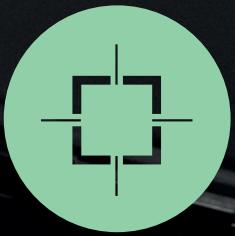
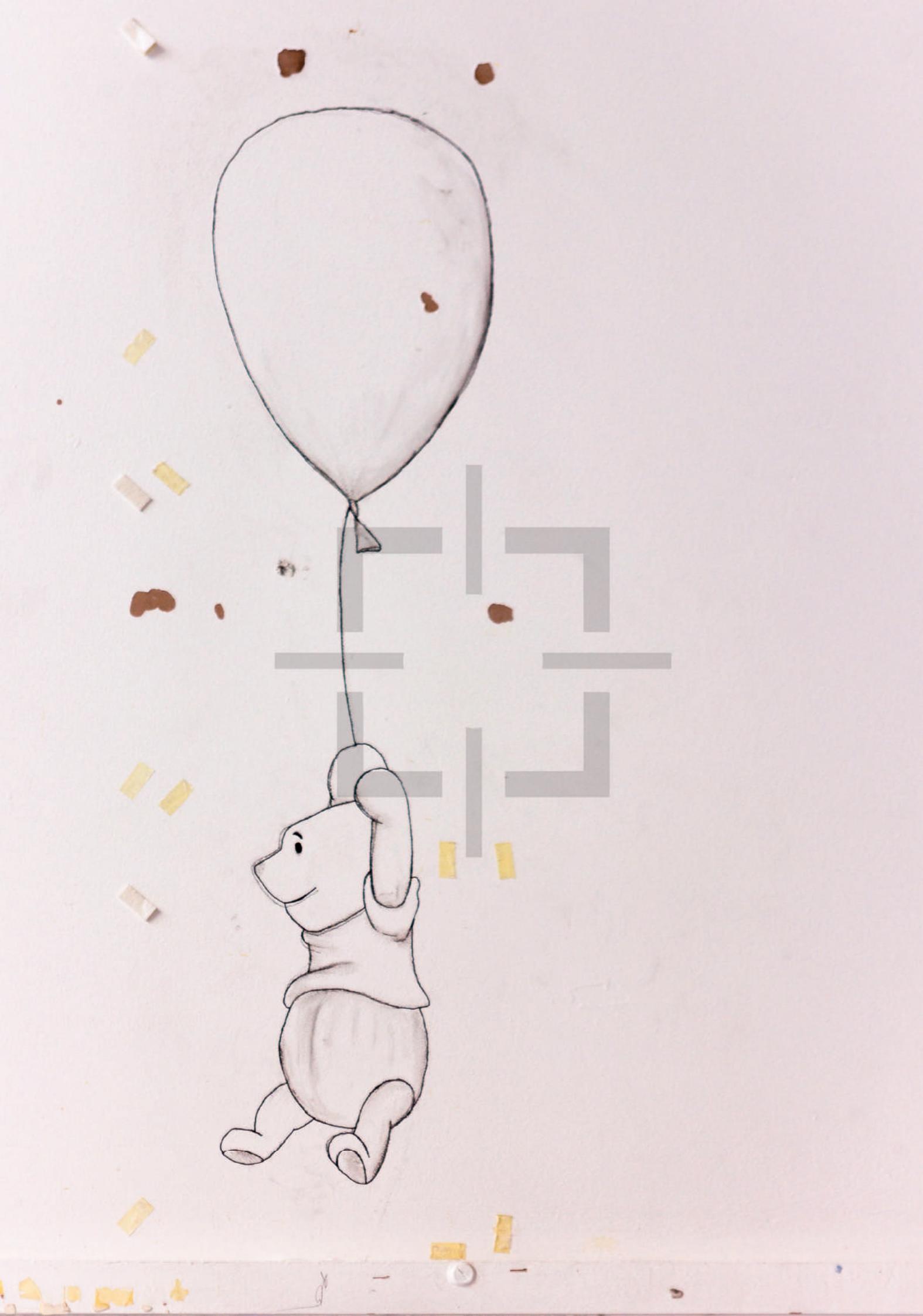


# paperspace



THE UNIVERSITY OF BATH DEPARTMENT OF ARCHITECTURE AND CIVIL ENGINEERING

ISSUE FOUR MAY 2015 SENSES NEWS HISTORY REVIEW COFFEE OPINION BREAK



paperspace



Department of Architecture and Civil Engineering, University of Bath  
Find us online at [issuu.com/bathpaperspace](http://issuu.com/bathpaperspace)

Colophon

Volume 2, Issue 2, May 2015

Students of the University of Bath receive paperspace twice a year

ISSN 2058-931X (online)

Editorial address

Paperspace

Room 6E 4.4

Claverton Down

Bath, BA2 7AY

Editor in Chief

Harry Streuli

Staff Writers

Toby Lewis

Printer

Colorworks the Printers

Supported by

**Feilden  
Clegg  
Bradley  
Studios**

**COLORWORKS  
THE PRINTERS**

**MINERVA  
*Art Supplies***

Contributors

Benedict Hignell  
Bobbie Emilia  
Dan Innes  
Diana Smiljkovic  
Harry Streuli  
Issy Spence  
Jessica Booth  
Joe Ridealgh  
Kishan Mulji  
Konstantinos Voulpiotis  
Lilian Lam  
Olly Ridgley  
Paulina Konkina  
Ross Ledsham  
Sara Medas  
Sonya Falkovskia  
Sung Lim  
Tiffany Cheung

Cover

Harry Streuli

# Contents

For this issue of paperspace, we have chosen to look at the theme 'senses'. In architecture school, students often find themselves thinking about how to create spaces that are atmospheric, captivating, and otherwise interesting. Generally, feelings such as these are caused by the way we experience spaces - the way we occupy them, and the way we sense them. Whether this is through sight, sound, touch, or smell - different spaces create different experiences.

Yet, the more I think about it, the more aware I have become that it is not just these five senses - there is something *more*. The image on the cover is located on The University of Bath Campus, in 6 East, room 2.8. Otherwise known as the 'Crit Room'.

Many of you will know it - but I imagine that for each of you there will be a different range of emotions remembered through the way you have interpreted the space. You will have seen columns and lintels that were designed to be 'didactic' - to teach occupants how the building works; you will have heard the rumble and whir of the workshop below; you may have smelt cheap coffee on the morning of a project review (or even worse, tasted it!). Yet, these sensory experiences will no doubt invoke a wide range of memories. Perhaps you remember the euphoric feeling only felt after finishing final year project presentations, or excitement at a society event.

What began as a brutal essay in conglomerate ordering in 1988 has grown into a rich and vibrant space that can be matched by no other. There is a patina of memories so clearly plastered over the walls of the crit room that it is almost impossible to ignore. What I find most exciting, is that this space has been experienced in so many different ways, that are so different from how the Smithson's will have imagined it. As designers, we can't be taught how to create atmospheric, captivating, and otherwise interesting spaces. We can only learn how to experience them, and by extension we can attempt to recreate those memories.

Some of these experiential conditions have been explored in the body of this issue. There are short forays into the interpretation of sight, sound, touch, or smell; punctuated with some slightly more abstract notions, which will hopefully make you think about how else we can experience place.

I hope you enjoy the read.,.

**Harry Streuli**  
Editor in Chief of Paperspace

## Senses

<b>26</b>	Architecture and the Senses
<b>28</b>	Book Review: The Thinking Hand
<b>30</b>	Are we too Emotionally Invested in our Work?
<b>31</b>	The Kitchen
<b>32</b>	Nasal Navigation and the Smells of 6East
<b>34</b>	Memory and the Forgotten Sense
<b>36</b>	Haunted Architecture
<b>38</b>	The Organic Relationship: Man, Music & Architecture
<b>40</b>	The Sound of Silence
<b>42</b>	Architecture for Senses: Losing Sight
<b>44</b>	Light, Shadows, and Materials
<b>46</b>	Film Review: Cathedrals Of Culture
<b>48</b>	The Architecture of Somewhere

## News & Opinion

<b>6</b>	Ace Review
<b>7</b>	What's On?
<b>8</b>	Building Review: The Edge
<b>10</b>	Building Peter Zumthor's Secular Retreat

## Student

<b>14</b>	Vertical Studio 2015: Imagine Bath
<b>16</b>	'We had no clue what we were doing'
<b>18</b>	The '6th Sense' of Architecture and Engineering
<b>20</b>	Fifth Year Fun!
<b>24</b>	First Years Let Loose in Europe

## Coffee Break

<b>50</b>	A Quick Guide to Architectural Observation
<b>51</b>	Studio Playlist
<b>52</b>	Recipes:  Asparagus and Broccoli Noodles Simple Chia Seed Pudding Where's Wickens?

# ACE Society Yearly Review

It has been a second year in a row when the ACE Society has fully woken up, and with it our department.

## By Konstantinos Voupiotis

I am the proudest outgoing chairman in the world: 2 years in ACE we have transformed our department and student body.

Last year we won the Best Departmental Society of the Year for going from almost disaffiliation to two very successful events and doubling of the committee size. This year the change is even bigger: Events were consistent. Attendance was fantastic. Engagement with the students (what we are really after) was spectacular. The topics discussed are very important and we invited great professionals to inspire us.

Harbinder Birdi, a partner at Hawkins\Brown, delivered an incredibly useful lecture on the engineer-architect collaboration based on his experience as principle Architect in three Crossrail stations. The event was attended by a record of more than 150 people!

**"Most importantly, however, we have the first year students involved"**

Kim Quazi, a director at Arup Associates, added his valuable opinion on the matter by sharing his experiences as an architect in infrastructure.



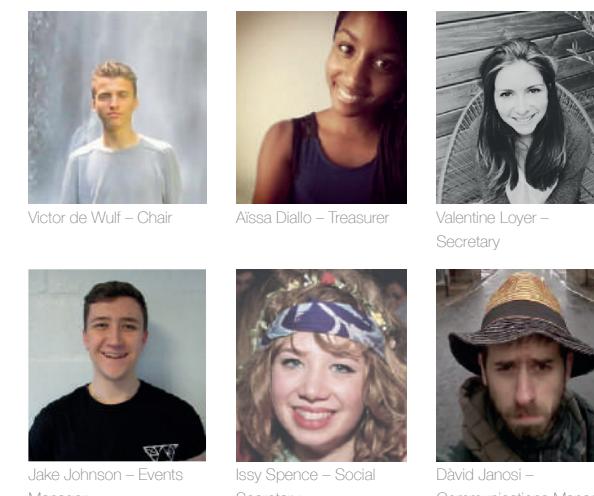
Packed audience at the Sustainability Debate

A very successful networking "Grab-a-Grad" event was run in collaboration with the ICE, IStructE, and BuroHappold, where younger students had the chance to informally meet graduate engineers from excellent firms.

The Society's first ever debate was run this March where students argued for and against "Is Sustainability Just A Brand?" in front of a fantastic audience, composed of ACE students, researchers and staff, as well as professionals from BuroHappold. It was recognised that sustainability is an overused term of a wider umbrella of issues, including environmental, financial, and social aspects. The engagement of the audience was phenomenal. It took 1.5 hours after the teams finished presenting to reach a vote, with the majority agreeing with the opposition: sustainability is certainly not just a brand, there is a lot more to it, but maybe a 'rebranding' would help a lot clarify the true objectives of sustainable construction.

Most importantly, however, we have the first year students involved. I cannot stress enough how important – and exciting – this is! When I was in first year, sadly nothing was going on. Now there are peer mentors, industrial contacts, networking events, PaperspACE, and a buzz about our department like never before.

The new committee are very well placed to continue this success and I am sure they will do their absolute best – there are some great ideas in the pipeline! If you happen to meet them, notice their enthusiasm and drive; they represent our department's nature and I wish them all the best to take the ACE Society to new heights.



# What's On? Bath, Bristol and Beyond

A short guide to exhibitions and events taking place in the next few months.

## By Benedict Hignell

### Bath:

Bath: Buildings in Landscape (Museum of Bath Architecture until 29 November) - Historic views of Bath and its setting.

Tale of Two Cities (44AD Artspace 9 June until 14 June) - A print exhibition exploring the relationship between Bath and Bristol and how their history and people have shaped them.

### Bristol:

Do Ho Suh: New York City Apartment (Bristol Museum & Art Gallery until 27 September) - A transparent fabric recreation of the artist's apartment.

Bouchard Exhibition (The Guildhall Gallery) - A father and daughter exhibition of two very different styles of art Philip creates fictional surreal landscapes for famous buildings, whereas Harriet paints photorealistic portraits.

### Beyond:

John Soane Museum - John Soane turned three Holborn Town houses into a museum of fascinating architectural curiosities for the education of his apprentices. That museum has been maintained in the condition it was in at the time of his death in 1837. It is run by a collection of eccentric folk that just themselves make the museum worth a visit.

Salt and Silver: Early Photography 1840 -1860 (Tate Britain until 7 June) - An exhibition presenting the early and short lived photography technique of Salt and Silver.

We Stumbled As We Clambered (Edel Assanti until 6 June) - An exploration of the politics of identity and space and the architecture of social experience

The Rise and Fall of The Council Estate (RIBA 7 - 8:40 23 June) - A discussion charting the history of council estate and their controversial architecture.

All this Belongs to You (V&A Museum until 19th July) - A series of interventions around the museum by architects and designers with an aim to question the role of public institutions in modern life.

Designs of The Year (28 Shad Thames, London until 23 August, £13 or £9.75 for students) - A collection of the best of graphic, industrial and architectural design of the last year

Architecture on Film (Barbican Centre, £11.50) - A series of independent films with architecture as a prominent but not always dominant theme.

New London Awards (The Building Centre, WC1E 7BT until 14th August) - Featuring the commended and winning projects for the 2014 New London Awards.

Public London: Ten Years of transformation (The Building Centre, WC1E 7BT until 11 July) - A exhibition celebrating how London's public realm and the public's attitudes towards it have improved over the last ten years,

A Clockwork Jerusalem (AA Gallery 9 May until 6 June) - This exhibition explores how modernism became effected by British sensibilities.

Serpentine Pavilion 2015 (An intriguing poisonous caterpillar in Kensington Gardens 25 June until 18 October)



2015 Serpentine Pavilion by SelgasCano



# Building Review: The Edge

From dangling balls to screaming walls: a weird and wonderful insight into life at the Edge.

By Olly Ridgley

The peculiarly named 'The Edge' is undeniably modern in both form and function. Costing close to £11 million, the shipping container like cladding encases performance spaces, some terrific gallery spaces, teaching spaces, theatre spaces, spaces to paint in, spaces to rehearse in – catering for all your artistic desires.

Everything so far seems normal. Most of what you would want, expect, or need in a brand spanking new arts complex. However, there is a curiously large array of oddities.

Orbs of light are dangled from the sky in no apparent pattern or formation. The entrance is partially surrounded by mirrors, for no discernible reason other than to spite the person whose job it is to keep said mirrors clean. The concrete stairways look as though they should lead to a 1980's Bond villain's nuclear submarine silo. There are strange multicoloured, hanging horizontal panels above the cafe. One exhibition space is currently occupied solely by an overly emotional wall: a psychedelic experience I would thoroughly recommend whilst mildly inebriated. The concrete columns are so lovely to the touch, I would urge anyone and everyone to have a feel. Funky lounge music that rivals even that of Nando's.

There is method in the madness of this design. The hanging orbs bring light into a deep plan space. The horizontal panels are acoustic dampeners. The mirrored panel above the front door

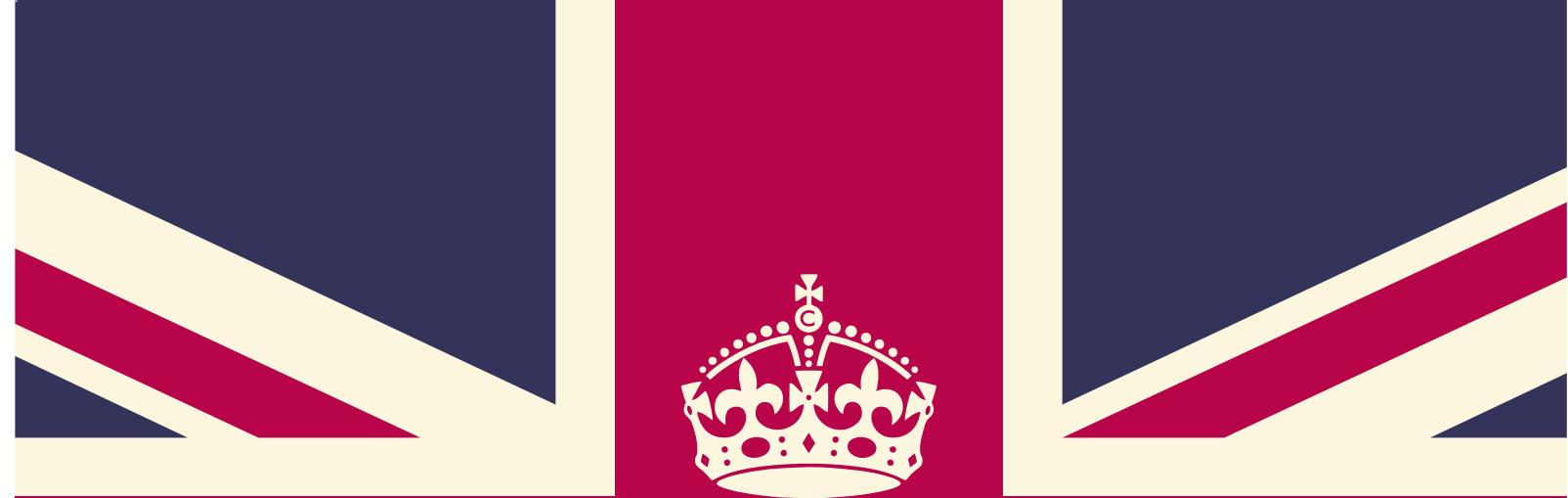
makes what would otherwise be quite a dark entrance feel a lot bigger and brighter. Even the cladding is clever. Certain sections are perforated to allow ventilation into the spaces that need it, whilst still maintaining an impressive monolithic exterior.

The fourth floor dance studios feature giant north facing windows, providing not only a view but also the best kind of light for visual activities, bright with less glare.

The most exciting space of the building lies at its heart, a huge opening that bathes the cafe in sunlight, and allows the smell of coffee to waft all the way up to the third floor balcony.

The exterior has divided opinion, with some criticising its likeness to an industrial unit, while others maintain the use of corrugated aluminium is an excellent example of contemporary cladding.

