest for the next 36 years. The Empire State would become more iconic than the previous two but completing at the end of the twenties made it an outsider. Talks of using the roof as airship docks depicted the Empire State like a futuristic space fantasy, distant and unreachable. As the ribbons of the opening ceremony were cut, the Wall Street crashed and America plummeted into the Great Depression. Residing at a poor location away from main transport, the offices were left empty and the top failed to work as an airship dock.

But the dreams that were so strongly believed in have survived, in the photos that Lewis Hine took of the construction workers having lunch on a steel beam, in dusty history books and rolled up posters, but most importantly in the buildings itself. This era that has spanned the first 30 years of the 20th century can arguably be America at its finest. The unique image that has been successfully orchestrated is a style that if it had to be summed up into one word and if it were possible to describe everything that has been said about this movement and more, the befitting choice would be Americanism.

‘Twas the night before Porto

This Novemeber third year architecture students jetted off to Porto to design an archive for Alvaro Siza’s work. Harriette Warner & Rebecca Whitman sum up the experience.

By Joanna Burleigh

‘Twas the night before Porto when all throughout Bath
Third years erased cameras of their last photograph,
The students were nestled all snug in their beds
While visions of Siza danced in their heads.

And Daniel in his kerchief and Matt W in his red scarf
Had just settled down to watch the last crit in Bath,
When off took the plane with an almighty roar,
Sending students to Porto – eighty-one plus four.

Upon landing cameras came out in a dash
Snappy-happy students using their flash,
Taking in the culture with many a photo and sketch
Viewing the city with every tile and etch.

Sketchbooks were filled and pens quickly ran out
As snapchats were sent home with many a pout,
Umbrellas were abundant in rainy Porto
And wellies were purchased, as you probably know.

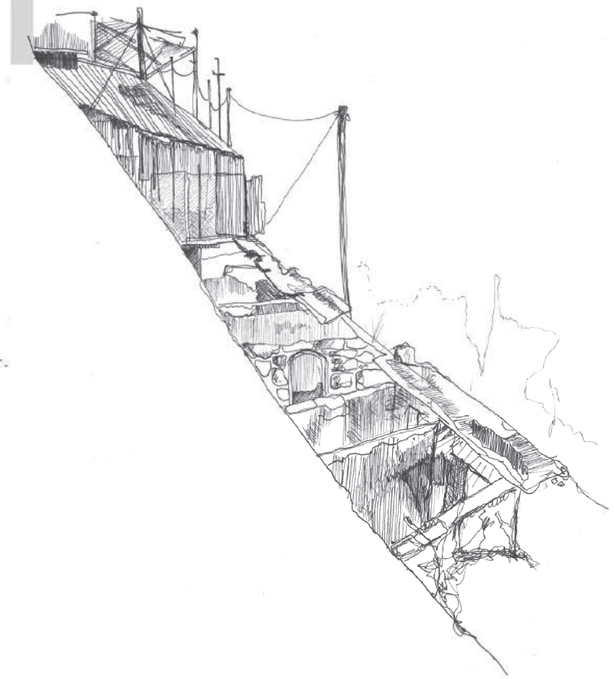
The culture was absorbed as they transformed into Flaneurs
Soaking up intricate details – the mind whirs,
Views from Clerigos, the highest point from Douro,
Gave stunning views of the roofscape below.

Cathedrals, markets, bridges and St Benedict’s church
Leaning over St Louis bridge made your stomach lurch,
Museum designs began to brew in their little heads
And concepts grew and spiralled while in their beds.

As the trip drew to a close and enough sangria had been tasted,
The students decided the time had come to get wasted,
So they filled their glasses with Port - both red and white
And threw some sick shapes well into the night.

They were immersed in the character of such a crazy city
To return to studio was a real pity,
Sponsored by Ibstock – for who they are very grateful
They enjoyed the trip with every Portuguese tapas plateful.

Daniel sprang to the dance floor, to the tutors gave a whistle
And back to England they flew like the down of a thistle,
And D-Wong exclaimed as he flew out of sight
Happy designing to all and to all a good night!



Architecture in Film: The Bigger Picture

Despite its inherent purpose to serve as a background to scenes, the role of architecture in film has helped nurture a host of visual and narrative styles spanning decades of cinema.

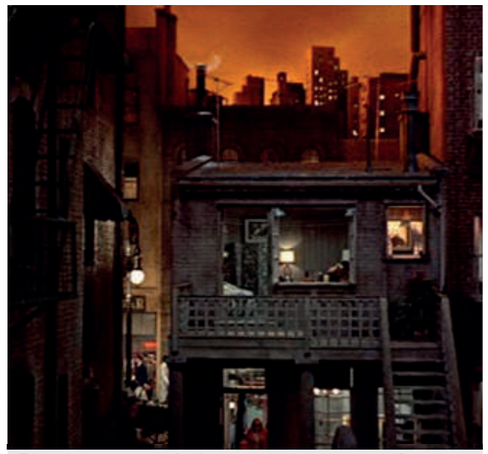
By Kishan Mulji

The abundance of special effects in many of today’s major productions is indicative of the industry’s advancement in technology, and has generated much interest from audiences alike. However, the resulting plotlines of such technologically focused films are often wafer-thin. Deconstructing a film reveals a repository of thought and memory, much like a building, and it is this relationship that has allowed the two fields to grasp evolving concepts over a long period of time.

