

P A P E R S P [ ] A C E

P A P E R / S P A C E

T A P \_ E R S P A C E

T R P E R [ ] S P A C E

P A \_ P E R A T A C E

P A N S L A \_ P A C E

P [ ] A P E R S P A C E

P A P E R S P [ ] A C E

T R A N S P L \_ A C E

P A - P E R S P A C E

P A P E R S [ ] P A C E

T R A P S / S P A C E

P A P E \_ R S P A C E

P A P E R L A / A C E

T R A N S \_ S P A C E

P [ ] A P E R S P A C E

P A P E R S P [ ] A C E

P A P - E R S P A C E

P A P E R S P / A C E

P A P E R \_ S P A C E

P A P \_ E R S P A C E

T R A N S L A T A C E

T R A N S L A T I O N

# Table of Contents

## PaperspaceACE

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

## Colophon

Volume 5, Issue 9  
February 2018  
Students of the University  
of Bath receive paperspace  
twice a year

## Editorial Address

Paperspace 4ES Room 4.1  
Claverton Down Bath  
BA2 7AY

## Editors in Chief

Diana Smiljkovic  
Olivia Harrison

## Printer

Greyhound Printers  
Bristol, UK

## Supported by

**Feilden Clegg Bradley Studios** **Keep Architecture**  
**DKA**

## Contributors

Latifa Al-Khayat  
Ifrah Arrif  
Idil Basut  
Sonya Falkovskiaia  
Sebastian Fischer Stripp  
Maddi Gomez-Iradi  
Olivia Harrison  
Dan Innes  
Oliwia Jackowska  
Julia Korpaska  
Sara Medas  
Max Michl  
Marina Mylonadis  
Agata Nguyen Chuong  
Joe Ridealgh  
Olly Ridgley

Benjamin Rowley  
Josepha Schindler  
Diana Smiljkovic  
Iiris Toom  
Michael Tsang  
Harry Wyatt  
Amy Young

## Cover

Sonya Falkovskiaia

## Internal poster

Agata Nguyen Chuong

## Inward

- 06 Editorial
- 07 Introduction
- 08 Campus Curated
- 10 Peoples of ACE
- 12 Room
- 14 Berlin Study Trip
- 18 Travel
- 22 Room
- 24 @
- 26 Guess Who: Beard edition
- 28 Coffee Break
- 29 Article Swap
- 30 Foodies Guide to London on Placement
- 32 Poster

Diana Smiljkovic  
Sonya Falkovskiaia  
Dan Innes  
Ifrah Arrif  
Amy Young  
Oliwia Jackowska  
Dan Innes  
Idil Basut  
Amy Young  
Olly Ridgley  
Marina Mylonadis  
TU Delft: Pantheon//  
Latifa Al-Khayat  
Agata Nguyen Chuong

## Outward

- 34 Urban Sea
- 38 Nothingness
- 40 A Multilingual Conversation
- 42 Seem[N]est
- 44 The Bath Education
- 45 Designability
- 46 Translation of a Dream
- 47 Architecture and Animation
- 48 Untranslatable Words
- 54 A Turning Point for Social Housing
- 55 Modern and Vernacular
- 56 Photography Translating Architectural Space
- 58 Do You Need a Translator?
- 60 Politics in Architecture
- 61 An Ode To Translation

Diana Smiljkovic  
Sara Medas  
Julia Korpaska  
Iiris Toom  
Sebastian Fischer Stripp  
Harry Wyatt  
Maddi Gomez-Iradi  
Michael Tsang  
Agata Nguyen Chuong  
Amy Young  
Benjamin Rowley  
Sonya Falkovskiaia  
Joe Ridealgh  
Josepha Schindler  
Olivia Harrison



Feilden Clegg Bradley Studios is an architectural and urban design 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!

[fcbstudios.com](http://fcbstudios.com)



Hayward Gallery, Southbank Centre, London

FCBStudios have designed the renovation of the Hayward Gallery to transform and modernise the cultural venue for generations to come. As part of the restoration the building's 66 iconic pyramid rooflights and ceilings underneath have undergone a complete redesign and now allow the galleries to be flooded with controllable natural light.