Despite its flaws which are few and far between, I find the building strangely likeable, with its various inexplicable hanging appendages and quirky installations. This is by far the best recent building on campus, especially given the ever increasing complexities that surround building at The University of Bath. Time and cost constraints, amongst other challenges, have troubled other recent projects, yet The Edge still brings some madness to an otherwise sensible campus - for this reason it deserves our approval.



## HIGH QUALITY PRINTING FOR STUDENTS

Dissertations  
Wire Binding  
Brochures  
Business Cards  
Postcards  
Posters  
Mounted Boards

COLORWORKS THE PRINTERS

Proudly independent suppliers of great British print for over 20 years  
6-8 Cotterell Court, Monmouth Place, Bath, BA1 2NP  
01225 464366 info@colorworksbath.co.uk www.colorworksbath.co.uk

# The Secular Retreat

Due for completion in 2016, Zumthor's first permanent building in the UK is a 'temple for atheists' that will function as a holiday home for the general public.

**By Jessica Booth**

Luke and I finally turn up to site on his motorbike after squeezing past several tractors in the lanes and getting distracted by the prospect of a quick cream tea on the beach. This is Devon after all and the pace of life is much slower. Not a bad thing for Peter Zumthor, who in classic Zumthor-style is taking his time over this one.

"The building should have the 'same sense of serenity and well-being as an ancient monastery or abbey'."

The project was intended for completion in 2010. It's been commissioned by Living Architecture, a non-profit organisation that opened for business that same year for the purpose of 'enabling people to experience what it's like to live, eat and sleep in a space designed by outstanding architectural practices'. Other houses include a collaboration between Grayson Perry and FAT



in Essex, as well as a John Pawson creation in central Wales. The organisation was founded by Alain de Botton, the popular philosopher who has something of a penchant for the architectural profession and wants to promote the value of good design and its beneficial effect on the human spirit. It's fitting that his book *The Architecture of Happiness* has brought de Botton and architecture to the fore after appearing in the Millennial classic and emotionally-truthful, *500 Days of Summer*. As an aside, his first book *Essays in Love*, written aged 23, makes essential reading for any fledgling romantic.

With this commission de Botton is looking to create 'a veritable haven from the pressures of modern life.' If executed correctly the building should have the 'same sense of serenity and well-being as an ancient monastery or abbey.' It shouldn't be hard, as Luke shows me the site it's easy to understand just how magical this place will be. Like Zumthor's previous creations, this house will be embedded in a stunning landscape not too dissimilar from the valley in Graubünden where he lives and works in Switzerland.

We might not have the mountains, but this part of Devon is much more dramatic, ancient and remote than the rolling hills further north in the county. The site is located on a hill-top which



overlooks the sea with tall, lonely pine trees that circle the house and shelter it from coastal winds. The craggy cliffs and large wild meadows give way to the Kingsbridge Estuary and the famous town of Salcombe. It's something akin to Poldark minus the horse-riding and sadly without any topless scythe-wielding.

The site in the hamlet of Chivelstone was previously occupied by a 1940s two-storey brick building. Access to the house is via a somewhat overgrown track which seems to be more grass than tarmac and has posed its own problems during construction. Zumthor intends that the house 'will absorb the landscape and reveal it over time' — though in this wild part of the country I'm not sure whether it's more likely to be the other way around.

**"Zumthor intends that the house 'will absorb the landscape and reveal it over time'."**

His deployment of materials is central to the scheme as one would expect. The aesthetic of the building has been likened to Stonehenge, with its shards of stone jutting out of the hill side and others carefully balancing on top to create a roof. The entire structure is an essay in concrete and glass, though Zumthor's naturalistic handling of the substances means that this house is something of a rural play on Pierre Koenig's iconic Stahl House, rather than an evolution of Modernism.

It's intended to be 'spartan and monastic' and the house is conceived with the same sense of quiet and emptiness as a church, not necessarily the most obvious place for a holiday. The living accommodation will provide 365m<sup>2</sup> of light-flooded living space, while two bedroom wings will radiate from a large central core with full height glazing on all sides, which will be held in place by solid concrete walls.

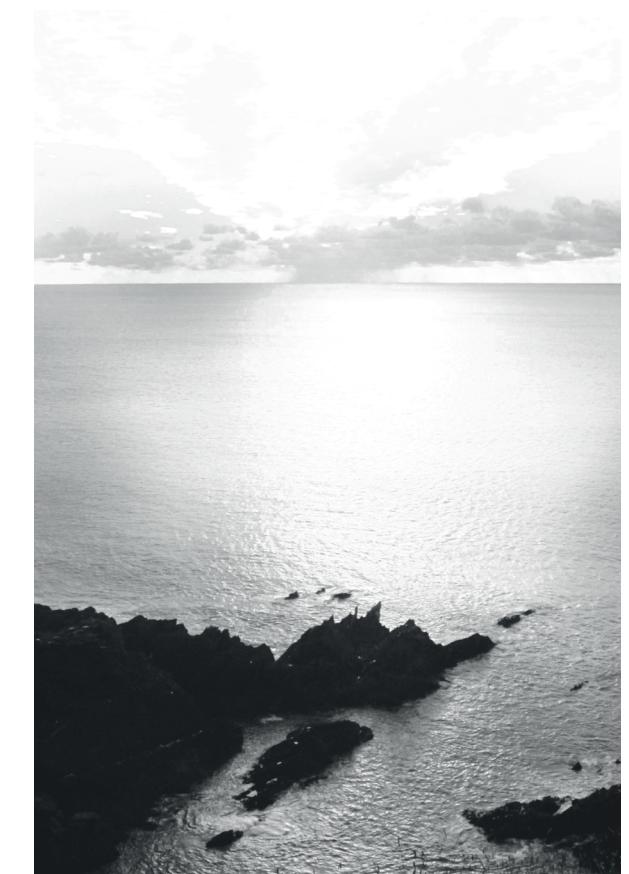
Luke Milton is one of the contractors working on the project - he tells me that they've spent hours on site mixing concrete to meet Zumthor's high expectations. The finish must be faultless, with so few materials in the house there's nowhere to hide. The concrete is rammed by hand into shuttering and the industrial mixer on site is old and often breaks leaving Luke to mix it together by hand. There's a lot of sweat and hard work gone into this scheme, and they've only managed to get a couple of walls up so far. It's a



method that I'm sure Zumthor approves of though. De Botton thinks of him as 'a master of craftsmanship and an expert in the use of natural materials', though it's disappointing not to see him using more renewable and naturally-occurring materials here.

For all the effort it entails, Zumthor hopes that the building will really allow people to 'find a place of solace and contemplation'. The time delay in getting this project finished is testament to both the client and the architect's ambition that this place be something extraordinary, to which time constraints, practicality and money are secondary for once. Luke's not too fussed about it either, there are worse places to work than this stunning hill in the middle of nowhere. It also means that there's more time for a bit of sunbathing and lounging around in the meadows, admiring the site, before heading down to the beach for the ritual evening swim.

You can find out more about Living Architecture and book a stay at one of their houses at [www.livingarchitecture.co.uk](http://www.livingarchitecture.co.uk).





**Feilden Clegg Bradley Studios** are an award-winning architectural practice with an international reputation for design quality, for pioneering environmental expertise and a progressive architectural approach.

We are proud of our long-standing relationship with the School of Architecture and with the University of Bath. We learn from you, we employ you, we teach you and we taught a lot of your teachers too!

# Vertical Studio 2015: Imagine Bath

A look back at the experiences of the participants of the department's week-long Vertical Studio project.

**By Joe Ridealgh & Kishan Mulji**

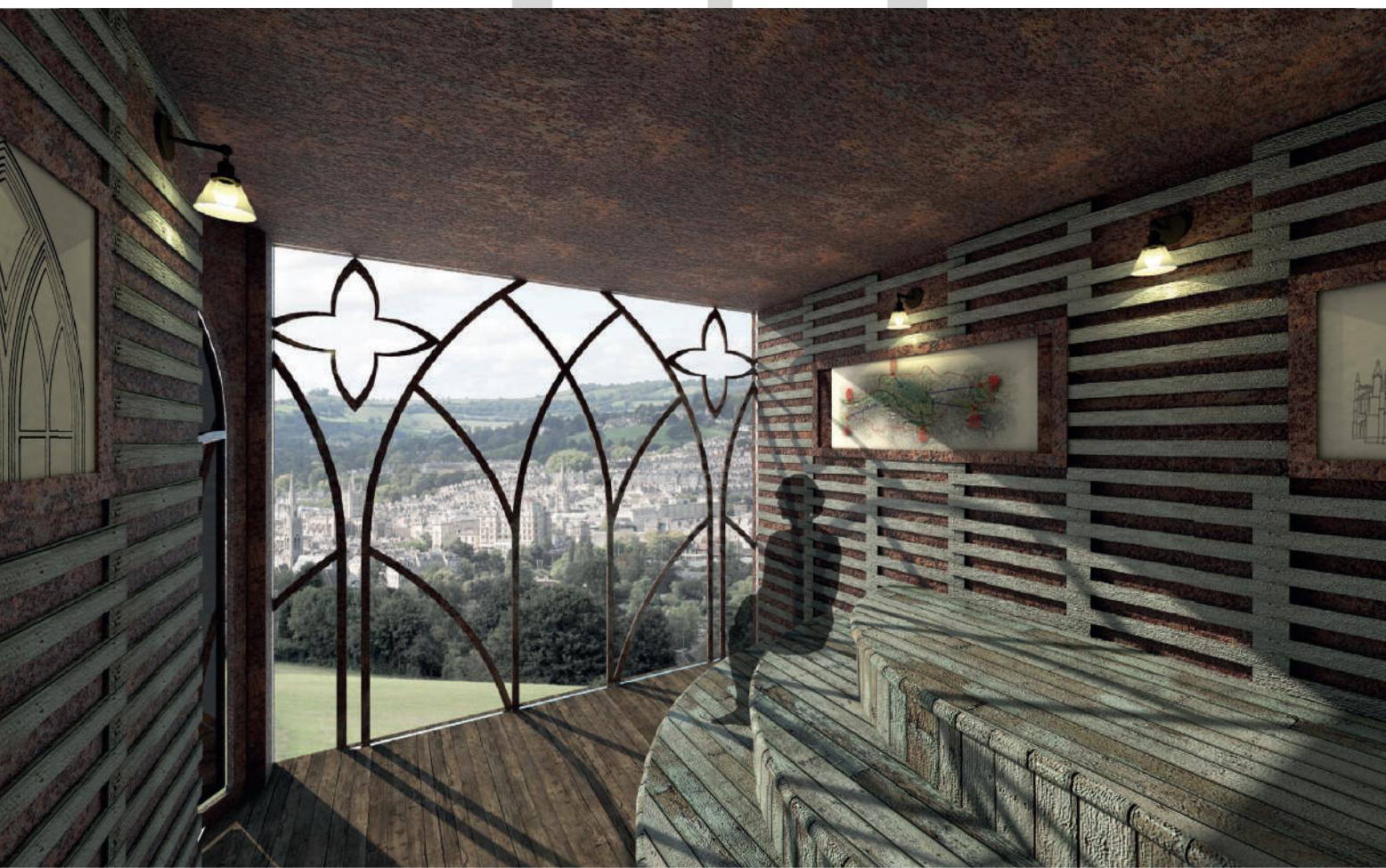
In February 2015, first, second, and third year Architecture students at Bath were asked in groups of four or five; either as a pair of first years and a group of second years or third years, to create a proposal relating to the future of Bath. Suggested ideas included transformation of a public space, a new building, piece of infrastructure, event or transport solution. Groups responded to the lack of restrictions in the brief with imaginative proposals that were judged more so on their aesthetic, as opposed to plausibility.

The resulting ideas were immensely creative, ranging in size and scale to the ambition of the schemes. Each group's proposal was presented on an A1 poster that would exhibit the main aspects of the scheme, which was largely intended as a testament to the team's presentation ability. These designs were subsequently submitted for RIBA's 'Imagine Bath' competition, with some students even receiving commendations and cash prizes for their impressive schemes at the university prize-giving ceremony, with Group 1 (Below) ranking first.

But most importantly, the vertical studio provided the opportunity for students from every year to pool their knowledge - it was a rich source of information for the first years involved in the project. Although this design process seemed to mostly benefit us naïve first years by providing skills and insights into architecture student life, the experience was not wasted on the second and third year students. Propelled along by the sheer enthusiasm of an ever-optimistic first year and the lack of creative constraints on the project, a design team of varying age and experience came together to make use of each person's assets.

The culminating exhibition – set in the moodily lit Vaults and Colonnade of Parade Gardens, celebrated not only students' work, but also the ideas of local professionals and public. This task to 'Imagine Bath' was a way of integrating the architectural world with the public realm and seemed to successfully connect local people in a unified wish to make Bath a better place to live.

1st Place: A New Perspective, Group 1 (Farrah Morgan, Aissa Diallo, James Wright, Helen Zhang)



Mill Market, Group 17 (Kristen Tan, Cressy Lopez, Tom Band, Clara Hunter)



Floating Amphitheatre, Group 18 (Sonya Falkovskia, Sung Lim, Will Campion, Karan Patel)



Frame Bath, Group 2 (Alexandra Enescu, Jessica Moss, Mimi Barr, Issy Spence)



Project AvonFest 2084, Group 4 (Kishan Mulji, Travis Moy, Findlay Mcfarlane, Nathan Davies)



Future Collective, Group 15 (Christopher Jolley, George Luffingham, Carolyn Smith, Nicole Langridge)

# 'We had no clue what we were doing'

The Academic year is up, but how did the First Years get on with their first 10 months of training and the beginning of their adventure into The World of Architecture?

By Issy Spence

1. Are you enjoying the course?



It's a love/hate relationship but each crit day makes me realise I wouldn't have it any other way.

**I am definitely enjoying the course. It tests our creativity and teaches us that there is much more to architecture than just the design aspect.**

I can't believe first year has already come to an end, it's gone by so fast, I'm not sure how I feel, but it's definitely very positive.

**In a broad sense ohmygodyes. It's a lot of work and at times I've felt quite down about getting stuff done. But I've only tolerated that because it's so fulfilling.**

Course is fab, hard work, but I'm not paying thousands of pounds for an easy time.

2. What's been your highlight?



**Studio. It was an intimidating place to begin with, but it suddenly became a very comfortable environment for us to engage and work in.**

When one of my crit panel really got my idea from the start and was really complimentary about it. That's a huge confidence boost.

**The First Project: we had no clue what we were doing but building stuff is fun.**

The late night studio 'Fun', it's great to have so many people that I am close to, who get me through the long hours.

**Being able to talk through a project with tutors who genuinely want to improve a design without talking down to you.**

3. Do you want to pursue architecture?



I definitely see myself sticking it out to become a real Architect and seeing these designs finally being built.

**It's difficult to say at this stage because a lot can change over 3 or 4 years. I'd like to think that I'll carry it on though.**

Before I even applied to study architecture I knew I didn't want to go down the typical route, I've always been interested in architecture combined with urban development.

**I think there is no need to answer this question.**

4. Have your opinions on Architecture changed over the year?



A design is never properly finished.

**We have a lot of potential to change the world.**

The detailing of a building plays a much greater role in the overall design.

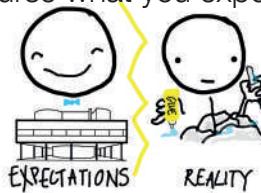
**In other subjects you learn about other peoples' ideas. In Architecture you do that too, but you get your own.**

Every aspect of life is some way or another related to architecture.

**We notice the smallest details, from handrails to window frames.**

In considering the science and construction behind a design, it actually helps aid the design process, rather than limit it.

5. Is the course what you expected?



I expected more emphasis on the use of hand drawings and artistic/abstract concepts in general.

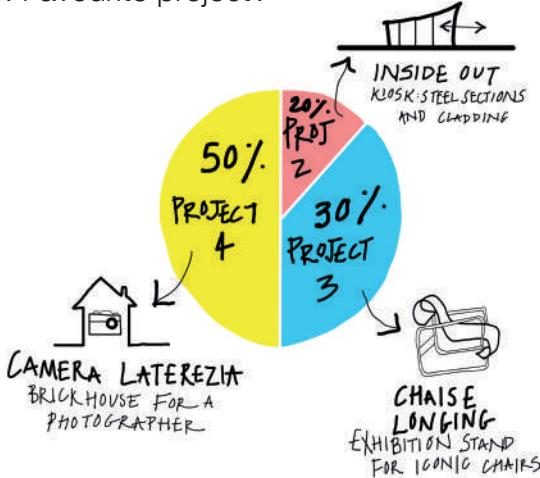
**I'd say it's everything I expected it to be, even the hours because every architecture student always goes on about them.**

At first I was concerned that the course would be completely engineering driven, but this second semester has really picked up in the creative/design side and I can see how both are necessary.

**I am currently enjoying it more than I thought possible!**

I feel like people expect a lot from us without teaching us everything they expect.

6. Favourite project?



7. Advice for next years Freshers



**Don't worry about what everyone else is doing, people learn at different paces and will end up at a similar level.**

**GET SLEEP:** I wasted too many evenings 'working' when actually I was very inefficient.

**Focus more on what I want to do to my work, rather than what the tutor wants me to do.**

Don't underestimate the power of working in studio.

**Take part in as much possible.**

Oh, Definitely don't eat whilst model-making.

8. What's been your biggest struggle?

**The late nights (But I guess I'm getting the most out of the course)**

Our first individual project, I had no idea where to start.

**This last project. I actually worked on three different schemes. This made it difficult for me just because I had a lot to do, but it's a good thing to not go with the first 'big idea' you find.**

The first project. I was worried about marks, and working with a group was a bit of a nightmare!

**The Bus.**

9. How's your sleeping pattern?



I haven't worked into the night yet. I feel like most 'all nighters' are just an excuse for late night Dominos.

**I think all nighters are a very bad way of working because you fool yourself into thinking you're getting stuff done.**

Semester 1 - Normal until 2 days before the final crit.

**Semester 2 - Things just got worse. Unfortunately and unexpectedly, several all nighters were pulled close to the projects' crits.**

In the early days of the course, everyone was bright-eyed and energetic, but since then we've slowly morphed into zombies. We all knew it was going to happen. I guess everyone has done it as part of becoming an architect.