Japanese filmmaker Akira Kurosawa treated the absence of dialogue in early silent films as a technique that drew upon the simplicity of modern art. He insisted that the interplay of sound over character gestures helped to multiply a film’s visuals, as opposed to acting as an accompaniment. ‘Rashomon’, his most renowned work, sees four individuals describe very different accounts of a woman’s attack. As each character tries to alleviate themselves of blame, the inconsistencies deepen and the story expands into a debate regarding the dichotomy of good and evil. The narrative’s progression captures the basis of good building design whereby different characteristics are revealed, when considered from different viewpoints.

In contrast to Kurosawa’s attraction to changing perspective, Alfred Hitchcock’s suspenseful ‘Rear Window’ limits our vision to the perspective of the protagonist confined to his room. His restriction in movement and activity contrasts with the liberties of his neighbours. This sense of claustrophobia associated with a limitation in space is also transferrable to large spaces. Stanley Kubrick’s science fiction epic ‘2001: A Space Odyssey’ in which space exploration is overshadowed by the vastness surrounding a small team of voyagers imagines a huge environment to instil a sense of isolation. Due to the scale of the work, set design plays an important role in creating a more convincing setting. This philosophy applies to the idyllic American suburban life depicted in ‘The Truman Show’. The master planning of a suburban landscape portrays a seemingly perfect existence for a community undisturbed by disorder and randomness, ultimately destroying the interactive nature of public spaces.

The visual and spoken elements of a film must work in harmony with one another so as not to overshadow the other. As a story focused solely on love, loss and despair, ‘The Fountain’ travels between the past, present and future over the course of three different millennia, and explores the depths of morality and



The viewer sees the story unfold from the protaganist’s perspective in ‘Rear Window’

humanity utilising the interwoven plotlines regarding reality and time. The usage of trick shots helps relate to the ethereal nature of the cosmos, a recurring theme throughout the film.

The understated value of lighting is used to its maximum advantage in Adam Sandler’s dramatic portrayal of the tormented Barry Egan in ‘Punch Drunk Love’, depicting a love story in the midst of crisis. The film’s intricate blend of light and shadow to convey mood in scenes adds a saddening tone to the film. One particular scene sees Barry walk down a lighted corridor as opposed to the unlighted alternative. The change in atmosphere is a significant way of creating drama in both film and architecture, and if done so effectively, drastically affects the final outcome of the work.

Shadows reflect Barry’s impaired judgment

Evolving Sacred Architecture

Religious buildings are amonst the most impressive in the world, and their evolution is married with the history of architecture in general. But evolving sacred architecture, often perceived as very traditional, requires movements of a revolutionary scale, a Reformation for example.

By Bethan Scorey

St Fagans National History Museum in Cardiff is home to over 40 original historic buildings that have been dismantled from their original locations across Wales and painstakingly rebuilt on the 100 acre site, one of Europe's largest open air museums. Although the museum showcases the evolution of architecture from Celtic times to the present day with residential, commercial and industrial buildings, it is the evolution of one particular church that has always captured my interest.

St.Teilo's church, built in the 12th century in Llandeilo Tal-y-bont near Swansea, fell to a state of disrepair by the 1980's and was consequently dismantled and rebuilt over 20 years at St Fagans. As historians surveyed the derelict church patches of colour were found showing through the plaster on the interior walls. It was only then, after 500 years of being covered by whitewash, that a mural of over fifteen square meters was uncovered.

Rebuilt at the museum with copies of the original wall paintings inside, the church looks as it would have in 1530. An Italian and a Spaniard were responsible for recreating the murals by using natural pigments such as limewash, charcoal, cinnabar and even silver and gold leaf to create the paint. The bold murals have become the primary feature of this beautiful church, enthralling both adults and children alike, who ask time and time again why art such as this was allowed to be covered and lost for half a century, therefore changing the entire atmosphere of the architecture. The answer is religion, and its supremacy over the arts, which in the Reformation of the 16th century evolved sacred architecture across Europe.

The restored exterior of St. Teilo's Church in its new location in St. Fagans National History Museum, Cardiff.

When only small minorities of church congregations were able to read in the 1500's, wall murals which depicted stories from the Bible in vivid colours, allowed people to better understand the stories they were told and immerse themselves in their faith. These paintings, along with other visual aids, became imperative to peoples understanding of Christianity.

The radical change of ideals in church design came when the Protestant Reformation swept Britain, under the reign of Henry the VIII, who by law made himself the Head of the Church in England. By doing so he detached England from the Roman Catholic Church and the pope. The movement created a religious upheaval unlike any seen before in Western Christianity.