# Editorial

We live in a constant mode of translation; a perpetual path of conversion into other forms. Translating our thoughts into actions, into words, into reality; interpreting our surroundings in our own manner which varies from each individual to the next. You see, these words I write are not the same as the words you read and as Ken Lui beautifully states “And yet, whatever has been lost in translation in the long journey of my thoughts through the maze of civilization to your mind, I think you do understand me, and you think you do understand me. Our minds managed to touch, if but briefly and imperfectly.”

The theme came upon us at the moment Paperspace was handed down from Issy Spence our previous editor to myself and Olivia Harrison; how could we evolve the magazine as the student body evolves as well? and so we present an issue dynamic and versatile in its content and presentation, an issue translating our thoughts onto paper.

The articles touch upon a plethora of subjects; the inward articles vast in explorations of what it is to be an architecture student at the University of Bath; be it the spatial portrayal of a student through their ‘Room’ or their encounters on their ‘study trip to Berlin’. The outward articles expand into subjects past the realms of our architectural education; ‘Politics in Architecture’ compares the Khrushchevka built in the Soviet Union after WWII to the suburbanisation of America during the same period, whilst ‘Architecture and Animation’ colourfully depicts Studio Ghibli’s fantasy worlds. Language is explored as ‘Untranslatable Words’ are elegantly portrayed stirring a sense of emotion through photography. All articles become an interwoven translation of the collaboration between each writer and their topic as well as the Paperspace body as a whole.

The involvement and dedication of the people who contributed to this magazine renders an immense sense of happiness and inspiration in me. What a beautiful thing to have, a platform to share ideas, to experiment and to discover your own voice. Having been a part of Paperspace since first year, I can say that it has helped shape me into who I am, discovering my love for the written word, and giving me the opportunity to expand past the fields of our architectural education into a multitude of different topics and affairs. Entering this academic year I have the privilege to write this editorial with nostalgic humbleness and utter happiness of what the past four years have taught me. I wish to thank all those who have helped make this magazine and who have helped build such unforgettable memories. Thank you so much and I hope you enjoy this issue.

Editor in Chief of Paperspace,  
Diana Smiljkovic

# trans - lation

/tra:nz'leɪʃ(ə)n/

*‘The conversion of something from one form or medium into another.’*

Change, evolve, interpret all belong to a series of translations. Be it in space or in words, everything undergoes a state of change — tangibly or intangibly. Recognising a translation brings us to recognise our own developments.

An anthology of voices translating their surroundings.

# CAMPUS

Curated



# Keep Architecture

Keep is a Bristol based practice specialising in architecture and masterplanning. We work closely with a variety of clients to create high quality residential, commercial, retail and mixed-use schemes.

2.6 Temple Studios Bristol BS1 6QA • tel. 0117 325 0359 • info@keeparchitecture.co.uk

[www.keeparchitecture.co.uk](http://www.keeparchitecture.co.uk)



## DKA IN NUMBERS...

FIND OUT MORE AT [WWW.DKA.CO.UK](http://WWW.DKA.CO.UK)



**25** years since DKA opened its Bath studio on the Kennet & Avon Canal

**2020** target opening for the University of Bath IAAPS project; DKA are technical architect

**23** members of staff and growing!



University of Bath alumni currently working at the practice, including two Directors