**No matter how hard I tried I still didn't sleep the week before crit. You can do it without the late nights and still do a great job and that's what I am aiming for next year.**

I HAVE NO PATTERN ANYMORE

10. One word to sum up the course



**Architorture**

Mental-strength

**Superglue**

Undefinable

**Rewarding**

Insane

**AAAahhhh...?**

ACE (lol)

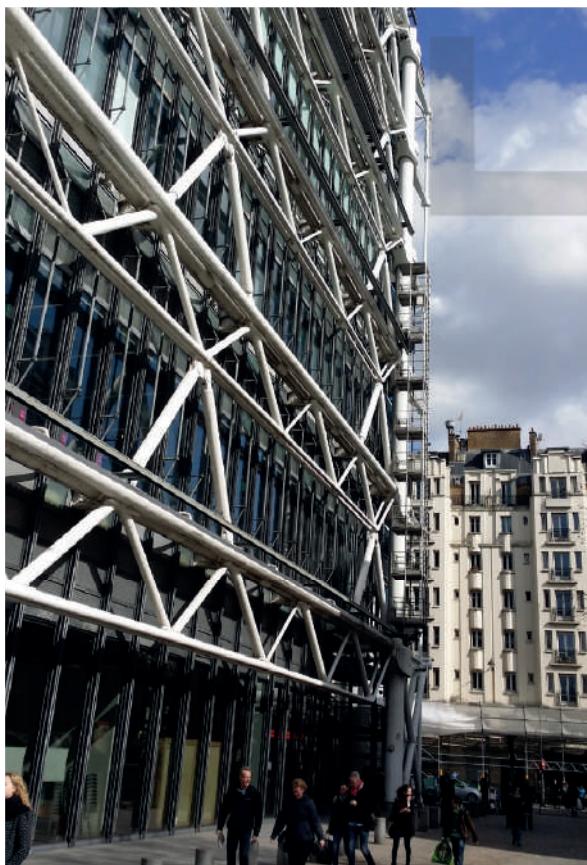
# The ‘6th Sense’ of Architecture and Engineering

People judge structures very quickly. As designers, how much do we understand about this judgement?

By Konstantinos Voupiotis

You walk into a building. What are your first feelings? Given that you, the reader, are probably an architect or engineer, you immediately start judging the building around you. You notice the structure, you point out details of the shapes, colours and textures around you. You observe the amount of natural light in the space, while you're eavesdropping for all sorts of sounds of the building: from the reverberation of the space noise, to the subtle hum of a plant room or a train arriving at the platform. And of course you feel no awkwardness at all when you are walking around touching walls, columns, handrails...

Like with first impressions with people, you have probably formed an educated opinion based on your interaction with the building in the first few seconds. But how about those, in fact the majority of the users, who do not have an architectural or engineering



Centre Pompidou. A structure that invites you to understand

background and hence interact with their surrounding structures in a much different (simpler?) manner? Can a building or space simply “feel great” and cause enthusiasm similar to a kid’s excitement? And if it can, how do we, as designers, engage the users with our structures to achieve this? I have personal examples of three buildings whose designers have thought quite carefully about the engagement of the users in different ways.

“...what we need to understand is how does the user react to a structure and how does that make the structure (dis)likeable?”

Peter Rice had a particularly strong opinion on the matter: use the materials in new ways and expose and scale the structural components down to the human scale, so that users can come close and study the structure. A big aficionado of bespoke design and attention to detail, he wrote “What matters is that they [the components] are free of the industrial tyranny. They require people to look and perceive so that they may understand”. A classic example of this theory is the Centre Pompidou in Paris. The whole idea of exposing has influenced the inside-out nature of the building as a whole, resulting in something intriguing, that many non-architects and non-engineers spend a lot of time trying to understand – and most love it!

The King’s Cross station’s redeveloped Western Concourse, by John McAslan and Partners with ARUP, is another example of a structure which has attracted a lot of attention. A grand gridshell roof, yes. But there are plenty of equally amazing gridshell roofs in the world, some of the top-notch ones in London. I believe here the main factor is the connection of the horizontal structure with the vertical one. A great roof will not be appreciated by everyone when it spans above your head as chances are you will not look up while running for your train. However the designers of the King’s Cross Western Concourse chose to “root” the structure right in the middle of the concourse. It was fantastically described by Keiran Long in the Evening Standard as “like some kind of reverse waterfall, a white steel grid that swoops up from the ground and cascades over your head”, showing some people’s appreciation of the geometry.



Lastly, our very own department building 6E. What now is judged as “old-fashioned” has a lot more to show than simply concrete and narrow corridors. Did you know that concrete is exposed only in primary structural elements whereas non-loadbearing elements are painted white? This 1980s structure has left a great, easy lesson to aspiring architects and engineers, to look around them and try to understand, just like Peter Rice argued. But how many of our students actually realise what 6E has to say without being told – and was this number different 30 years ago?

Engaging the user is, of course, not limited to the above three examples, but the lesson is the same: we, architects and engineers, know very well how to appreciate structures however what we need to understand is how does the user react to a structure and how does that make the structure (dis)likeable? This is something which happens in a few seconds and which might not be just visual or auditory. This immediate reaction to the structure, the 6th sense, is changing over time and in different cultures. What is it?

I will happily hear your opinions and debate about it on voulpiotis@gmail.com.



The top of the middle staircase in 6E. The staircase, columns, beams and door cills are exposed concrete whilst everything else is painted white



# Fifth Year Fun!

Architecture at Bath isn't all toil and trouble - the fifth year is known to be a bit more experimental, and this is a snapshot of some of the fun!

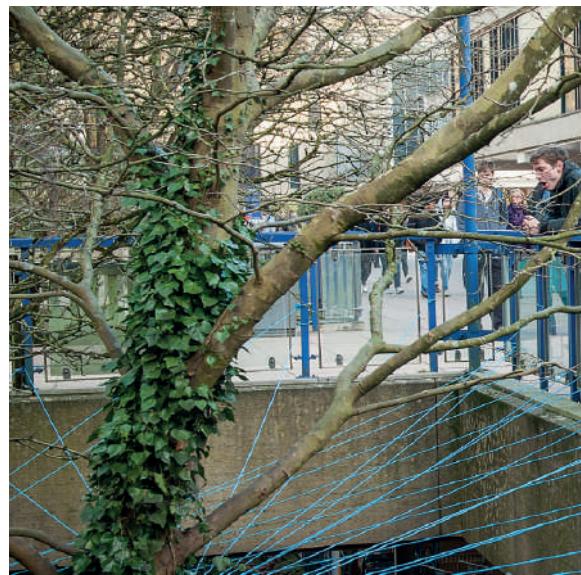
By Harry Streuli

The 'icebreaker' for old and new students into the first year of the MArch is the 'threshold project'.

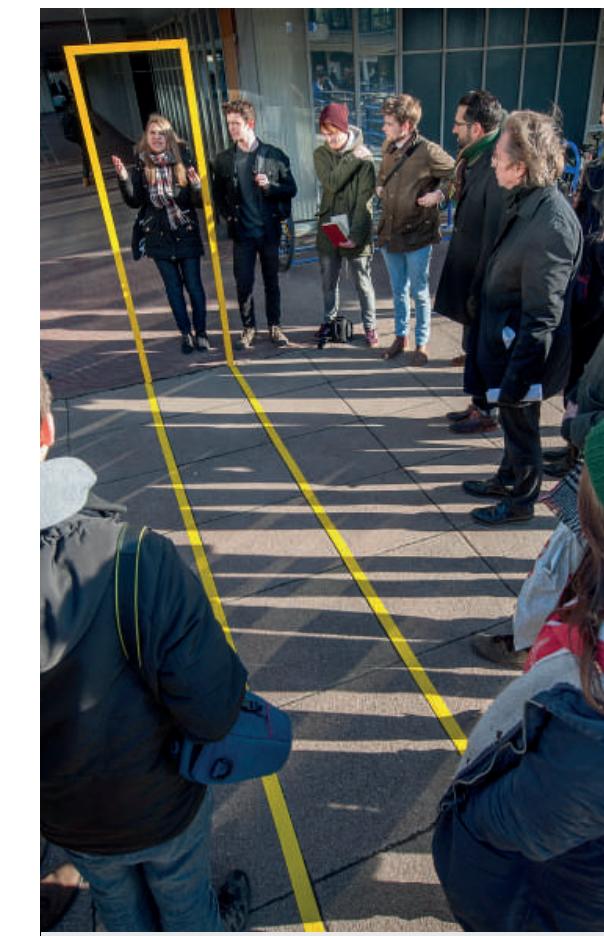
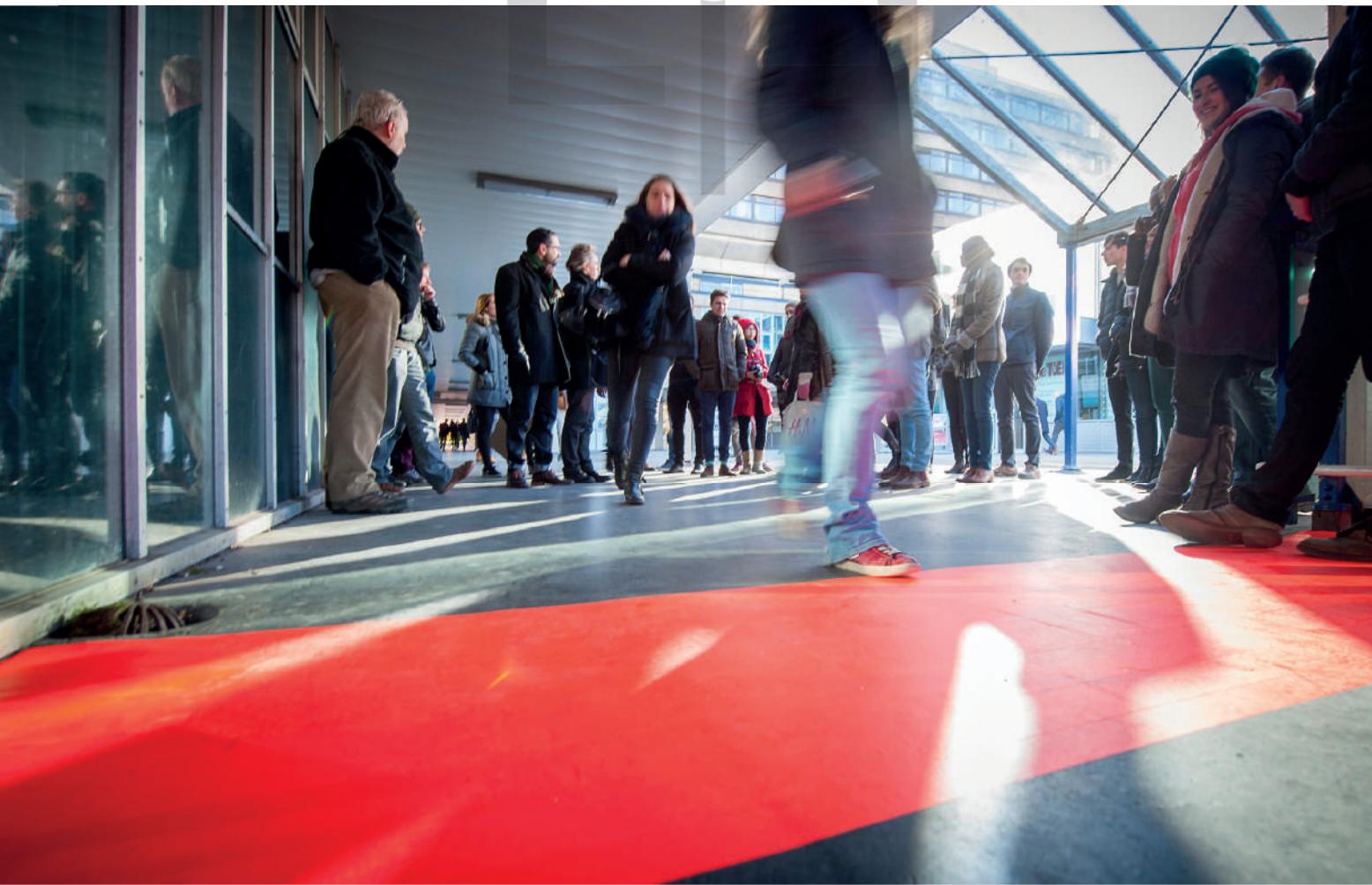
Small groups with a shoestring budget, five days, and the starting point of 'threshold' were tasked with creating a series of campus interventions, that both excited and confused passers by.

What followed ranged from a strange door floating in space that welcomed people onto the parade, to stripes of orange tape that got more and more intense as you walk up, past 6E from the bus stop.

Later into the second semester, half of the year group travelled to the AA's Hooke Park, where they carry out a 'Design and Make' programme. Littered throughout the park are small timber projects that are leftover from this and previous iterations of the programme. Some projects had become over-run by the working



Enormous spiderweb in the parade voids



An ambiguous yellow door onto to parade



Elastic weaving in the corridor linking 6East and 4East



forest, and being stuck inside a giant floating wooden ladybird was certainly a highlight!

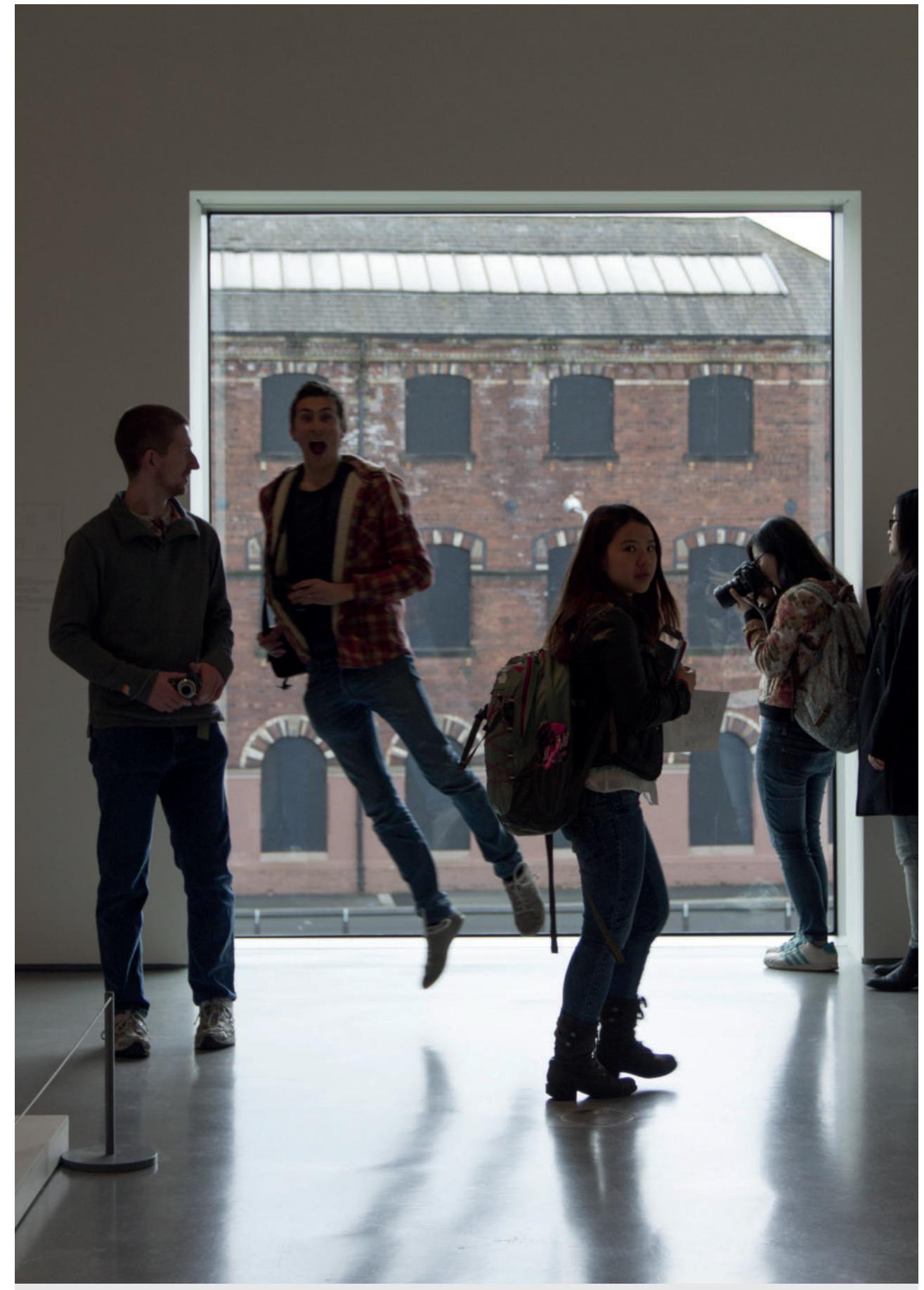
With games such as 'asking looking playing making', and 'muff on a huff puff', students found themselves with an opportunity to play with materials, and explore what can be extracted from them. Ed Robertson (left, in a felt scarf and masking tape knee pad) was captivated by the 'mesmeric' quality of the River Avon, while Mike Lewis set fire to everything.

The fun was rounded off by a trip to the North, where Manchester's scummiest area was beautifully master-planned in just five days! Followed by a whistle-stop tour of Yorkshire's finest architecture, this was certainly an entertaining week.

Architecture at Bath is quite often considered serious, pragmatic, and technical. This doesn't mean that students are too - the casual approach to the Fifth Year means that we have an opportunity to explore the fun side to architecture, and not lose sight of what may have drawn us to the subject all those years ago.



Mike Lewis has taken the opportunity to burn almost everything in his sight!



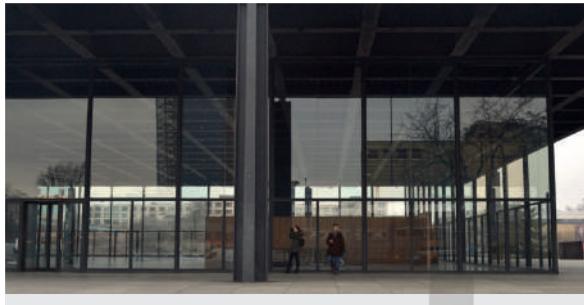
Luke Macnab is summoned by his 'people' during a trip around Yorkshire's finest buildings - this is the Hepworth in Wakefield

# Travel: Berlin

## First Years Let Loose in Europe

Currywurst, graffiti, and some buildings too. A first year take on Europe's culture capital.

By Sonya Falkovskia, Diana Smiljkovic, Sung Lim, Olly Ridgley



Neues Museum

Berlin – known to many for its outlandish nightlife, exquisite Currywurst and rampant graffiti – provided an excellent stage for a group of first year architecture students to roam free, without the constraints of all nighters in the studio. Now, in hindsight, there was also some pretty decent architecture.