Protestant worship prioritised the spoken word rather than a sacerdotal emphasis, and the minister became the central focus of worship, making the pulpit the focus point of every church design. The first reformed church in Willemstad, Denmark was built in 1607 and had an octagonal shape to emphasize this. Interiors were to provide as little distraction as possible, therefore wall paintings, stained glass and decorations were replaced with whitewash and biblical texts, which explains the fate of St. Teilo's murals. 'Superstitious Images' of saints, statues, crucifixes, candlesticks and even bells were ripped out of parish churches. Columns were permitted for structural purpose although they had to be void of any of the classical orders. These actions were taken to focus the congregation's attention on man's direct access to God and encourage full and active participation without the distraction of imagery.

This became particularly important following the 1559 Act of Uniformity, which under the rule of Elizabeth I, made attendance at Anglican services compulsory. Failure to attend Sunday services, some of which lasted up to six hours, was punishable by fine and physical torture, meaning that congregations grew considerably. In St. Teilo's case, 250-300 worshippers attended services, which led to an extension of the South transept to create an additional aisle, whilst pews were removed to accommodate everyone and often wooden galleries were added with exterior staircases.

In 16th century France the Reformed Protestants built meeting places called 'temples', named to imply religious usage and distinguish them from Catholic places of worship. Their plans were basilica type, for example Charenton, with internal emphasis on acoustics, pews circling the pulpit and tribunes allowing additional seating.

The interior of St. Teilo's Church featuring copies of the original wall paintings discovered during the churches restoration.

However this was not the only architectural affect the movement had on sacred architecture. Whilst it is responsible for minimalist church designs, it also generated the Baroque style. Naturally, the Catholic Church Responded to the Protestant movement by beginning a reformation of its own in order to secure its place in the modern world. The Counter Reformation celebrated the absolutist state of the Catholic Church, by using Renaissance motifs in an exaggerated fashion. By exploring the drama of light, form and shadow their architecture showcased their great wealth. Whilst the spoken word dominated Protestant worship, Catholics argued that the embellishment of their architecture was more emotional and expressive, which was more accessible to congregants. The nature of their statues and paintings was realistic and intelligible, making them relevant to even the 'ordinary worshipper'.

Il Gesu (The Church of Jesus) in Rome, designed by Giacomo da Vignola in 1573, became the model for Counter Reformation churches throughout Europe. Its 60 foot wide Latin cross nave allowed for elaborate religious processions, and featured media's such as bronze, precious stoned and painted stucco.

The Reformation catalysed two opposite architectural movements which evolved religious spaces in ways that are still evident today, where the architecture of a church or chapel can dictate the nature of a Protestant or Catholic service.

The embellished interior of Il Gesu (The Church of Jesus) in Rome, which became the model for Counter Reformation architecture across Europe.

The ‘contemporisation’ of the British mosque

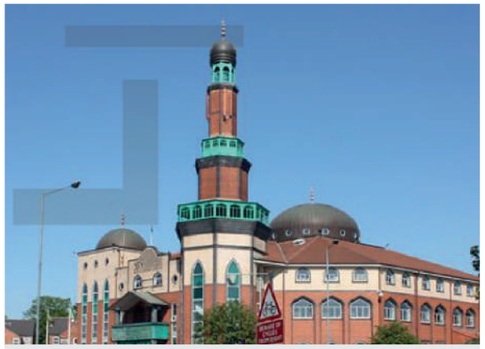
A look into one MArch research paper, exploring how clients and designers are affecting the shift in architecture for Muslim communities in response to the current socio-political context.

By Emaad Damda

The mosque as a building type is one that is rarely covered in architectural discourse in Britain. It has no prescribed form under Islamic teaching or law, so one can effectively pray anywhere. Nevertheless, since the establishment of the first Islamic building in Britain 125 years ago, the architecture of the mosque has evolved quicker perhaps than any other single building type. Post-colonial migration in the mid-20th century gave rise to a large number of Muslim communities in major cities across the country, and what followed was an exponential rise in the number of mosques. These were often within terraced houses or converted chapels and warehouses, or indeed purpose-built structures.

Shah Jahan Mosque, Woking, Surrey (1889) - Britain’s first purpose-built mosque, an example of Victorian Orientalism studying the mysterious ‘East’

As with many other immigrant groups, religious buildings became not just a sanctuary within a foreign land, but also a way of asserting a certain cultural identity on their new surroundings. These structures have almost invariably been the topic of debate within local communities, attracting vitriolic criticism for being ‘alien’ to the established status quo and even segregating communities along ethnic or religious lines. As Muslim communities became settled over time, second-generation immigrants attempting to explore their dual cultural identities produced mosques that were often an uncomfortable amalgam of ‘British’ architectural styles with semiotically ‘Islamic’ elements.



Ghamkol Sharif, Birmingham (1993) - One illustration of a ‘landmark mosque’, an idea that fed into 80s and 90s planning; note the stylistic ‘Islamic’ elements

In the last ten years, with a gradually increasing number of architects from diaspora communities, the mosque has slowly begun to develop a contemporary language, albeit within the eclectic nature of architectural practice today. With the present coverage of Muslims and Islam in mainstream media, there is perhaps a desire on the clients’ (and the designers’) part for their buildings to contribute positively to the wider community, and aesthetically to be seen to ‘fit in’. They are certainly still a case for contestation in the planning process and are not universally approved, both with non-Muslim residents and British Muslims.