**13** DKA Award winners for the most inspiring computer-generated images from the Architecture end-of-year show

**16** our current projects span 16 counties from Devon to Yorkshire

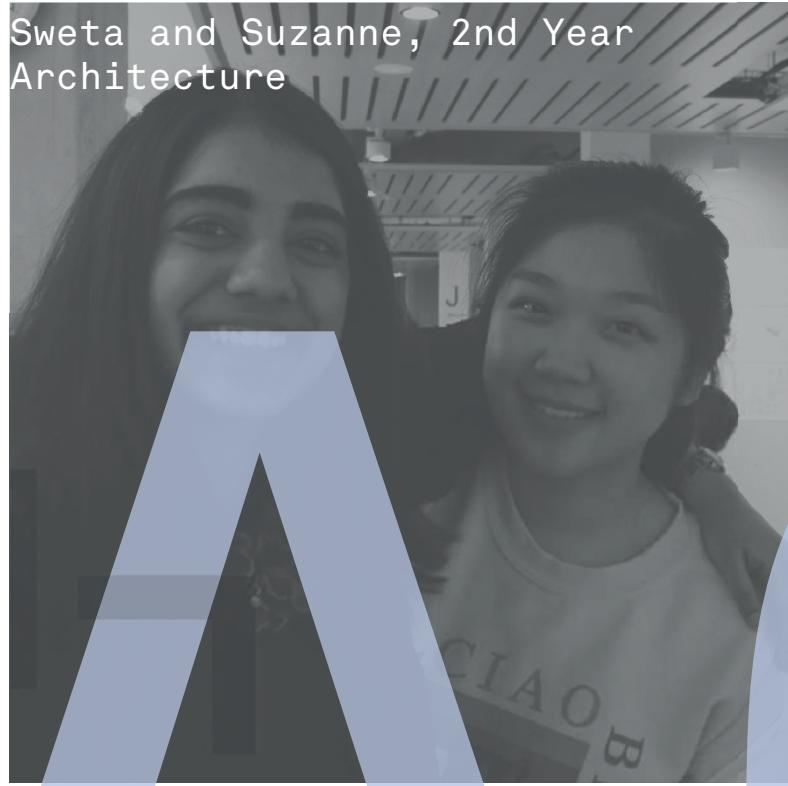


"Are you looking forward to the Christmas Break?"  
 "I am, but our break begins almost a week after the students so we'll be here working when everyone else is gone."

**Dr. Juliana Calabria-Holley,  
Lecturer**



**Sweta and Suzanne, 2nd Year  
Architecture**



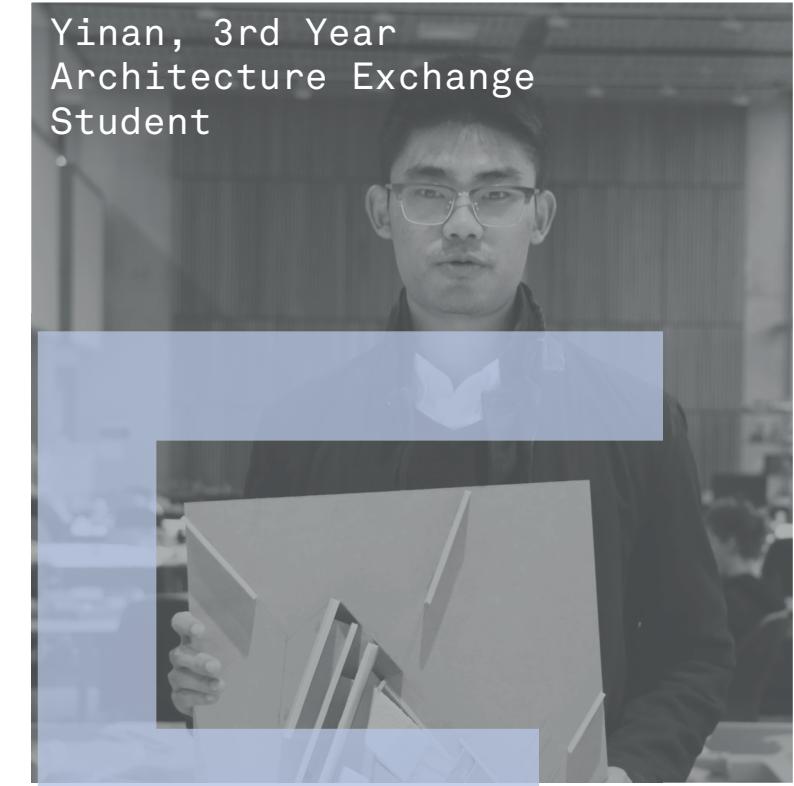
"I'm making a plaster mound for an experimental theatre project set in Berlin. This is the first time I've properly used the workshop even though I'm already in 3rd year!"