When in Berlin if one strives to be a true architecture student, they must visit Mies Van De Rohe's 'Neues Gallery', which to our luck was declared shut when we arrived, for the next 5 years. Nevertheless, we took it in our stride and appreciated the building in all its Modernist glory. The power of the building is even more obvious when seen in person. In the words of Mies himself 'less is more' is definitely a concept, which made such an influential building possible.

Potsdamer Platz – where spacious areas are aligned with obeying structures and glass structures protrude tall into air - previously known to be uninhabited has grown into a business centre. Its architecture belonging to Richard Rogers, Hans Kollhoff, Renzo Piano and many others reflects the mindset and work ethic that



Potsdamer



Neues Museum

inhabits it. The birth of Potsdamer was due to the Philharmonic's arrival, which then led to the building of a series of monumental structures such as the National Library. Potsdamer Platz directly contrasts its Eastern counterparts as a vivid image of uniformity is painted.

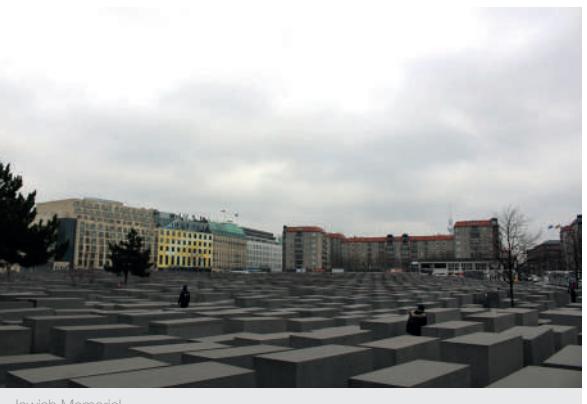
The Berlin Philharmonic stands in all its glory as the jewel of Potsdamer. Walking around the perimeter trying to find the tour entrance we finally managed to enter and began the tour of the building. Walking through the winding staircases and walkways it would be an understatement to say that at first getting lost seems like an easy task, but even whilst guided it became intuitive. By chance there was an orchestra practicing in the philharmonic and the acoustics within the grand space were all encompassing.

Iron beams representing the wall lead the eye towards the new chapel, proceeding past it. Timber columns construct the outer oval wall recreating what once stood while its previous walls are engraved into the ground. As we pass the threshold of exterior into the interior, fragments of the chapel are embedded into the



Chapel of Reconciliation

rammed earth walls. A sense of atmosphere is created with the roof lights, allowing a heavenly glow to softly illuminate the coarse earth walls. Completed in 1894, the original neo Gothic church has been subject to a myriad of casualties. As the war ended and Germany was subject to its separation, the church fell into uncertain territory. To increase security and sterility, the church was to be demolished leaving only the foundation as a fragment of what once stood. Architects Rudolf Reitermann and Peter Sassenroth were commissioned to revive the church allowing it to stand as a memorial and reconciliation to the destruction Germany was subjected to.



Jewish Memorial

After leaving the Old National Gallery of Berlin and walking onwards through the city a feeling of modesty was on everyone's minds. We then came across the sea of gravestone-like concrete blocks. As soon as we stepped into the memorial, we were dragged into the river of humbleness. The ground descended down and down, unnoticeable until we couldn't see anything but those monotonous rectangular blocks with openings akin to bullet holes. The centre of the memorial isolates you from the world and guided us through the inexplicable thoughts about our own naïvety, reminding us that we can't even imagine the depth of the situation until you truly investigate it. The memorial kindly suggested us to do so, and we started feeling that we were walking on an incline. We realised that we were already out of the modest atmosphere, and started to understand what made us feel so humble in the first place.

**"The centre of the memorial isolates you from the world..."**



Alternative Berlin Tour

The Alternative Berlin tour is worth both the money and time if you ever find yourself with either to spare. Berlin is widely regarded as the graffiti capital of Europe, owing its title largely to the fact that the form of graffiti known as 'pasting-up' is actually legal. This involves the wallpaper-like layering of artwork onto a wall rather than actually applying paint (which is illegal, and arrest-worthy – though the chances of getting caught are incomprehensibly slim, since there are only about 20 people tasked with policing the arty actions of hundreds). On our last day, we pasted up our own contribution within the bustling Alexanderplatz on our favorite concrete column. But perhaps what was most refreshing

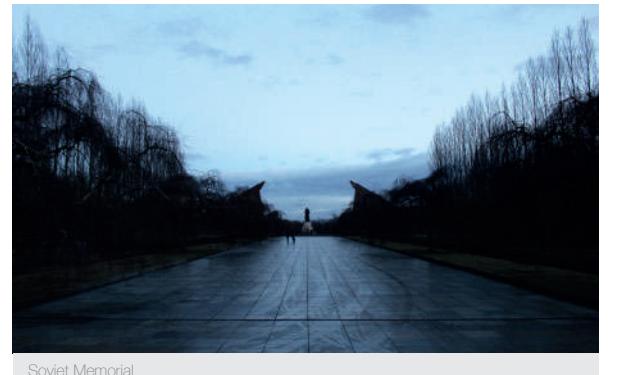


Alternative Berlin Tour

about this tour was not the vast amount of talent, imagination and beauty on display, but the opportunity to see the otherwise ignored. The most faith-restoring aspect was the distinct lack of any mention of Banksy. Instead, the day consisted of learning the processes and thinking behind works of world renowned artists such as Blu and the 1UP Crew, as well as the lengths some artists went to in order to create their art (abseiling from buildings in the middle of the night is all in a day's work it would seem).

A place few know about in the outskirts of central Berlin is the Soviet Memorial. Located next to an abandoned theme park, where fences must be cautioned with care, to say the atmosphere of the place was eerie would be an understatement.

The memorial spans a huge area giving vast open spaces in true Soviet style, where a large statue of a heroic Soviet soldier stands at the end of the axis overlooking the perfectly symmetrical but desolate area. A place that must not be missed gives a definite sense of history and provides a moment for reflection within the busy city.



Soviet Memorial



# Architecture and the Senses

Each issue, we ask a member of staff from the department to share some of their current musings and ideas...

By Toby Lewis

Considering 'Architecture and the Senses' brings to mind our experience of place. The atmosphere, the sensations, what we smell, touch, the sounds we hear, the images we see, heat and cold, our sense of space and our body in relation to it, also our sense of time as things change or we move. This is the stuff of phenomenology; the study of our experience of the world. Zumthor has written of Atmosphere, Pallasmaa in 'The Eyes of the Skin' makes a plea for considering all the senses. Our experience becomes part of our memory. Our memories and ideas form the personal and cultural baggage we bring when responding to place. We do not just see, or just smell.

To work with this we can, to a large extent, rely on our unvoiced intuition. Our experience began long before we had words to describe it. But if we delve into our experience we can reveal implicit meanings, we can develop a cultivated sensibility based on knowledge and imagination. Our current cultural situation, described as post-modern, is characterised by subjective values, ambiguity, lost traditions and the lack of agreed ideals. We rely to a greater extent on our own judgement. In 6th century Greece Thales of Miletus said "know thyself"; that it is up to each of us to find truth, not wait for it to be handed to us through revelation, mysticism or tradition.

For several hundred thousand years our experience has been of the natural world: mountains, rivers, forests, snow. We modified the landscape through farming and made tools and implements,

to the point where nowadays many environments are entirely man made. We are confronted by the making of others; where everything was once in someone else's imagination. We are creatures of imagination and this insatiable curiosity drives our creativity. All art, music, sculpture, literature, architecture is driven by our need to create.

An architect is very aware of the act of creation. It is the basis of our project work. But we rarely, if at all, actually make the things we design. We do not carve or paint or saw. We work in a sensually deprived way. We draw lines and write words so others can make. Unlike most artists and craftsmen we work without the immediate feedback of seeing the thing as it is created. We are unable to judge its effect, to know to stop when it is enough, to have the joy of serendipity or accident in the making.

I think it is a thirst to work in a richer and more sensual way that has led to a resurgence of making amongst schools of architecture. I first noticed this with Ghost Lab under the instigation of Brian MacKay-Lyons in Nova Scotia. It continued with Sam Mockbee's Rural Studio in Alabama, the AA's Design and Make course, the summer schools of HelloWood in Hungary, TU Riga in Latvia and, for me personally, in the nine year journey that is Studio in the Woods. There is a greater stimulation and satisfaction in doing it oneself. Trying things out, taking risks, making decisions; it is empowering. So smell the freshly cut wood, hear the wind and the echo of distant chopping, see the results of your labours, feel the sawdust, the mud and the ache in your muscles. Surely this is an architecture of the senses.



**MINERVA**  
*Art Supplies*

[info@minervaartsupplies.co.uk](mailto:info@minervaartsupplies.co.uk)

13 Green Street – BATH – BA1 2JZ – Tel: 01225 462116



# Book Review: The Thinking Hand

"The Thinking Hand - Existential and Embodied Wisdom in Architecture" highlights the importance of touch in architecture, as well as the professions that surround craft.

**By Diana Smiljkovic**

Divided into 8 parts, the reader is taken on a journey from the origin of touch, progressing to mastering the sense and understanding its contribution to the formulation of our experience.

1. The Mysterious Hand - the origin of touch is introduced, describing the hands as our main source for language and communication. It highlights the importance of the hands' role in evolution of human skills, intelligence and conceptual capacities.

"Art and architecture guide us back to the origins of language, to the ordinary wonder and amazement when encountering the unforeseen."

2. The Working Hand speaks of the hand at work. The tool is described to be an extension and specialisation of the hand. It in itself provides extra capacities for the hands abilities. It speaks of how a craftsman needs to embody the tool through the hand to translate the language of the mind.

Touching surfaces, sensing their materiality and texture brings in a form of intimacy between the subject and the object.

"The tradition of craftsmanship is clearly gaining increasing value and appreciation in today's reality of the technological world, mechanical production and the regrettable loss of the touch of the human hand in our mechanically mass-produced products and environments. In traditional cultures the entire life world is the

product of human hands and the daily sphere of work and life means an endless passing of the hand skills and their products on to others; a traditional life world is a continuous meeting and join of the hand of successive generations."

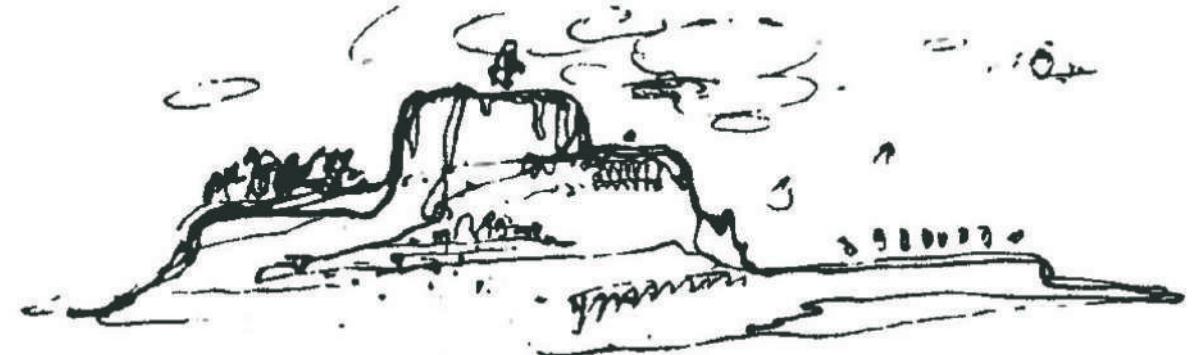
3. Eye-Hand-Mind Fusion provides insight into the "associative and experimenting creative process", introducing the absent-minded hand and its aimless play in sketching. An embodied mode of mental scanning needs to overtake careful, precise focus, allowing the hand to record what is imagined.

Collaboration between eye, hand, and the mind is integrated throughout this chapter explaining how performance gradually betters into a system of reaction and response.

Skill is explained as trained practice, speaking of how result arises from refinement, "beauty or simplicity cannot be preconceived, conscious targets in artistic work; one arrives at these qualities by struggling from other ends."

4. The Drawing Hand - drawing is a spatial and haptic exercise. It fuses external reality of space and matter, and the internal reality of perception and mental imagery, into singular and dialectic entities.

It speaks of how through sketching one must feel the subject and internalise its character, referencing to how the image is recorded into ones muscle memory.



Alvar Aalto: early sketches of a mountain landscape, 1927

Computer aided design is supported in the book in the sense that it enables the design of complex, spatial and formal situations otherwise impossible to conceive. It is described to enter a world without skin, therefore making the designer an outsider. Hand drawings and physical models are promoted in the early phases of discovering the design as "computer drawings are devices for a bodiless observer."

5. Embodied Thinking - design is described to be a process of constantly going back and forth. Uncertainty is said to stimulate curiosity, and is therefore a driving force in the creative process "allowing the hands to express the essence of the mental journey."

"An artistic thought is not merely a conceptual or logical deduction, it implies an existential understanding and a synthesis of lived experience that fuses perception, memory and desire. Perception "fuses memory with the actual percept, and consequently, even ordinary sense perceptions are complex processes of comparison and evaluation."

Existential knowledge is described as the architect works with his entire body and sense of self. Simultaneously engaging in the perspective of self image in relation to the world.

**"A sketch is in fact a temporal image, a piece of cinematic action recorded as a graphic."**

6. Body, Self and Mind - the relationship between space and mind is mentioned. An architect must internalise the client, creating a design for this altered, simulated self. What is being asked for must be identified, resolving the requirements of the brief. This introduces a structure that is a double portrait.

7. Emotion and Imagination - architecture constructs and shapes space around us. It is what is present that brings a sense of materiality, whilst the space itself leaves it to the occupants imagination for further construction.

Our coherence and understanding is strengthened as we engage our sense of touch with our surroundings.

"An architectural work is not experienced as a series of isolated retinal pictures; it is touched and lived in its full and integrated

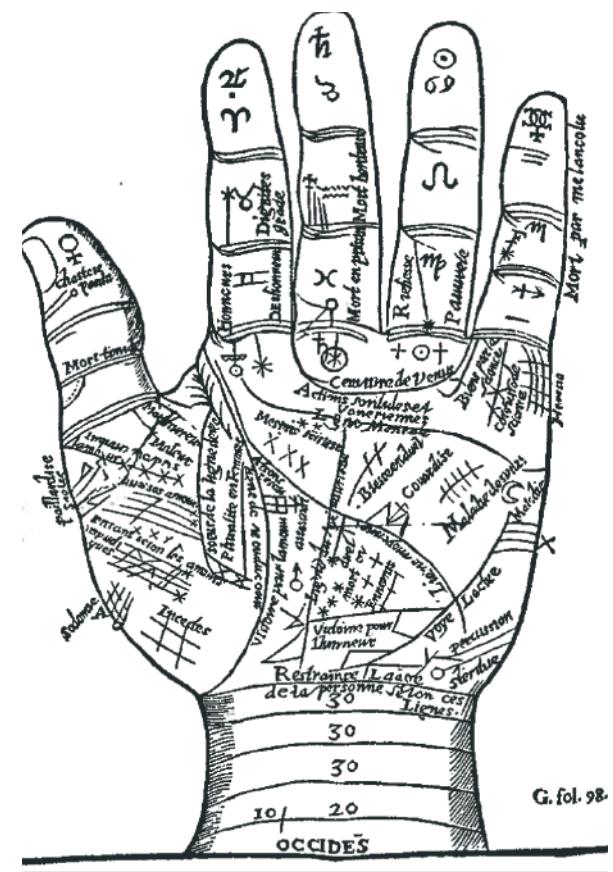
material, embodied and spiritual essence."

8. Theory and Life - conceptual analysis and architectural education is talked about in "Theory and Life"

"Architectural education tends to be dominated by conceptualisation and the articulation of conscious intentions, and today's avant-garde architecture is often a mere medium for projecting intellectual or speculative ideas."

The hands importance is brought to attention, as required skill is a prime contribution to the processing of ideas. Architecture is described as an art of constructing.

"The duty of architecture and art is to survey ideals and new modes of perception and experience, and thus open up and widen the boundaries of our lived world."



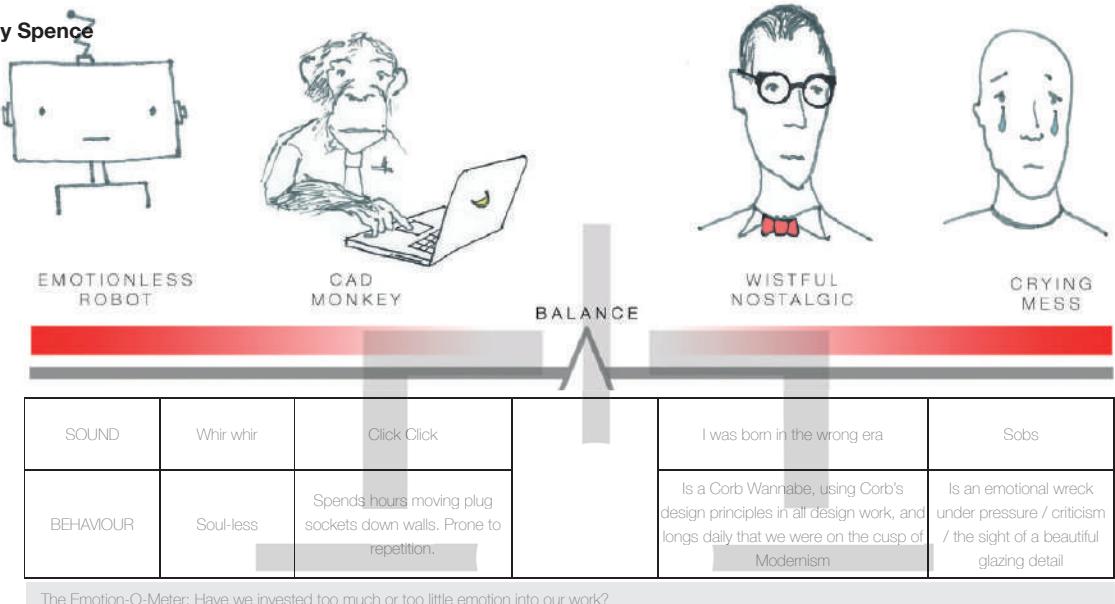
Jean Belot oeuvres, 1649

G. fol. 98

# Are we too Emotionally Invested in our work?

A project, like a new born baby, requires you to attend to its every need, constant feeding, and will often keep you up until 4am, leaving you with a headache for the rest of the next day.