Burnett Place, Bradford (1988) - Example of a house-mosque that has been incrementally added to as funds are gradually raised

In the research paper, I look at three projects commissioned by Muslim groups for their local communities, where the design process has tackled the relationships between tradition and modernity, identity and expression, programme and architecture. The common thread between them is the response that they all elicit: “It doesn’t look like a mosque”.

Shahporan Masjid is located in Bethnal Green within the London Borough of Tower Hamlets, the heart of Bengali culture in Britain. Nearby are the East London Mosque and Brick Lane Mosque, both of which have attracted controversy in the debate over ‘Islamisation’ of space. A local Muslim architect was employed to reconstruct Shahporan’s run-down premises off Hackney Road, located adjacent to a Grade II-listed terraced house within a conservation area. The proposal uses these constraints to slot into the context using a contemporary palette of materials, relating more to a human scale unlike most religious buildings. There is still a desire for uniqueness and this is expressed in the elevation. Using a tile pattern found in a Turkish palace and with a process of experimentation, the façade gives the mosque and congregation its identity but in a rather more restrained way than its predecessors.

The Cambridge Mosque on Mill Road will replace an old converted chapel which has become inadequate. The city is host to a diverse student population, reflected in its growing congregation that is now younger, more educated and increasingly restless. It is a professionally delivered project - a big name client (Yusuf Islam aka Cat Stevens heads the group) with renowned experts in Islamic art, architecture and liturgy thrust it in a global context. Appointing the architects of the London Eye is perhaps a conscious move to place the building as a valuable landmark of Britain’s urban fabric. There are ideas of the ‘veil’ and ‘calm oasis’ referencing the Prophet’s mosque and its ‘structural trees’ are based on Gothic fan vaults, an English innovation. These metaphors attempt to synthesise a dual Islamic and British heritage. Branded an ‘eco-mosque’, the scheme integrates numerous passive and low-energy measures. Although the Muslim community has been actively engaged in the process, a mosque of this size naturally attracts controversy, and third party comments range from firm objections to extreme distaste.

North Harrow Community Centre is located in a more affluent, suburban London borough. The Shi’a community here began with a group of East African Asian students in the 1960s, keen to redevelop the existing site. It is a project angling to the future. The design team includes an architect with experience with Zaha Hadid, and a dedicated planning consultant. It is seen as a multifunctional building for the whole community, including a library, gym, sports hall, play lounge, restaurant and exhibition space; the prayer hall is but a small part of the whole. The abstract materiality derives from the architect’s previous work in the Middle East. Detailed environmental and landscape features form a key part of the scheme. The focus on image and public relations is particularly interesting. The marketing illustrates that the image of the congregation as mosque elders has been replaced by a young, educated, professional body involving students, parents, and importantly many women. Feedback from the public consultation and exhibition attracted plenty of negativity, but not as extreme and the client had responses ready.

These projects come about through a younger generation, keen to express a dual identity and be more engaged with the planning process. All three case studies try to address the question facing Muslim communities looking to develop: what should a British mosque be today?

The situation today, anti-mosque protest at an EDL rally, Leeds - the dominant imagery is that of the dome, minaret and crescent moon.

Shahporan Masjid, Bethnal Green, London (completed 2013) - Slotting into the city context [image: Makespace Architects]

Cambridge Mosque (under construction) - Marrying traditional form with contemporary meaning [image: Marks Barfield Architects]

North Harrow Community Centre, London (under construction) - An all-encompassing outlook [image: Mangera Yvars Architects]

(R)evolution in Battersea?

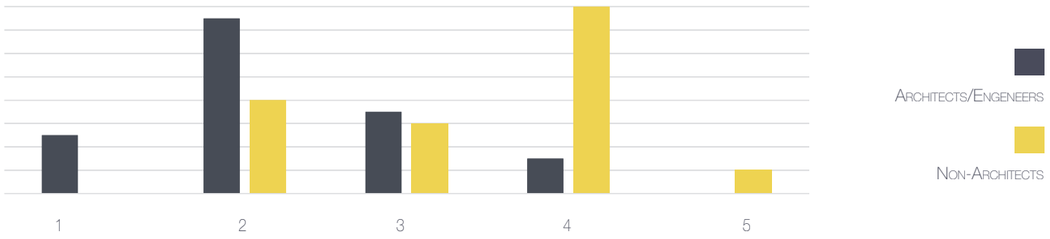
Gehry and Foster proposed their scheme to Battersea Power Station. We carried out a survey to compare the opinions of architecture/civil engineering students to others.

Arinah Rizal + David Janosi

The two prolific architects, Frank Gehry and Norman Foster have collaborated to design "The Electric Boulevard": a gateway to the 42-acre Battersea Power Station mixed use development of residential, offices, and shopping. We showed rendered images of the master plan to people at the University of Bath, and asked them for their first impression of the scheme. The results are not surprising, but raises some interesting questions.