**Kim, 3rd Year Architecture**



"I study a masters degree in Finland but I'm here for an exchange year. I feel like students here work so hard here. I mean, the level of work here exceeds a lot of final year work I've seen elsewhere."

**Yinan, 3rd Year  
Architecture Exchange  
Student**



**Jade, 1st Year Architecture**

"Curves are difficult to execute."

"Never skip wedge day."

**Tom, 4th Year Architecture**



**Miles, Workshop Staff**

"I joined Bath 2 years ago... just in time for the brand new workshops!"

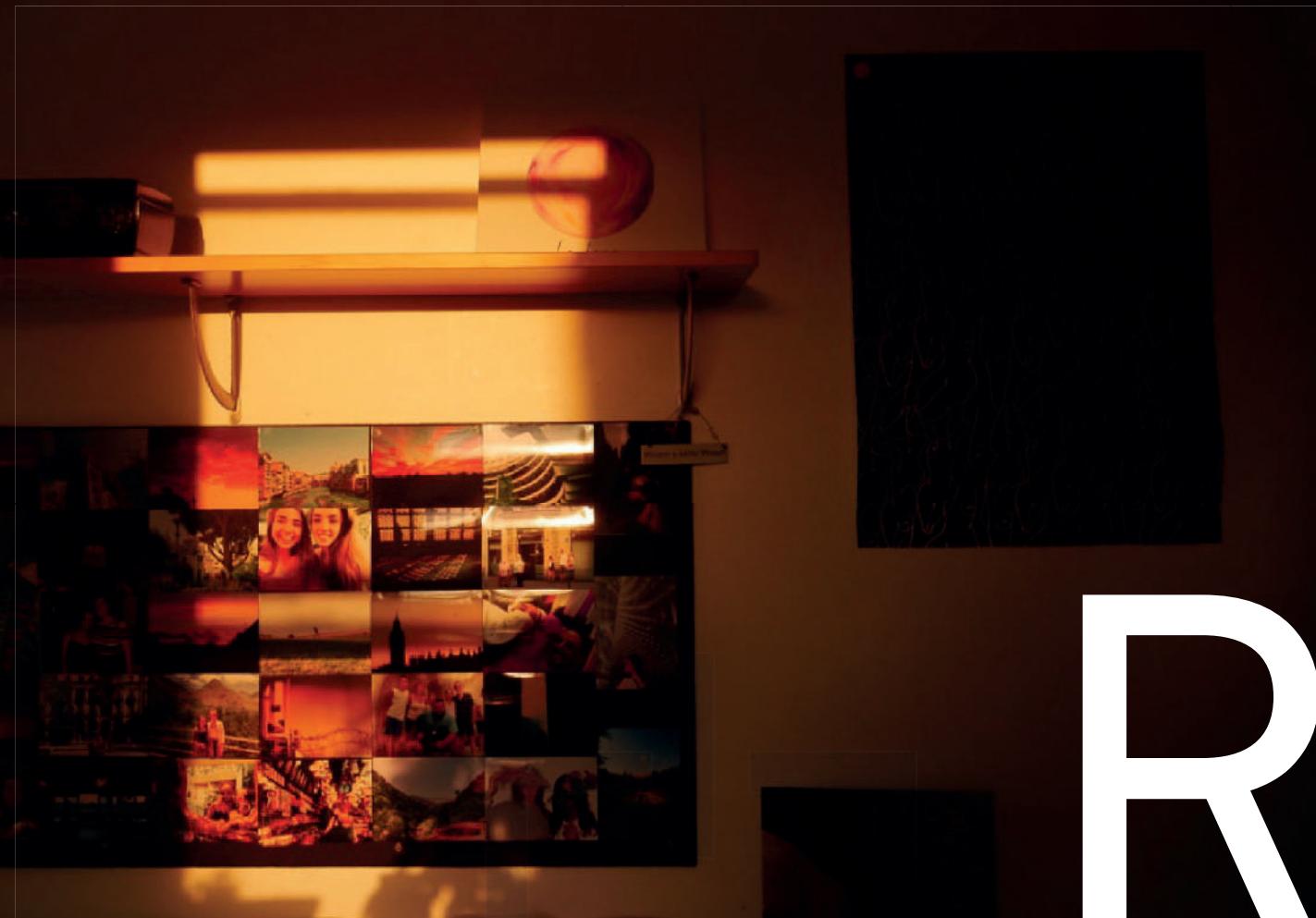
**Pierre, 1st Year  
Architecture**

"What do you hope to achieve with your degree?"