**By Issy Spence**



We can't help but form a relationship with our work simply because we pour so much time, energy and money into it. (Foamboard prices have definitely risen) But are we too emotionally attached to a bunch of lineweights and a concept?

Or do we lack any connection at all because we feel architecture has become too commercial? Does the harsh, cold reality that your design may not actually get built, cost too much, or doesn't make the developers happy, leave you cold and emotionless? To explore this, I introduce to you, The Emotion-O-Meter, to gauge the emotional level you have poured into your work.

At first glance, we have the CAD monkey clan. I remember the early studio days, where Sketchup just hit The Mainstream and the fabulously original box design swooped a majority, leaving the minority (1 studio seat) of Team Curve & Crazy Parabola rather lonely. Zaha would have felt rather out of place, weeping as her studio minions were enslaved by their inability on CAD, to produce anything other than the same orthogonal box building...

CAD is a brilliant tool and a truly cracking piece of technology. But beware: do not fall due to the chronic illness of what I like to call OCD, Obsessive CAD Disorder. Symptoms include obsessing over details on initial stages of your design project because you feel they need to be 'correct' from Day 1, you are unable to hold a pen and you have dreams about the Follow Me tool on Sketchup. (I have suffered all of the above) Unfortunately, there is no immediate cure for said OCD (Obsessive CAD Disorder) but

a dose of marker pens and a roll of tracing paper should ease symptoms. Don't be restricted in your design by what you can and can't do on your computer.

On the opposite side of the spectrum, we have the Wistful Nostalgics. You look back and reminisce over how you did more hand drawing in your infant school years than you do now. What's even worse is that the nostalgia you feel, may be for something you never experienced. (There is probably a more technical term for this, but if I looked it up, I would look back with sadness, at the naive time when I didn't know overly pretentious lexical choices to convey my sentiment...) It's great to look back, take influence from what's gone on before you arrived on this planet but don't be a slave for life to The Grid of Mies or think that everything you design needs to be as monumental as a Kahn Building.

And that lands us nicely in the middle. The middle is a great place. In the middle, you inject your projects with love and enthusiasm. But not so much you are wrung of all energy. In the middle, you strike up a balance between working on CAD and stepping away from your trusty computer. In the middle, you look at historic case studies, but balance it with forward thinking.

So in summary, don't be a monkey, a robot, stuck in the past, or over obsessed with all the detail, it is about The Balance. Be in touch with your emotions but not dictated and distracted by them.

Back in time for breakfast, lunch and dinner

**By Tiffany Cheung**

Heavily influenced by a collection of trends and styles over a single short century, the design of our kitchens is a resulting concoction between industrial engineering and society's ever-changing structure. Looking at the different tastes we have had over the years, we can see how the material, form and colour of the kitchen has embodied the characteristics of each era.

Pondering back to the pre-world war years, when the arts and crafts era detailed the workmanship of hand-crafted decor, the kitchen was a large space occupied with free standing cupboards around the perimeter and a large work table in the middle of the room. This mapped an orientation that faced inwards and allowed tasks to be carried out centrally, allowing a number of people, the female members of the household, to work together efficiently.

In the post-war years that followed, smaller dwellings that replaced ruins led to limited spaces available for the kitchen. The result of this was the design of space-saving built-in cabinets with fitted worktops, which removed the need of a central work table. The 1930s kitchen focused on a simple and functional layout in a period when food rationing carried on and meals were bland and under-portioned. The

women, having tested their capabilities during the war, returned to being trapped alone in long hours of household chores.

Moving from mid-century onwards, technological advances began to pick up the pace. In the new age of appliances, kitchens were fitted out with new chrome textures, chequered flooring, and vibrant colours of plastic red or avocado green. The form of the kitchen was now more welcoming and exciting than ever before and along with the invention of convenience food, life for the modern housewife was dramatically transformed. Women were finally able to find a job and earn their own income as a result of less time spent preparing food.

Looking past the millennium, the kitchen of today not only satisfies a hungry stomach but also is the place where work is done, friends hang out, and families come together. The current kitchen experience we have created is arguably an amalgamation of all the different designs we have encountered throughout history. As the research behind the psychological interdependence between a person and his or her environment and behaviour comes into understanding, the results can influence how we achieve a balance between form and functionality in design. Subtly, the senses evoked from the different kitchen styles may have influenced the psychology of women and indirectly affected how society has developed.



# Nasal Navigation and the Smells of 6East

For reasons beyond our understanding, there is one place in the University like no other, one place that continues to confound, confuse, and smell.

**By Olly Ridgley**

We all have smells that we associate with a particular time or place. The stench-filled maze of 6 East is a treasure trove of bizarre nostril nectar. It is rumoured that there are even some fourth years who can find their way through its winding corridors using only their nose.

**"It is a physical thing,  
something so thick and putrid  
it can be touched, felt and  
worst of all - tasted."**

What follows is a comprehensive breakdown of these smells, in the hopes of passing on this sacred olfactory knowledge, so that others might be able to learn the art of nasal navigation.

Upon entering 6E, we are immediately greeted by the familiar and friendly smells of old carpet and stale air. The old carpet contains a unique blend of years' worth of trodden in debris: food, gum, strange liquids, hair having been ripped out pre-crit, tears, sweat, blood, puss, the lot really.

The stagnant air is what gives 6E its unique atmosphere and climate, and mostly entirely due to the fact that no one ever opens the windows (very few people actually know how).

Following the carpet pong to the concrete stairs, the air is somewhat colder, giving us the false sense that the quality of said air is higher. This is not the case. The illusion is soon shattered upon the realisation that there is a lingering smell accompanying this seemingly fresh air. Wafting up from below, a faint earthy smell from the soil labs, mixing with the dry, sawdusty air of the wood workshop, to create one of the most organic smells on campus (second only to freshly manured flower beds). This smell grows stronger the closer we get to the bottom of the stair case, culminating in a stench that transports us to the lumberyards of North America.

Moving upwards to the level three studios, we again appreciate

the pseudo-fresh air, until our fantasies are brutally excreted upon by the most pungent pong of all 6 East: the Year Four studios. Once the door to this floor is opened, the airlock is broken. Like a hole in the hull of a massive interstellar spaceship, the oxygen of the stairwell is sucked into an eternal stinky void. This experience can only be described as overwhelming, and frankly dangerous to the nasally unprepared.

The smell is so powerful, it pervades the entire floor. A smell that defies both explanation and description. We can only hazard a guess as to the cause of such a smell. Perhaps we have sinned and angered a god or two. More likely is that a small mammal died there long ago. Whatever may be the cause, the difficulty of describing this mysterious pong remains.

It is a terrible, unholy smell. A smell of dread and impending deadlines, inciting panic into the hearts and minds of all those passing through this whiffy land. It is the smell of sleep deprivation, and drying printing ink. The smell of scepticism and Sketchup. It is the smell of Architecture.

Whatever abstractions we may attribute to this smell, one thing is clear. It is more than just a smell. It is a way of being. It is a physical thing, something so thick and putrid it can be touched, felt and worst of all - tasted.

This aromatic atrocity is not confined to the building of 6 East. We have failed to contain the monster we have created. Like a plague, it has spread to all corners of our once beautiful smelling University.

Corners like the CAD lab: the underground cave dwelling of Civil Engineers and Architects alike. This is a dark place devoid of sunlight and happiness, like David Cameron's soul. There are no windows. There is no sound, save for the soft, miserable whine of ancient computers. Instead of natural light and anything good in the world, we are given a humid, stifling, sweaty excuse for air.

This may have something to do with the fact that the one and only door opens into the Sports Hall, one of the sweatiest places in the entire University. It is a testament to the armpits of both Architects and Civil Engineers, that they can make a place sweater than the place that is actually famous for being sweaty.

**"His small but perfectly formed  
betrayal was discovered by  
the cleaners soon after."**

Even further afield, lies the tragic atmospheric decline of 6WS.

The studio of 6WS was once a safe haven, surrounded by trees and flowers and sunlight with a ventilation system to die for. A colony for Architecture students, an outpost, located far away from the great stinking mothership that is 6E. But alas, this too has become another casualty in the War of the Noses.

We became complacent in this paradise. We allowed into our midst a terrible beast, known to his adversaries as Felix the Cat, and known by others as 'The Cat that Crapped in Studio'. We were fooled by this fury Judas. We were taken in by his cuteness, and in our blindness we could not see the inevitable outcome of having a studio pet.

His small but perfectly formed betrayal was discovered by the cleaners soon after.

Word of Felix's treachery spread, and Wickens decreed that he be punished for his crimes and banished for eternity. Maybe one day the 6WS studio will recover, and future generations will be able to experience the sweet-scented utopia we once knew. But Felix has left his mark, and for now at least we will have to endure working in a cat litter.

So far, I have merely listed the disgusting lingers we are forced to inhale on a daily basis. You may therefore be asking what can be done against this pungent foe. Will we ever defeat the shameful smells of 6E, or are we doomed to forever suffer at the hands of a never ending stench? Are our children doomed to suffer because of our selfish, smelly mistakes? Will we ever free humanity from this abominable putridity?

Something must be done. And thankfully, there is hope. I have come up with a number of elegant solutions to improve the horrible smells of 6 East.

- Strawberry scented Blu Tack  
The crit room would smell delicious. Would be even better if edible. In fact, we should all just agree to stop using Blu Tack, and instead use Extra Strawberry Flavour Sugarfree Gum. It's so much cheaper and also neutralises plaque acids.

- Scratch 'n' sniff project reports  
We've all been there. Hand in day. Haven't slept, showered, brushed teeth or ventilated armpits for three days. Wouldn't it be refreshing if when we pick up our printed reports, we also pick up an aroma of chocolate mint and banana?

- Replace radiators with lavender and daisies  
Because let's face it; keeping warm really isn't an issue when we're struggling to actually breathe in clean air. The excessive warmth provided by the radiators is also a strong contributor to the disgusting rainforest conditions of the third year studios.

- No shoes in 6E  
This is radical, I know. But it would prevent further layers of detritus from being added to the already colourful carpets. A slipper rental system could be implemented. Phase two would introduce dressing gowns and blankets.

- Emergency Febreeze located around the building  
As important, if not more so, than fire extinguishers and first aid. Particularly useful in those stressful crit situations, if and when someone accidentally nervously lets rip.

- Weekly 'Who's Wearing the Nicest Deodorant' competitions  
Entrants will be subjected to a thorough sniffing by qualified judges. The prize is a pack of Extra gum.

One thing is clear from all of this. We must act now if we are to have any hope of containing this amalgamation of oppressive odours.

Please. For the sake of humanity and all its noses. Open a window.

# Memory and the Forgotten Sense

Sensual qualities of architecture can stimulate memories - a notion which is explored through the design process of architects such as Peter Zumthor

By Diana Smiljkovic

"We all experience architecture before we have even heard the word. The roots of our understanding of architecture lie in our childhood, in our youth; They lie in our biography."

A memory is a collection of moments created at a particular time evoked in a distinct place. A memory constitutes of its subject, a distinguishing event, and mostly its situated area.

"We may be equally moved by something evoked by our memory or imagination as by an actual experience." - The Thinking Hand.

There is no experience without region; whilst there is no space without the inhabitant. It is a symbiotic process of space shaping us as we shape space.

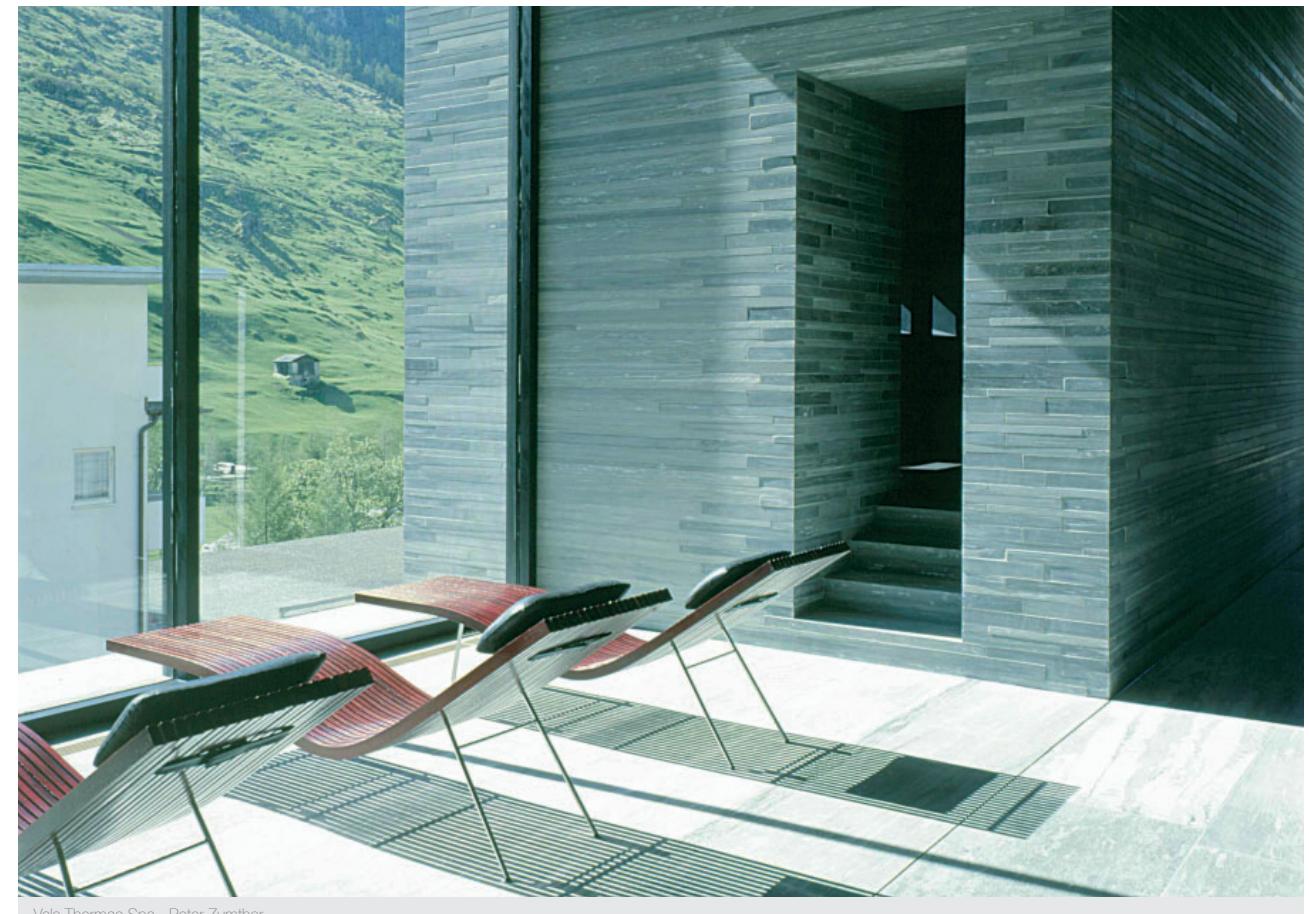
The light, the touch of materiality, the way the sound echoes or halts, the taste of air that surrounds it are all factors contributing to atmosphere, but our association with smell is not to the architecture as it is to the components integrated within.

The olfactory sense is most affiliated with memory whilst architecture itself is primarily considered a visual experience.

The sense of smell is one that triggers the limbic system, bringing about conditioned responses yet is usually discarded from the architectural experience. Scent itself happens both before and behind all other senses.

"At the centre of architecture, there seems to be an empty space. You can't plan emptiness, but you can draw its boundaries, and so empty comes to life." - Peter Zumthor.

It is cognitively bonded with memory, therefore by designing



Vals Thermae Spa - Peter Zumthor

stimulating qualities, inhabitants can visualise the space occupied with their own associations. Each individual engineers a space into that of their perception.

The function of a building, and the relation of usage affects its scent. The materials used, as well as the environment it is within.

Scent can play a more emotional, expressive, and even functional role in our everyday lives. This is especially noticed within vernacular buildings whose scents reflect that of the natural, local materials.

*"When I design a building, I frequently find myself sinking into old, half-forgotten memories and I try to recollect what the remembered architectural situation was really like."*

"Looking back it seems as if this was the only room in the house in which the ceiling did not disappear into twilight; ... a smell of oil paint issued from the kitchen cupboard. Everything about this

kitchen was typical of a traditional kitchen. There was nothing special about it. But perhaps it was the fact that it was so very much, so very naturally, a kitchen that has imprinted its memory indelibly on my mind. The atmosphere of the room is insolubly linked with my idea of a kitchen."