After doing the survey, it was clear that the general public approves of the idea much more than architects, who are more aware about contextualisation. It is easy to say, that we (architects) are right, are more educated in the field, but is this proposal actually as poor as the survey shows? One can argue, that if people to whom it is designed for like it, why should we worry about the contextual impact? It is possible that we can question the architect's responsibility: to create something that follows the contextual impact of architecture such as respecting the historical and built surroundings, or to create something that the general public will find exciting? Our personal opinion is that a great design should fulfil both aspects. Consequently, we are critical of Gehry and Foster's proposal for lacking context with respect to the iconic industrial power station. On the other hand, if we follow the logic Louis Sullivan's famous theory: "form follows function", the scheme works very well. The function is to regenerate the area, and create a new hub to start an urban transformation Battersea. Taking the bigger picture, the overall building design satisfies this aim, according to the opinions of non-architectural thinkers.

While we think about the relationship and differences between Architectural ideas and the public opinion, it has been announced that BIG is going to design the next phase of the project. It seems that the developer's idea is to provide a playground for starchitects and turn Battersea into an architectural Disneyland.



ARCHITECTURE + CIVIL ENGINEERING STUDENTS

I don't like it at all, doesn't look like London…looks like Singapore

Not contextual doesn't fit in, looks like a generic project in a sunny country.

Nice plan, but structure? Not.

Battersea is very English, this in not.

Views onto the river are lovely.

I just don't get it.

No response to existing building, looks like it choked.

It works with the large space around it.

Surface area is huge, so it will have massive heat loss.

Not material efficient.

Interiors are nice.

This [Foster's] could work, but not this [Gehry]!

So Dubai, not London

Very fluid, organic, looks like an overhaul of the site.

Completely regenerating the area, creating a new hub, but with no respect of what is there.

In drawings they just plopped the station in.

> "Horrible! Looks like Charlie and the Chocolate Factory!"

Would be sufficient at creating something energetic, by branding the area and giving it a new identity.

What's the problem with straight lines?!

No comment…

Aesthetically? - Horrible, but might be good functionally…?

They just want to shit out their style…!

Detracts from the power station, donno, how it gonna work, but could be good for the area.

Not beautiful, but the CGI makes it work well.

Gehry looks like Gaudi, but it's not Spain! It's England!

I think it will be good in regenerating. It will be popular, not many people go there now.

Lacks context, design doesn't responded to its context, doesn't reflect to the past.

It dwarfs the iconic building [the power station]

The graduate engineer was going mental working on it, it's hard to make it work.

It's an upcoming area, peripheral structures would draw people to it. Public space is big, which is nice. Don't like Gehry's and not sure about Foster's.

OTHERS

This [Gehry] is interesting, nice interaction.

People would like it there.

Makes the area look better.

It will date very quickly, a bit weird shape.

Wouldn't make me wanna go there. Nice interior.

Cool!

> "Gehry looks awsome! I'd love it there."

Looks ridiculous, doesn't fit in…

Seafront shape, like Spain.

This [Gehry] not gonna happen.

Put the pig back in the middle!!!

I'd get lost in there.

I like it, looks nice. This [Gehry] is too much. Reminds me of Westfield.

It's interesting, stands out, and futuristic.

I would go there!

Crossword

There are one hundred and ninety six countries in the world.
How many capital cities can you name?