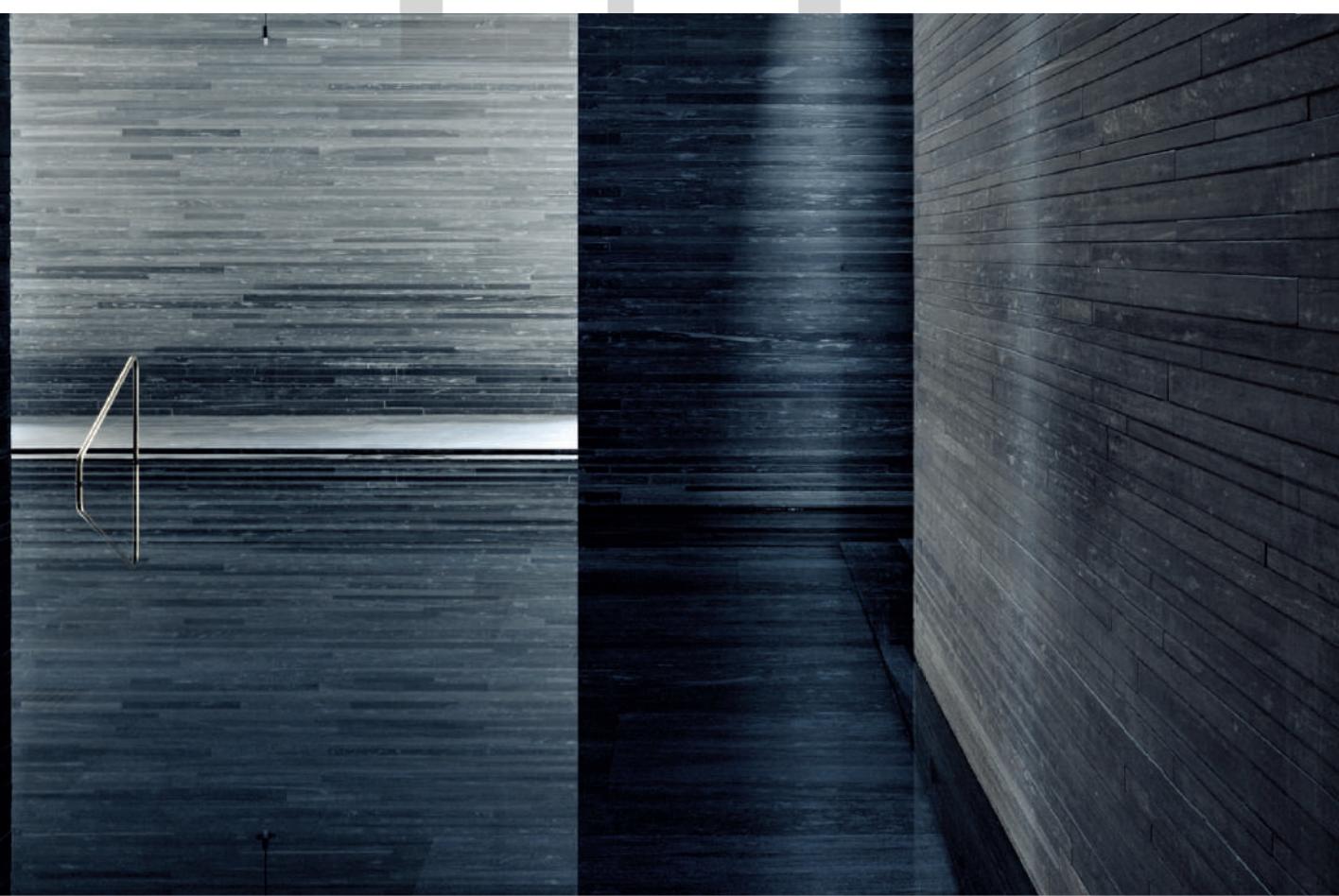
Zumthor emphasises sensory aspects of architectural experience. He stands behind the idea that as an architect, one must map out and measure a space through sensual qualities. It is the act of bringing forth impalpable messages making them physical. Architecture serves as an expression of inner impressions in the form of utilitarian scopes.

Zumthor's Vals spa does so by appealing to all senses. This has been a growing interest in the world of architecture; Construction is orchestrated so to enhance the inhabitants sense of embodiment.

Urban planning is focused on physical guidance and movement aiding in journey and transport; singularly, structures are to be designed to benefit the individual creating a space of comfort and ease.

Zumthor says:

A focus on reviving memory and the vibrant atmosphere pervaded by the simple presence of things should be embedded into the design process.





# Haunted Architecture

In this article we will be exploring what predetermines a space to feel haunted, what transforms architecture to distorted and indelible?

By Bobbie Emilia

What qualities lie behind certain spaces that sharpen our senses and send butterflies to our stomachs? What defines an architectural environment as a place of dread and foreboding? Could it be that the passage of time has engraved a sense of neglect upon it? The lack of light, colour and comfort, or something else entirely that cannot be given a tangible explanation?

We have all heard stories of haunted houses and spooky cemeteries - places where the dead have left an imprint of their soul to spook generations of gullible children and wise adults alike. The power of story telling continues to inspire multitudes of people from all cultures to revel in the mystery of the occult - the paranormal industry is thriving, attributing haunting sensations to ghosts or spirits, which are so often bound to specific locations.

Indeed, ghost and horror stories commonly begin with a depiction of the setting, the literal place to form the corporeal backdrop for the super-natural and often terrible events befalling characters. It is these liminal places, their description evocative of familiar

locations yet profoundly 'other' in their effect on a visitor, that arguably are the foundation of the ghostly experience. The ghost tales fill the imagination with foreboding and anticipation of dread, while the real-life ghostly architecture is combination of unexpected sensations creating unease and a recognition of the qualities associated with horror and ghost tales. The two factors feed off each other, creating a cyclical sinister relationship.

"This arena of imagination,  
reality and dread I hereby  
name the Architecture of Fear"

DUN-DUN-DUUUHHHHHNNNN!!!

Scientists and paranormal researchers attempt to deliver a measurable explanation, based on human sensations, as to why certain buildings carry a sense of foreboding and fear.

One such explanation is the **Infra Sound Theory**. Humans can



hear sounds of up to 20,000 Hertz, but on average anything lower than 20 Hertz is undetectable to the human ear and is therefore called infrasound. Such frequencies are however detected in different ways in the human body, by absorption in the tissues and cavities that might produce changes within the heart rate, blood pressure & respiratory rate. This can result in disorientation or hallucinations, therefore creating a psycho-physiological response to the environment. Albeit, there is still little or limited evidence to support this theory, but nevertheless beware extraction fans and turbines, cited as culprits of subsonic vibrations.

Other possible explanations might be **charged particles**. Both positive and negative ions have been proven to affect physical mood. Negative ions (anions) can make us feel calm and relaxed while positive ions (cations) can cause headaches, depression and unease. Exposure to electrical appliances such as air conditioning units, radio and television transmitters and high voltage networks, often found in office environments, have potential to create such effects. Hence why poorly designed open-plan offices or studio spaces might not be the best places for your health, or for collaborative work for that matter.

These explanations are attributed to buildings that have become accidentally dreadful to their occupants, yet architects often intentionally create haunting spaces that might hint to a fleeting presence of a people, or express the loss of them. Peter Eisenman's Holocaust memorial is one such place which creates an allegory of loss. The seemingly rational, playful series of tomblike concrete blocks subtly slope, their ground undulates, creating various heights, glimpses and an overall feeling of disorientation and detachment from the human world.

In popular cinema, set designers often collaborate with architects

*"...dreadful anticipation and storytelling, layered with long historic references, renders real-life places into potential grounds for hauntings"*

to create a haunting backdrop for their movies. Terry Gilliam's movie Brazil, adapted from Orwell's iconic novel '1984', would not convey its meaning if not for the the sci-fi noir setting that, inspired from its precursors Metropolis and Bladerunner, invites the spectator in a dystopian futuristic urban environment that leaves no space for individuality, freedom or hope. The architecture oppresses, despairs, leaving the characters to potter in a sea of giant, brutalist concrete blocks, dominated by leaking air-conditioning units, ducts and fans. Similarly, in the cult movie 'Alien', the ambience of horror in the spaceship is depicted through dark, artificial spaces with winding corridors, flickering lights and dark overhead ductwork, an atmosphere of suspense designed to force the spectator into hyperventilation.



Architects like to play with nuances, evocations and hints, often creating buildings as pristine, perfected manifestos that transcends human habitation and thus stand autonomous. Nowhere is this better represented than in cathedrals. In attempting to reach the spiritual and the timeless, these spaces are thought out in a manner to enlighten, to elevate. However, they can equally oppress and render insignificant their inhabitants through exaggerated proportions, manipulated light or acoustics. In Gothic architecture, light is celebrated as a pinnacle of divinity and awe, yet many people associate 'gothic' with darkness and horror. This relationship has roots in the gothic novel - creating an atmosphere of suspense and fear, set amongst crumbling, drafty old castles, manors and churches. Forbidding portals, secret winding passages, hidden rooms, dark staircases and unsettling ornamentation appear possessed and become the author's instruments of fear. Corvin castle in Transylvania is one such real life example. Somewhere within its imposing dark stone walls, steep turrets, intricate gothic embellishment and horrible dungeons, the legend of Dracula was born.

The build up of dreadful anticipation and storytelling, layered with long historic references, renders real-life places into potential grounds for hauntings. Gothic castles, asylums and sanatoriums, abandoned houses and underpasses - they are cited in popular culture most likely to intimidate or be possessed by an unknown presence. Yet, I wonder whether this effect was their designers' original intention.

Buildings are created by people for people, thus anthropomorphic qualities are inevitably applied to them. As largely visual creatures, do we experience architecture through its purely aesthetic qualities, or do we rely on our gut sense more than anything? 'Gut feeling' can be a collection of sensual information being presented to us as a single answer or description, based on pattern recognition and past experience, rather than the myriad of smells, sounds, textures, pressures and tastes. There is a certain threshold when time and human inhabitation saturate a place or a building to a point where its original state is unrecognisable, where it transcends original architectural intent, becoming an altogether different entity with life and character of its own.

# The Organic Relationship: Man, Music & Architecture

How can the science and abstraction of music be translated to architecture.

**By Joe Ridealgh**

It is easy to take for granted the enveloping power of a church organ, the heavy noise seems to suppress the listener and grounds them in the presence of God. Music has the power to toy with a person's spatial awareness, and is strictly governed by the architectural surroundings. The relationship between architect and musician is something which has become key to design in history, our churches, concert halls and temples all share the same mathematical formula as that utilised by the composers of the times. Although at first the abstract form of music seems impossible to process quantitatively, it is this geometric relationship between the two forms that creates such rich architecture.

There is something profoundly tribal about humanity's connection with music, to this day the right pounding rhythm releases something animalistic, albeit not poetic in festival revellers. This intrinsic link of music and humanity is, however, more a mathematical formulae than an ancient hunger for movement. Perhaps one of the earliest examples of how this scientific musicality manifests is in the Brodgar stone circles – a ruin of rocks at precise angles. Brodgar is believed to have been a place for musical performance, an archetypal concert hall, much like Stone Henge. The placement of the rocks were governed by the natural laws of solar geometry and provides early evidence of mankind's obsessive linking of music and natural geometry.

Throughout the ages, humanity has treated music as sacred.

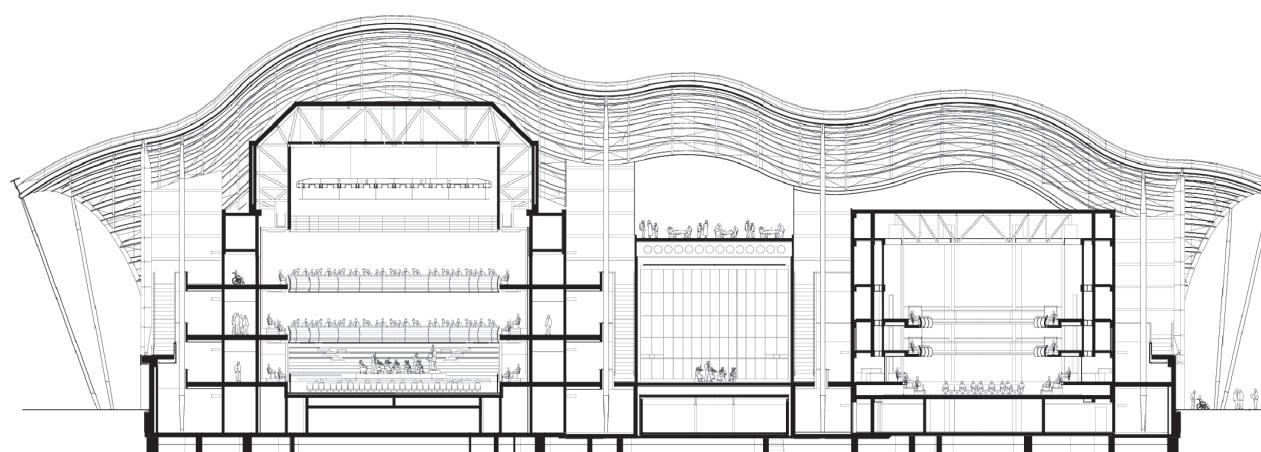
Yet this special appreciation extends further than a vernacular logic, most obviously into the realm of Renaissance architecture in Brunelleschi's fresco adorned Duomo di Firenze. This most sacred of places was designed by the architect in collaboration with the composer's command of musical form. It is believed that the strict order of classical music, the scale was integrated into the engineering of the dome, to create a perfect acoustic environment to exalt the chorus to heavenly heights.

'As Rudolf Wittkower argued, Renaissance architects saw the cosmic connections in simple ratios such as 1:1 (a sound repeating itself, or the architecture of a square room), and 2:1 (the octave, a string doubled or halved in length, or in building the double-square front of a temple).' Interpretation of Wittkower's theory by Charles Jencks in AR.

This relationship of Architect and Composer is something that has been key in the design of some of the most iconic religious buildings around Europe. The relative ratios of the arches of Notre Dame reflect the composer Pérotin's idea of lengths of note and basic rhythm. As Charles Jencks explains in 'Architecture Becomes Music':

'He could signal basic rhythms - Dum-ti, Dum-ti, Dum-ti, Dum – just as Gothic architects were working out complex alternate bar rhythms - A,b, A,b, A,b, A.'

In a modern day context, architectural acoustics are governed by far more scientific rules, something unfortunately becoming



Section through Foster + Partners Sage Gateshead.



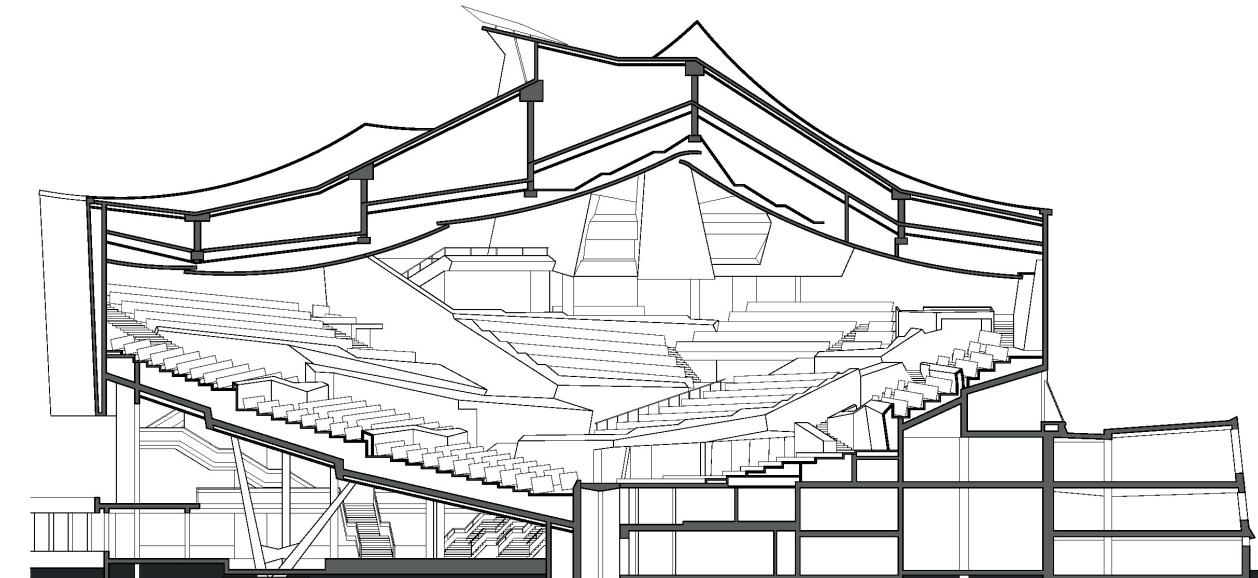
Norman Foster's visualisation of the Sage Gateshead.

far more obvious in the wake of Built Environment. Yet although restricting, these basic principals can provide a blueprint for creating beautiful acoustic surroundings. I had not appreciated this really until a performance last summer of the Eels in the acoustic chamber of the Sage Gateshead's Hall 1. The shuddering double bass resonated inside my body whilst a harmony of strings seemed to uplift the entire crowd.

**"how do you align the geometry of music with an aesthetic that portrays such a human response."**

This was a truly special experience that forced me to acknowledge the architectural science of creating something abstract and emotional. Perhaps this is the paradox of the concert hall, how do you align the geometry of music with an aesthetic that portrays such a human response. The result, as evidenced in the Sage and as well in the Walt Disney Concert Hall is usually a shell of abstraction, masking an interior of precisely engineered spaces.

It seems that few architects can achieve perfect organic 'harmony'



Section through Hans Scharoun's Berlin Philharmonie.

between the science and art of music. One architect who I, among others, believe can achieve this synthesis is Hans Scharoun. Despite working in the pressures of Nazi Berlin, Scharoun creates a space which allows abstraction whilst retaining the perfect geometry of music in the Berlin Philharmonie. With the acoustic expertise of Lothar Cremer, author of 'The Physics of the Violin', the science behind the music was fully exploited to achieve perfect acoustics in all parts of the hall. This obsession with acoustic performance in these spaces stems from the most basic idea of form born of function. The importance of this basic principle has also become evident in the showy world of modern architecture, with Jean Nouvel completely disowning his Paris Concert Hall after there were no acoustics tests on the building.

The relationship of man, music and architecture runs deep through history. It seems that people have always weighted the importance of music, desperately trying to understand how the organic nature of music can be harnessed and enjoyed. This most powerful of relationships becomes personified in Architecture. The scientific precision of the derived musical formula can still be expressed in an abstract emotional response to the music. Even the oppressive order of the Nazi regime bowed down to the natural dance of order and chaos displayed in Scharoun's Philharmonie, and from this perfect organic form, breathes perfect organic sound.



# The Sound of Silence

A consideration of anechoic chambers from an architectural perspective.

By Ross Ledsham

"Hello darkness my old friend / I've come to talk with you again"

Simon and Garfunkel once sang about the 'sound of silence'. Simon claims that he wrote this song in his bathroom, after turning off the lights. The connection of silence and light puts us in mind of Louis Kahn, and his exploration of being. Sight and sound are clearly the senses with which we most vividly perceive the world around us.

There is a place where you can experience silence; or to put it less romantically: -9 decibels. To put that into context: a quiet library is somewhere around 30 decibels. And when you consider that with every 3 decibels fewer the power of the sound is halved, you realise just how quiet that is.

This place - technically called anechoic chamber - is located at Orfield Laboratories, in Minneapolis. 99.9% of all sound is absorbed in the chamber, and this is achieved with three-foot thick fiberglass acoustic wedges installed on the floor, walls and ceiling, further double insulated steel walls and foot thick concrete walls. A suspended mesh floor enables entry to the space.

Our sense of sound is relative; usually we are surrounded by sounds, drawing our attention to events exterior to our bodies. When we are deprived of this exterior stimulation, our brain recalibrates, and our attention shifts to the interior, to within ourselves.

First, you become aware of the rustling of your clothes. Then, any fluids moving in your mouth or throat become obvious. Then you start to hear the blood flowing through your brain. Some people

even claim to have heard their own heartbeat.