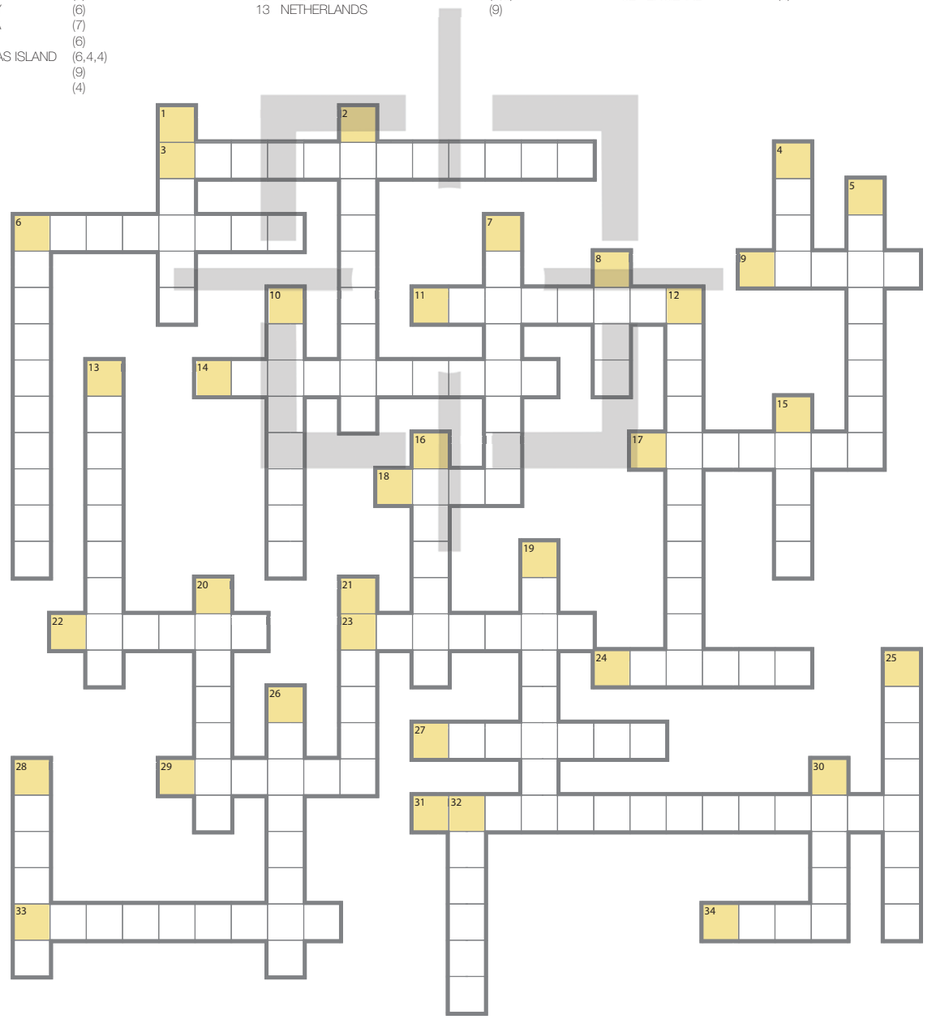
By Ben Norrish

ACROSS

3	MADAGASCAR	(12)
6	SERBIA	(8)
9	SOUTH KOREA	(5)
11	NAMIBIA	(8)
14	DENMARK	(10)
17	KENYA	(7)
18	PERU	(4)
22	CROATIA	(6)
23	LIBYA	(7)
24	GERMANY	(6)
27	LITHUANIA	(7)
29	TURKEY	(6)
31	CHRISTMAS ISLAND	(6,4,4)
33	ICELAND	(9)
34	NORWAY	(4)

DOWN

1	SPAIN	(6)
2	SAN MARINO	(3,6)
4	ITALY	(4)
5	UNITED ARAB EMIRATES	(3,5)
6	SLOVAKIA	(10)
7	AUSTRALIA	(8)
8	QATAR	(4)
10	SOUTH AFRICA	(4,4)
12	MALAYSIA	(5,6)
13	NETHERLANDS	(9)
15	BULGARIA	(5)
19	FINLAND	(8)
20	CHINA	(7)
21	CANADA	(6)
25	MALTA	(8)
26	BRAZIL	(8)
28	ZIMBABWE	(6)
30	JAPAN	(5)
32	ENGLAND	(6)



Whose Christmas Tree Is It?

By Bethan Scorey

1 _____

2 _____

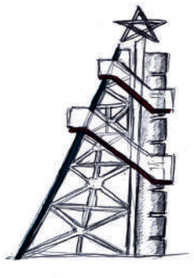
3 _____

4 _____

5 _____

6 _____

7 _____



8 _____

Answers 1. Norman Foster **2** . Zaha Hadid **3** . Antonio Gaudi **4** . Frank Lloyd Wright **5** . Louis Kahn **6** . Frank Geehy **7** . Herzog & DeMeuron **8** . Richard Rogers

Mediterranean Cous Cous Salad

This delicious and healthy recipe is super quick to make at home or in your studio. Simply use a kettle!

By Bobbie Emilova

INGREDIENTS

1/2 cup of cous cous
1 ripe avocado
1 green pepper
A bunch of cherry tomatoes
1/4 cucumber
a bunch of fresh parsley
2 spring onions
salt and pepper to taste
a handful of rocket

METHOD OF PREPARATION

Place the cous cous in a large bowl and cover with 1/3 cup of boiling water. The water should come just above the cous cous. Add in salt and pepper and leave for 5 minutes, it should cook on its own! Finely chop all other ingredients and mix well. Add the rocket on top and voila, its's ready!

Christmas Ginger Cookies

METHOD OF PREPARATION

Preheat your oven to 180° C. Mix the dry ingredients and the sunflower oil with a spoon. Beat the egg with the milk and lemon juice until homogenous, knead it on a floured surface and spread thinly with a rolling pin. Cut out your cookies in fun shapes, stick in the oven and give or take 15 minutes you will have a batch of Christmas cookies!

You can throw in some icing when the cookies have cooled down, you will need an icing pen or disposable icing bag to draw. The simplest way to make icing is to mix in some icing sugar and lemon juice to create a paste.

Happy Holidays!

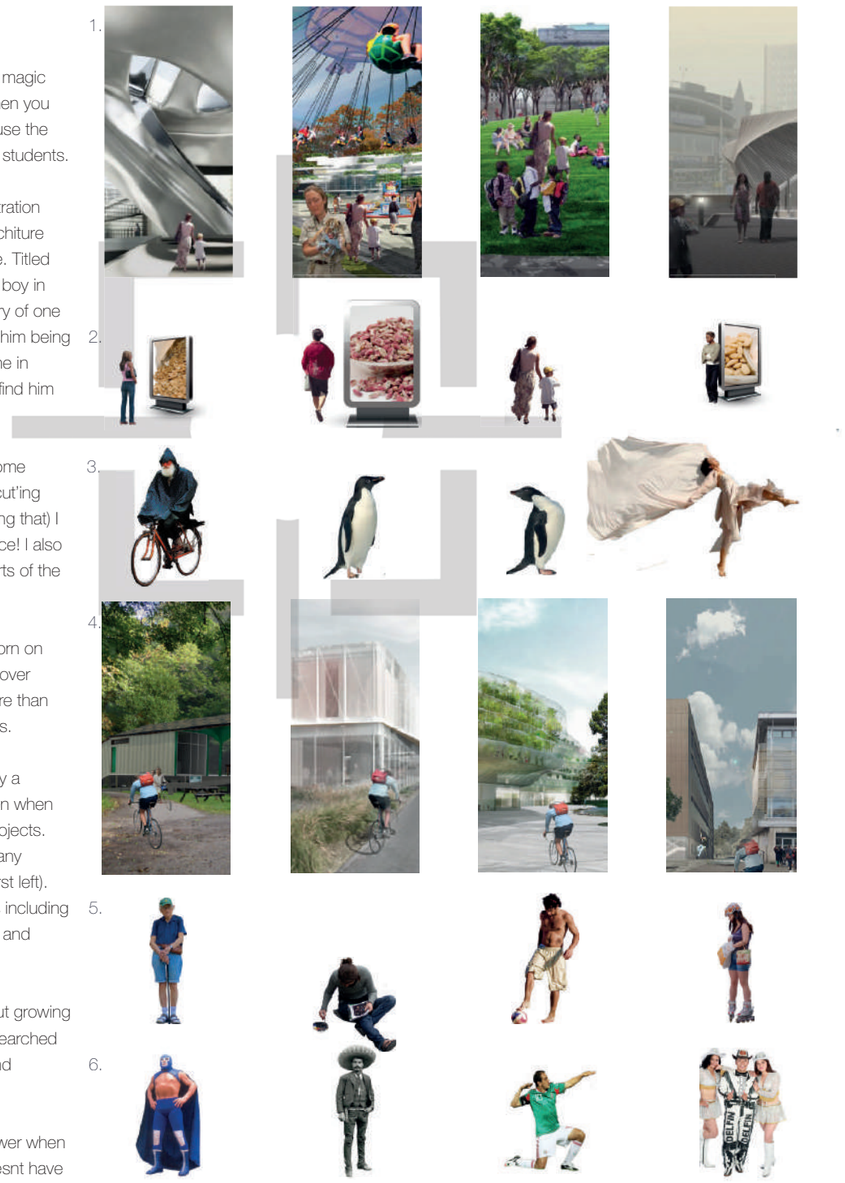
INGREDIENTS

150/ 1 cup wholemeal flour
1/2 tsp bicarbonate of soda
25g porridge oats
2ts ground ginger
1tsp ground corriander
2 tsp ground cinnamon
1 tbsp honey/maple syrup
100ml or 1/4 cup of sunflower oil
1egg
4tsp milk/soya or rice milk
1 tsp lemon juice

Cutout People

Finding them is a long, monotonous and unfulfilling part of creating any architectural render. So I decided to put together a list of great sites that will make that job alot easier.

By Benedict Hignell



However, using these will take the magic away from proffesional renders when you have the sad realisation that they use the same cutout people as us measly students.

1. Daryl Mulvihill shares my frustration and posted an article on Failed Architure about a cutout that caught her eye. Titled 'The mysterious adventures of the boy in the yellow cap'. It is a hilarious story of one boy's epic journey. This ends with him being cut away from his mother and alone in London. So, She put out a call to find him and reunite him and his mother.

2. I took on this task and after some investigative journalism ('layer-via-cut'ing them onto a new PSD and Googling that) I found the lost boy and his birthplace! I also came across him in rather odd parts of the web.

3. The yellow capped kid was born on archinoah.com. This site also has over 1000 other cutout people and more than 100 animals as the name suggests.

4. skalgubbar.se. was created by a student, Teodor Emdén, in Sweden when struggling to find cutouts for his projects. These cutouts are the staple of many student renders (including mine, first left). They are also used by starchitects including Thomas Heatherwick, Zaha Hadid and Bjarke Ingels.

5. architextur.es has a smaller but growing collection of cutouts that can be searched by their gender, facing direction and posture.

6. escalalatina.com has the answer when you find Teodor of Skalgubbar doesnt have any eccentric latino friends.

Horoscopes

ARIES
You will fall in love with a new font but be careful do not let your new affair let you fall into the trap of a bad crit.

TAURUS
Dead clowns will try to follow you home! Get out there! Also the number of times you walk through a door will help you seek out new plan ideas.

GEMINI
All of your plans and aims are achievable, although you might need many more cups of coffee than usual.

CANCER
There is no clear correlation between having the least sleep and how well you do in the crit! Get some sleep!