"Anechoic" means "echo-less". Echo and reverberation enables

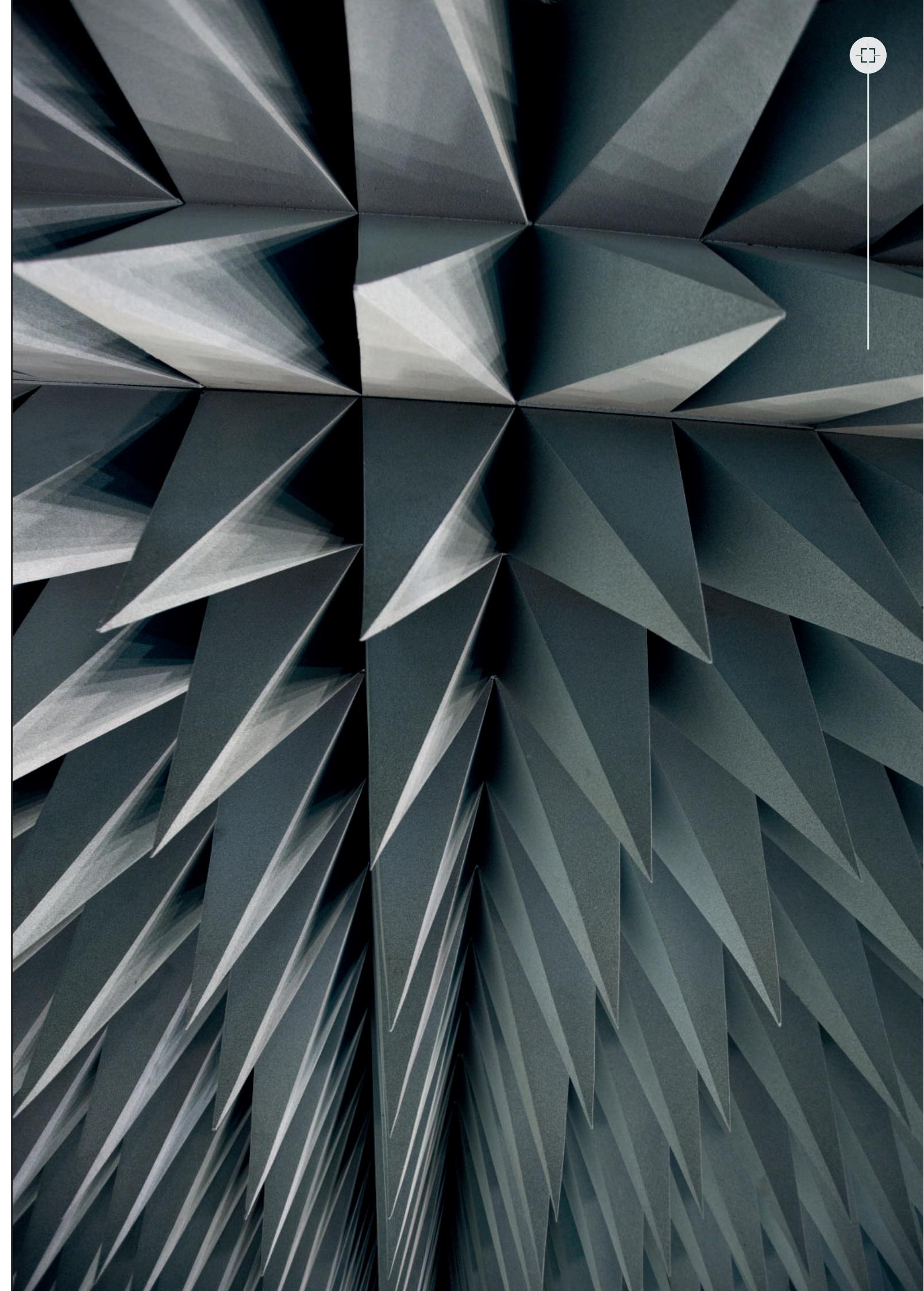
"There is a place where you can experience silence; or to put it less romantically: -9 decibels."

us to orientate ourselves in space and the absence of this sensation can have disturbing effects.

Of course, when the doors of the chamber are closed, there is no natural light reaching the space. This complete absence of sound and light is known to induce hallucinations. 45 minutes is the apparently the longest someone has been able to stay in the room.

The ability to hear your footsteps allows you to orientate yourself in space. The ability to see shadows on walls brings depth and understanding to the environment around you. In the anechoic chamber, there is zero light and zero sound. Kahn would probably not have regarded it as architecture – "A room is not a room without natural light".

Architecture can manipulate our senses, or deprive us of sense altogether. For some, sensory deprivation can be torture. It is the ultimate fear; it represents the abyss, the void. For others, a momentary escape from sound and sight can be liberating. Not to be seeing, hearing, almost not being at all.



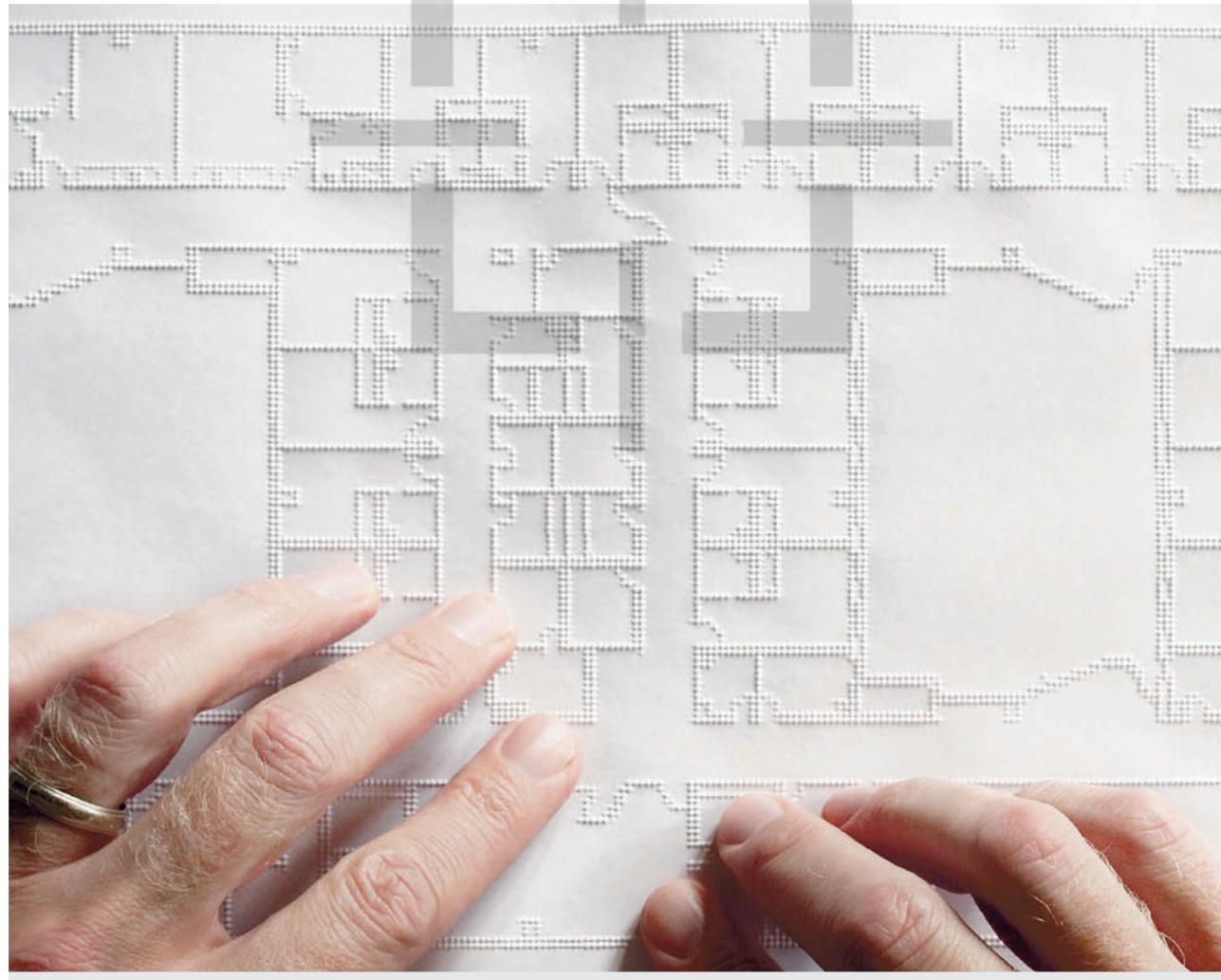
# Architecture for Senses: Losing Sight

Human existence gives identity to a place. A building is only fully celebrated when someone is in a space, experiencing it through all their senses.

**By Paulina Konkina**

Architecture is interpreted differently by blind people, who form a contrasting perception within their mind. Understanding of our own senses and their relationship with our surroundings gives an idea of how this world is perceived by the blind.

Architecture is traditionally concerned with the importance of sight; however, evolving methods of practice are developing a sensory approach, which concentrates on all senses simultaneously. This has resulted in establishing a more direct relationship between buildings and humans. Someone with impaired vision may go



Embossing technology produces raised profiles of 2D CAD drawings: enabling you to read a drawing with touch

through a process of mental illustration when in a new space - his mind is constantly under critical hypothesis, analysing and evaluating the function of a surrounding space through smell and sound.

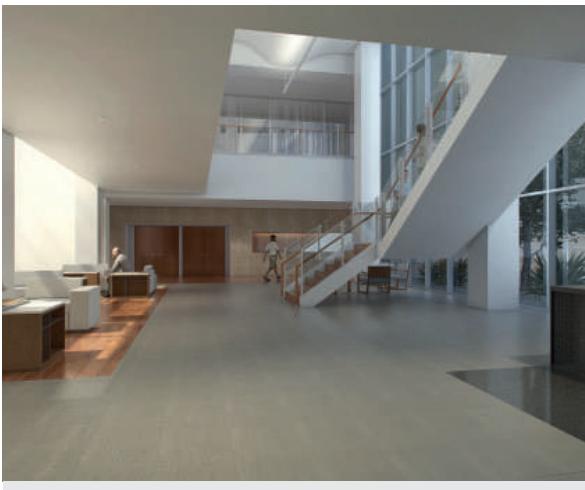
The most persistent memory of any space is its smell. Nostrils make us remember a forgotten memory. When we smell a particular thing in a building, it makes us remember and connect to a particular place with a feeling. This special feeling directly associates a particular hypothesis of this place and develops an image of the setting. The smell of a dusty room has its own scent

while the smell of a dry fish market is very precise. The finishing of a particular material can also impart smell. The scent can leave memories and assist blind, navigating simply by its intensity.

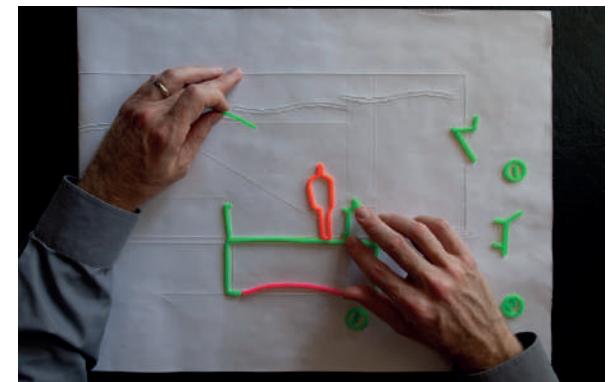
Sound creates an experience of interiority. Noise resonates and gives a pleasant feeling of protection in a given setting as the body feels at peace when it can feel the surroundings making or reflecting sound. The combination of form, volume, and acoustic treatment influence the way a building sounds. This encourages a blind person to experience things differently. There exists a different expression of sound in an empty room as it travels in its own unique way from one end to the other. Chaos in a crowd has a high intensity of sound, which is concentrated in small areas of the environment. Large rooms such as auditoriums have acoustic treatments on walls and ceilings to control reflections of sound, to transfer it to every corner in a controlled manner. Vibrations just disappear in large woods without any intensity over a long distance.

We may think that it is difficult to be aware of architecture without sight; and one may think it is impossible to design buildings when blind. Chris Downey is one of the few architects in the world who works in a practice and has no vision. He lost his sight seven years ago, as he started to notice blind spots in his vision. In 2008, Downey had a nine hour operation to remove a brain tumor, but when he woke up, the world was blurry. He could distinguish his wife, as colours and shapes but could not make out the details of her face. At first, this was a sign of normal recovery but the next day, the bottom half of Downey's visual field was dark, as though he were partly submerged in ink. The day after, even the blurred vision was gone, replaced by changing sensations of light and dark. By the fifth day, everything had gone black.

Within a month, Downey was back at the firm part-time. Since he could not use a cane well yet, he spent his days either in his chair or being led around the office by colleagues. However, soon a technology trainer he was working with found him an embossing printer—a specialty technology normally used in educational settings to print braille and tactile graphics. With some adjustments, Downey and his trainer got it to print floor plans from PDFs. The PDF format is common currency in the architecture



Downey helped design the Palo Alto Poly-trauma and Blind Rehabilitation Centre



Downey uses wax sticks to design space and create drawings

profession, and having a piece of technology that could read it meant he could participate without asking anyone to adopt another technology. However, Downey still had no way of getting his own ideas onto paper. The language of the industry he had worked in for 20 years was trapped on inscrutably flat pieces of paper or locked away in electrons on a screen.

The architect could work on any text-based programs with a help of his computer's audible interface, but it cannot help him draw in CAD programs. Downey uses the wax sticks as an informal tool for sketching on top of working plans. Architecture professors from the University of Maryland, College Park, had the students applying wax sticks to paper to create drawings and three-dimensional forms. The sticks warm to the touch and bend easily; they can make precise angles, and their tackiness makes them stick to paper. Downey says that as he walks through a building he designed, "I recognise it as my perception of the space, and it's been confirmed by my experience feeling the space, but I don't have that visual confirmation. It's hard for me to put it together with the same degree of clarity and absoluteness with all the colours and things in my mind. With it comes some degree of a question."

We think of architecture as a visual discipline, but vision is just one of our spatial senses. Close your eyes, after all, and the room around you is still there.



Downey helped design the Palo Alto Poly-trauma and Blind Rehabilitation Centre



# Light, Shadows, and Materials in the Architecture of Louis Kahn

Between shadows and light, between the defined and the undefined, between modern and ancient times for a deep search of order.

By Sara Medas

During the Twentieth century, this was the Architecture of Louis Kahn. In my opinion, although strongly rooted in the tradition of Modern Architecture, Kahn never forgot to look back at the ancient roots of architecture. Whenever I look at one of Kahn's buildings, I feel that it is possible to perceive a subtle underlining presence, which characterizes all his work. This is partially due to the effect that light and shade have in his buildings, as well as a simplicity and clearness, which bring all of his buildings to life. These elements combined make the beholder deeply aware of the timeless character of his architecture.

**"The interplay between light and materials becomes an extraordinary source to express the beauty and power of architecture."**

One of the core principles of Modern Architecture is that 'form follows function'. Few architects attempted to achieve something beyond just an expression of this, and for me, Louis

Kahn was definitely one of those. He is known for creating serving and served spaces that result in a clear organization of the plan. The served spaces are free from all kind of services, leaving the served spaces to fulfill their purpose. The plan of Esherick House in Philadelphia shows clearly and neatly an alternation of served, serving, served, and serving spaces.

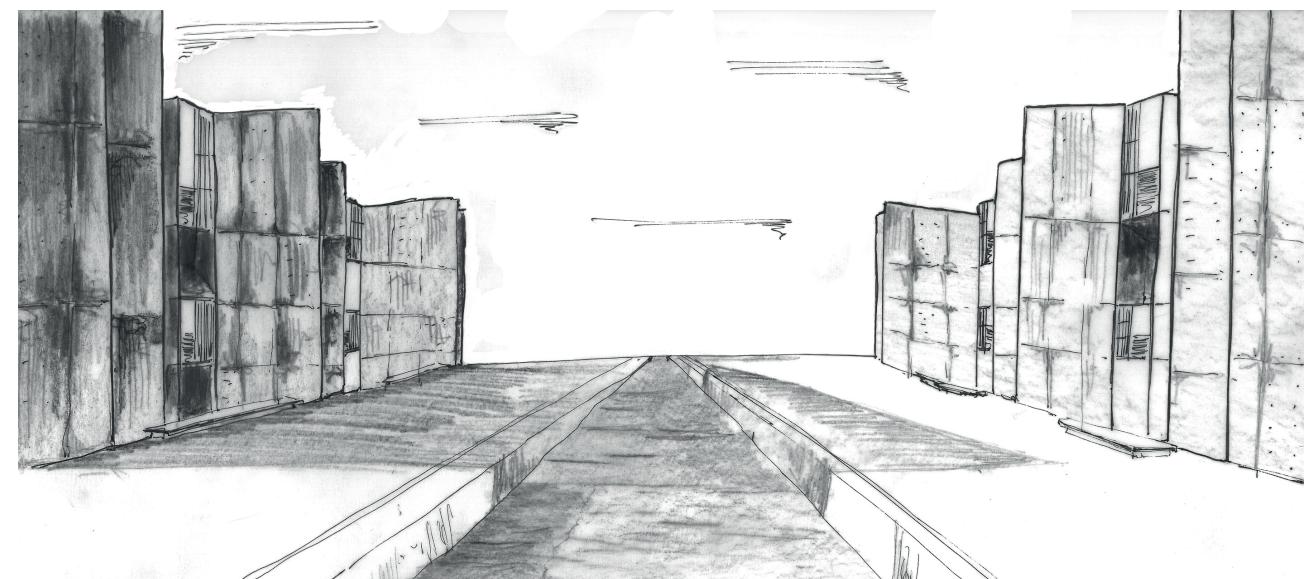
I feel that the beauty of Kahn's buildings comes from a subtle combination of a clear organization of the plan and a deep and constant relationship with nature. Kahn strongly believes that a building has to be functional. In believing this, he shows his agreement with Modernist Architecture.

The organization and study of the plan became an important process from an early stage of the design. It does not just deal with the solution of structural issues and with the organization of the spaces. It also deals with the effect that light and shadow could have on the design. A clear structural organization of the building gives a defined alternation of dark and light spaces inside the buildings, while also makes the building very easy to understand.

Kahn also takes inspiration from ancient architecture. I believe that Kahn must have surely looked at examples such as the ancient architecture of Egypt, Greece, and Rome as great precedents. I feel that the neat shadow cast by the big opening in the Pantheon in Rome is mirrored in the big openings in the National Parliament House of Bangladesh.



The Parthenon, Athens.



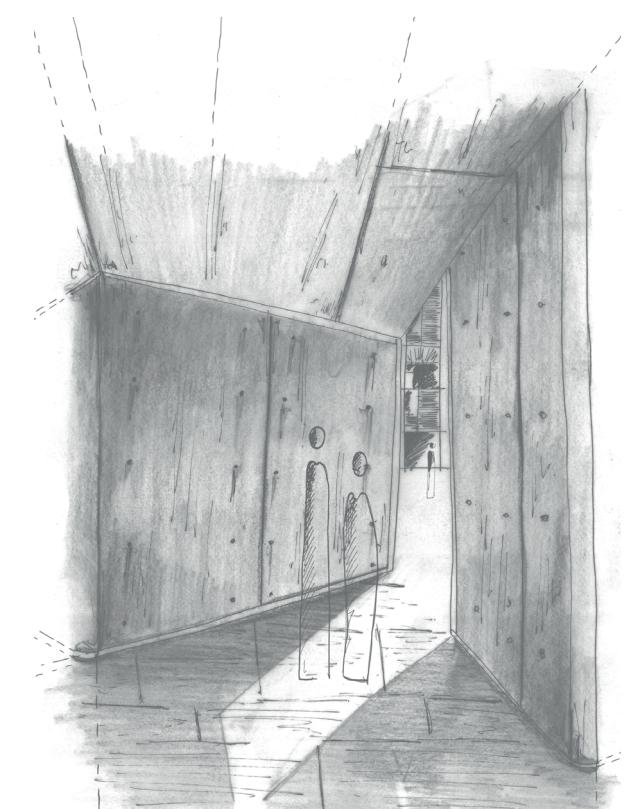
Louis Kahn, Salk Institute for Biological Studies, La Jolla, California.

Through all his architecture, concrete, brick, steel, travertine are the main materials used with a simplicity that goes along with the simplicity of the chosen forms. Once again, this shows how Kahn's architecture takes inspiration from the past. If we take the example of the Parthenon in Athens, and the Salk Institute for Biological Studies in La Jolla, California, I think you can find many similarities between the two buildings, regardless of their completely different architectural periods. Both buildings dominate the surrounding landscape. Primary materials characterize them. Their simple manifestation casts neat and deep shadows. It is also possible to recognize the influence of the rhythmical disposition of the columns of the Parthenon in the arcade of the Salk Institute. This simplicity makes the building feel timeless. Nothing seems out of place or order, and everything, from the little detail to the big one, finds the right place in the design.

**"Nothing seems out of place or order, and everything ,from the little detail to the big one, finds the right place in the design."**

The interplay between light and materials becomes an extraordinary source to express the beauty and power of architecture. The Kimbell Art Museum in Fort Worth, Texas, can be considered as one of Kahn's best achievements in terms of the use of natural light. Vaulted ceilings cut at the top so that rays of natural light penetrate into the building and subtly illuminate pieces of art. This brings the beholder's attention firstly towards the pieces of art, with the architecture itself resting as a subtle, yet beautiful, backdrop.

Whenever I look at any building designed by Kahn, I feel that the nature and function comes alive through a magic combination of simple shapes, a clear organization of the plan, and a deliberate use of materials. For me, this is demonstrated in the National Parliament House of Bangladesh. Simple shapes, sharp and deep shadows reinforce the relationship between architecture,



Louis Kahn, Salk Institute for Biological Studies, La Jolla, California.

# Film Review: Cathedrals Of Culture

Six directors came together in 2014 to produce a film where audiences are given a new insight into six fascinating projects.

**By Sonya Falkovskia**

"Architecture should speak of its time and place, but yearn for timelessness." (Frank Ghery). In 'Cathedrals of Culture' – a documentary by 6 directors - buildings are presented as exactly that, but perhaps in a more literal sense than most would case to expect. Six directors paired each with an exemplary piece of architecture present these unique buildings by personifying their inner voices to the big screens.

Buildings that talk? A concept perhaps more trivial when initially thought about, but within the first few minutes of the opening scene all reservations go out the window and the next 3 hours are a treat to the eyes and ears for enthusiasts and creative people alike.

Wim Wenders is the first to breathe life into architecture. The Berliner Philharmonie – notably Hans Scharoun's most celebrated work – is broken apart layer by layer to reveal the soul which lies under its golden skin. Winding shots following the interchanging routes within the building makes you feel like you are there, just meters away from the Orchestra itself. Speaking as someone who then visited the building a few months after watching the film, being there in person wasn't far off Wenders' representation. As the film delves deeper into the building's core numerous occupants are presented – giving an even greater sense that Scharoun's design is alive and well 50 years after its initial creation.

Next to be brought to life was the National Library of Russia. Perhaps the most experimental film of the six, Michael Glawogger's segment takes the audience back in time, away from the never-ending bustle of modern day living and into the



Berlin Philharmonie, Hans Scharoun, 1963, Berlin, Germany

slow pace life of the library itself. A female voice represents the building, where she quotes various examples of Russian literature – Tolstoy and Dostoyevsky to name a few – whilst the camera moves slowly through the narrow corridors past the unassuming library clerks, making you feel as if you are an intruder amongst the greatest literary figures from modern times.

Eerie could be chosen to describe the overall feeling when being brought through Halden Prison in Norway. Designed by Erik Moller Architects and HLM Architects, you are presented with a building, which doesn't look much like a prison at all. More you feel like you are being shown a luxury tour of a beautiful Scandinavian social housing scheme. However, this doesn't last long and you are brought back to the reality of the building when typical prison acts are presented. The prison being labelled 'the most humane prison' evokes this within the film. Whilst focusing on the architecture, the narration brings you just as close and personal with the inmates themselves.

Shortly after Norway we are brought to California in Khan's Salk Institute. The building's beauty is strongly highlighted in this segment where scenic shots comprise the majority of the building's representation. Unlike the previous buildings, the Salk Institute directly interviews its inhabitants making it more of a traditional documentation of the building. However, Khan's old interviews are incorporated and the understanding forgotten of the building as a result isn't superficial in the least. Giving perhaps a different impression on those who know of the building, Redford's segment presents the institute in a very appealing way as you want to be there in person to experience the space yourself.

Margreth Olin is next to take us on a journey through the inner workings of these cathedrals of culture. The Oslo Opera House



National Library of Russia, Yegor Sokolov, 1796, St Petersburg, Russia



Halden Prison, Erik Moller & HLM Architects, 2010, Halden, Norway



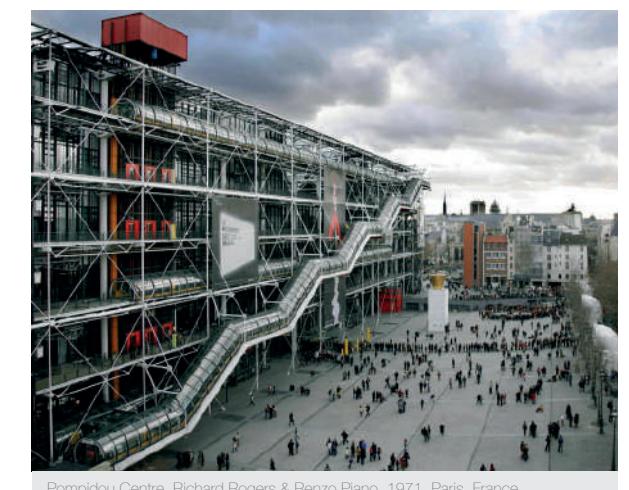
Oslo Opera House, Snøhetta, 2007, Oslo, Norway

narrated by Olin herself brings the space alive even more so than the previous examples. This feat is greatly aided by the vibrancy of people who are within the building itself. Dancers, performers and spectators alike are all shown to be unique – an aspect which is celebrated within this film. Shots of the performers at work both on and off stage bring the personal aspect to the table. The building itself is presented truly as a centre for culture where all kinds of people are brought together.

Finally, the Pompidou gets given its own unique voice. Karim Ainouz ends the succession of films giving a fresh face to this old

**"A film not just for those who know a thing or two about architecture, but for anyone who wants to learn about what makes spaces great..."**

giant in modern architecture. The energy of the building is what takes you on the journey from the time before opening where the narration breaks the silence behind its steel skeleton through the day where every inch of the building is providing something to add to the liveliness of the space. The art itself is given a voice, showing that the Pompidou thrives and lives off the temporary



Pompidou Centre, Richard Rogers & Renzo Piano, 1971, Paris, France



Salk Institute, Louis Kahn, 1966, California, USA



# The Architecture of Somewhere

Senses are a useful way to categorise spaces. But in doing so we shy away from the less tangible qualities of space.

**By Dan Innes**

In this edition, it is natural for there to be articles about each of the five senses, and their relationship to architecture. But there is something unsatisfying, albeit clear, about using senses alone when we try and describe the quality of spaces.

Imagine that you are reading a book for the first time. You might first admire the illustrations and the fonts, the shape of the letters, then perhaps feel the roughness of the pages. You might press your nose into the binding, and sound out the words with your mouth. These sensory experiences are rich and pleasant, but alone they lack meaning. Our brains have to take these words and process them in order to create emotion.

Kahn once said that "a great building must begin with the unmeasurable, must go through measurable means when it is being designed, and in the end must be unmeasurable." Yet senses alone are eminently tangible. We generally know what it is for something to be rough or smooth, lit or gloomy, or loud or quiet. I propose that, if Kahn is to be believed, there is an emotional aspect of space that transcends the senses.

In architecture, however, this last quality is often forgotten. Too many buildings are designed to be looked at, not felt, and usually from only a few viewpoints (the ones that the architect shows to the client in their renders). This crime has reduced much of today's architecture to a form of mediocre art, and makes our



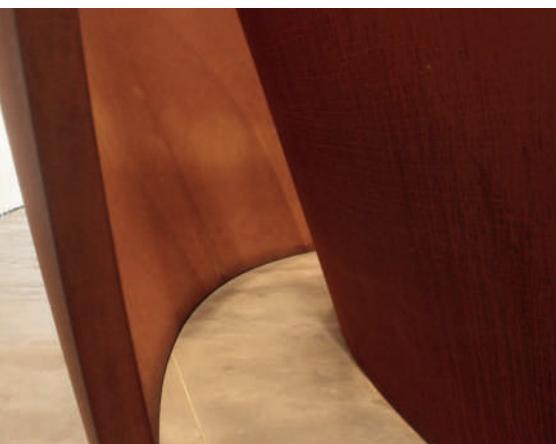
profession fully deserving of the disregard of the general public. So many of us are preoccupied with visual beauty, or efficient logistics, that buildings become either flamboyant, pretentious husks, or else depressing space-planning exercises that kill the souls of the people inside.

**"Too many buildings are designed to be looked at, not felt, and usually only from a few viewpoints."**

When designing spaces, what is surely more important is how they feel. The reason this is rarely described in writing or prioritised in design is because it is difficult to define or express. Architects and writers are afraid of being perceived as pretentious, because their use of language and images is often not sufficient to convey the intangible nature of 'feeling'.

It is for this reason that I am reluctant to cite an example, because I fear that writing only rarely, if ever, can produce a satisfying description of spaces. However, there has been one experience which was so powerful that it merits such a risk.

The space I am talking about is not a building, but a sculpture by artist Richard Serra. In a large hall in the Guggenheim, Bilbao, you



The entrances are tactile and immediately intimate.

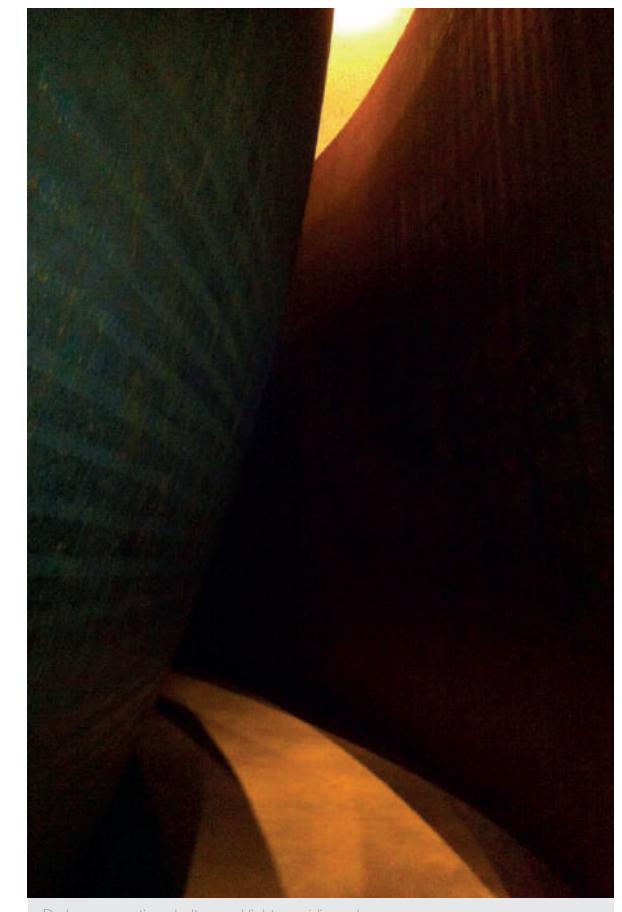
find in front of you a series of giant Cor-Ten sculptures. You see at first a narrow pathway. As you enter, and travel through, you run your hands along the rough walls, feeling the skins pulling away from you and pushing towards you, like the ebb and flow of a tide. In a footstep you go from dark to light, silent to booming, and in another you are thrown back the other way. The experience feels like a journey towards something. But that something is intangible, a nothingness, and it is only by stumbling through ignorance and uncertainty that you reach the centre: a pure, elliptical courtyard that opens towards the heavens. For a non-believer it was the closest I have ever felt to transcendent, it was as if everything you had endured and experienced suddenly made sense, as if you had dived into the ocean and finally emerged above the surf. It almost felt, quite simply, as if God had reached down and touched you.

**"A great building begins with the unmeasurable...and in the end must be unmeasurable."** Louis Kahn

In my opinion, I still cannot adequately describe this space. In writing, I doubt we can ever fully describe something so ephemeral. But, I hope, the description captures something of my experience, and my proposition: looking beyond sensory



Many of the sculptures converge on a calm centre.



Darkness creating shelter, and light providing release.

experiences is crucial in the pursuit of happiness, joy, or whatever creative ideal to which you and your work aspire.

For a moment, look around the place you have been reading this article; it was chosen by you for a reason. Was it because it looked beautiful? Or smelt pleasant? Or had a nice acoustic? I would wager that it went beyond these simple, animal pleasures. I believe it was because these senses provoked emotions, and those emotions culminated into feelings such as shelter, comfort, or joy.

In line with my doubts about writing, I do not believe that an article can change a person. But I believe a space can, and for me, Serra's sculptures absolutely have done. When you are lucky enough to experience beautiful spaces – because there will be times in your life that you will be – do not miss the opportunity to look beyond vision, feel beyond touch, and hear beyond sound.

But I would also urge you to look for it in the smallest places – in your favourite reading corner, umbrella, or toilet cubicle – every space has the potential for joy. Serra did not need a blank cheque nor a massive, complex design to create a beautiful space: only an emotional intent.

Having read this article, I would ask you to do one last thing: think about the feeling of your spaces before you rest on the crutch of pre-conceived, repeated, unfeeling ideas. All it takes is for us, as designers and observers, to open our eyes.

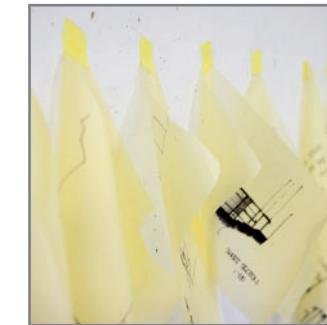
# A Quick Guide to Observing Architecture

By Lilian Lam



# Studio Playlist

Q Search



## PLAYLIST STUDIO SONGS

A collection of songs recommended to suit the many tasks carried out in studio. From steady rhythmic beats for hand drawing plans and hatches to motivational anthems for late night all nighters.

Created by paperspace | 10 songs

SONG	ARTIST	ALBUM	TASK
Fire Rides	MØ	No Mythologies to Follow	Three hours before the crit...
Another Brick in the Wall	Pink Floyd	The Wall	Hatching Textures
So Long, Flank Lloyd Wright	Simon & Garfunkel	Bridge Over Troubled Water	History and Theory
Bleeding Out	Imagine Dragons	Night Visions	Late Nights
Gotta Get Thru This	Daniel Bedingfield	Gotta Get Thru This	Photoshopping at 2am
Hold back the River	Jame Bay	Chaos and the Calm	Photographing models
i Need Some Sleep	Eels	Meet the Eels: Vol. One	Just being an architecture student
Send Me On My Way	Rusted Root	Cruel Sun/When I Woke	Working in Third Year studio
Technologic	Daft Punk	Human After All	Working in First Year studio
If You Leave Me Now	Chicago	Chicago X	When your computer crashes



# Asparagus and Broccoli Noodles

It's high time to ditch the microwave lasagne and detox with this post-crit green goodness.

By Bobbie Emilia

## INGREDIENTS

A bunch of asparagus, chop the heads off the stalks.  
A broccoli head  
4-5 mushrooms  
2 eggs  
1 pkg. of noodles  
2 tbsp Sunflower oil  
1 tsp salt  
2 tsp sesame seeds

## METHOD OF PREPARATION

Cook your chosen noodles. Beat the two eggs with the salt. Slowly add them to the hot drained noodles and stir them. The eggs should cook from the heat and coat the noodles. Heat the sunflower oil in a wok, add the broccoli floret and stir fry for 1-2 minutes on high heat. Add the asparagus stalks (chopped in strips) and the sesame seeds. Stir for another 5 minutes. Add the chopped mushrooms and the heads of the asparagus and stir fry for 2-3 minutes.



# Simple Chia Seed Pudding

A make in studio recipe that is not only yummy, but also healthy. Perfect for a nutritious breakfast or energy boosting afternoon snack.

By Tiffany Cheung

## INGREDIENTS

3 tbsp chia seeds  
1 cup milk of choice (soy, almond, coconut milk ...etc)  
Sweetener of choice (raw agave syrup, maple syrup, honey, coconut sugar etc)  
Optional natural flavouring: cinnamon, vanilla seed, raw cacao powder

## METHOD

Combine all the ingredients into a mason jar. Screw the lid on and shake for three minutes then leave to stand for 30 minutes. The pudding is ready when it has a soft jello consistency. Layer with endless combinations of your choice such as Fresh fruit, Nuts, Seeds, raisins, dates, or compotes.





# Where's Wickens?

Woah! The department has become over run with Skalgubbar residents. Can you find Matt amongst the madness?

By Harry Streuli