LEO
You will soon come to realise that actually a family pet has chewed through the cord of your mouse.

VIRGO
The odds on you surviving the day with your sanity intact are low. Any dreams you have been granted recently will turn out to be brilliant!

LIBRA
The colours you see around you are intended to give you an idea of three dimensional space. Close your eyes and you become a dangerous walking buffoon.

SCORPIO
Watch out! Be careful on your way to studio! You never know when a new scale ruler will try to kill you!

SAGITTARIUS
Boxes that you have lying around may become useful for any storage. And your old models could also be used for something new.

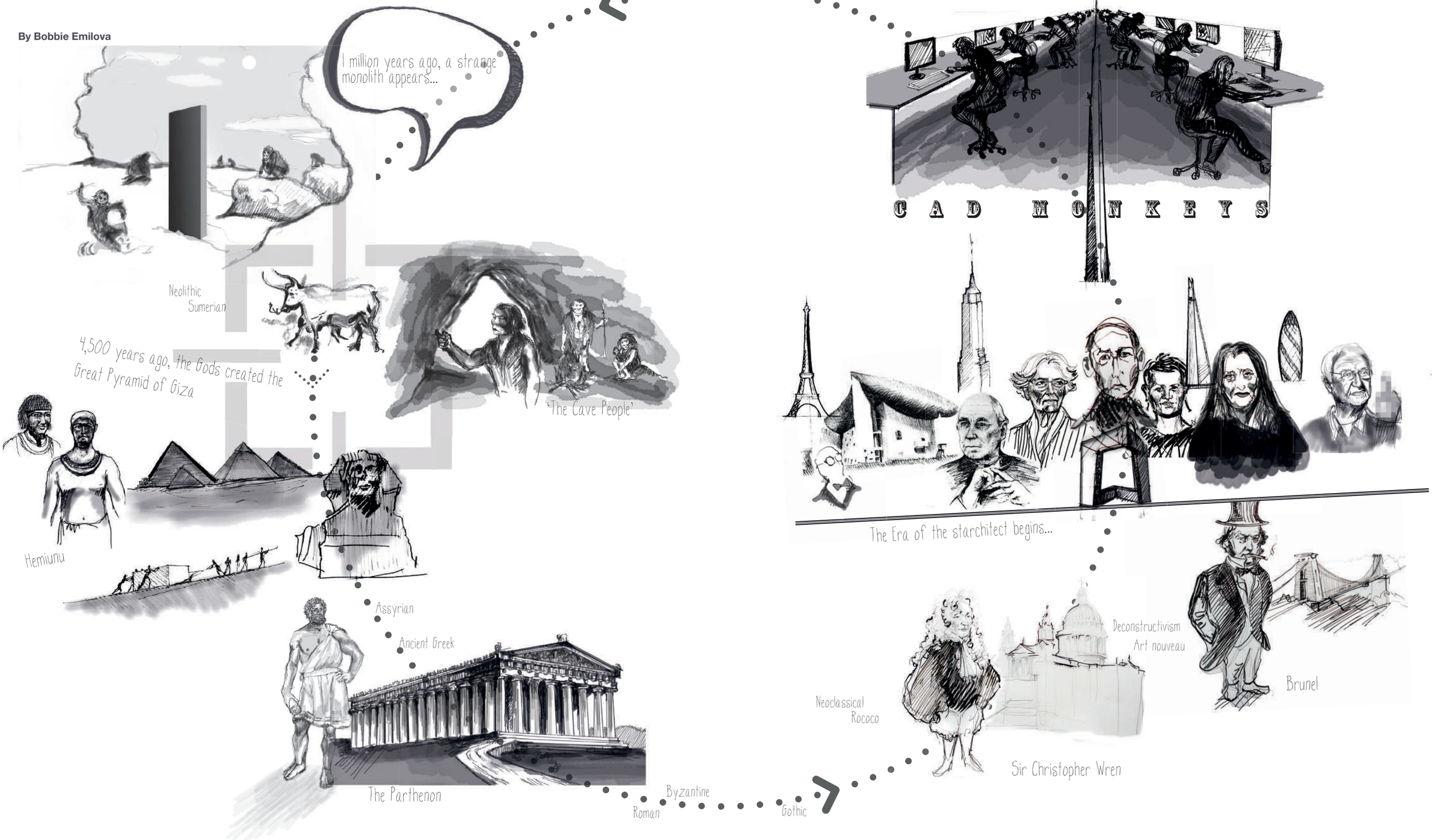
CAPRICORN
The week may start well, but fall into sharp decline later on Saturday. Sleep deprevation can affect you negatively today, so ensure you murder all the dogs in your area for a guaranteed good night's kip.

AQUARIUS
Today might be a day where new things start to happen. Assume everyone's an idiot today and you may find yourself being patronising and brilliantly witty.

PIECES
Today might find you requiring a move of the left-hand and right-hand side speakers or earphones you use to listen to music.

The Evolution of the Architect
A Crash Course

By Bobbie Emilova




FLORAL EMPORIUM