"What degree am I doing?"

"Architecture..."

"So... I want to be an architect. Logically."



Li-TOM



Room:  
Amy Young  
[1st Year Architecture]

RO  
M



# BERLIN

3rd year STUDY STUDY STUDY STUDY STUDY STUDY STUDY STUDY

Walking on the streets of Berlin you notice the wide roads and pavements, informal urban spaces, informal housing, an incredible architectural mishmash of buildings from different times and different worlds. You soak in the atmosphere of the vibrant history of this city.

- And you sketch; sketch till your hands freeze to stiffness. You want to capture everything – with your camera, with your pencil, with your feelings.

The brief for an experimental theatre in Berlin made us all actors and theatre directors, writing scripts and practicing during the mornings. Each of five groups produced a short performance based on movement, sound and interaction with the audience. We moved around a workshop theatre – from courtyard to one room, to another room and courtyard again, depending on the performance spaces that each group chose. Some groups were inspired by the theatre of cruelty, some used the audience as a part of their performance, but despite all, we mostly used our intuition to produce those performances. All were successful. This long moment of silence bonded us as a year and left inspiration lingering in our minds.





colour / hong kong



Dan Innes



colour / andalucia





vertical enclosure / andalucia



Dan Innes

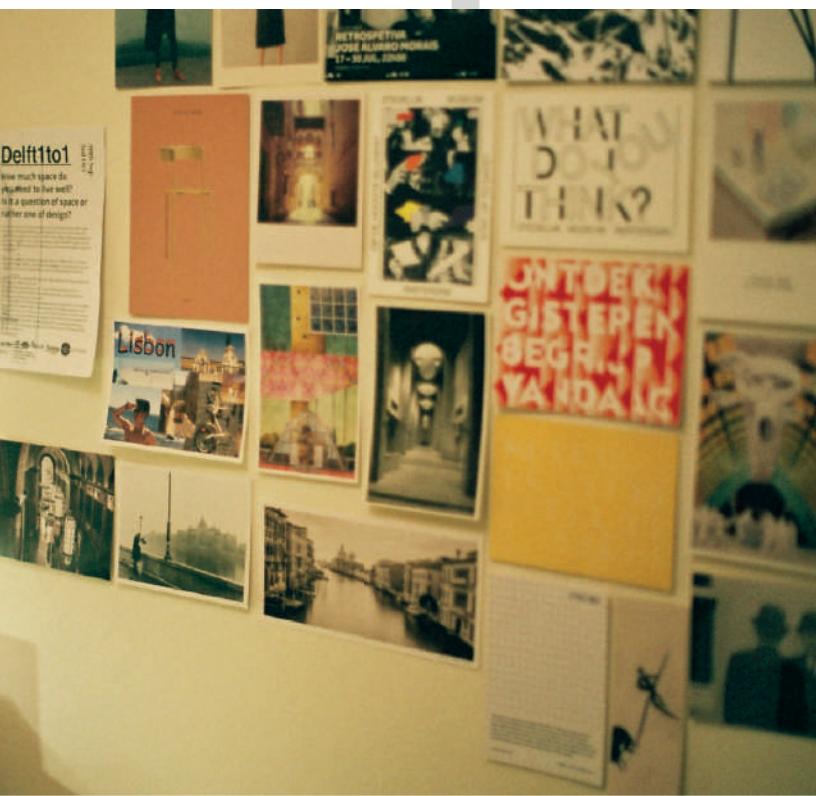


Dan Innes

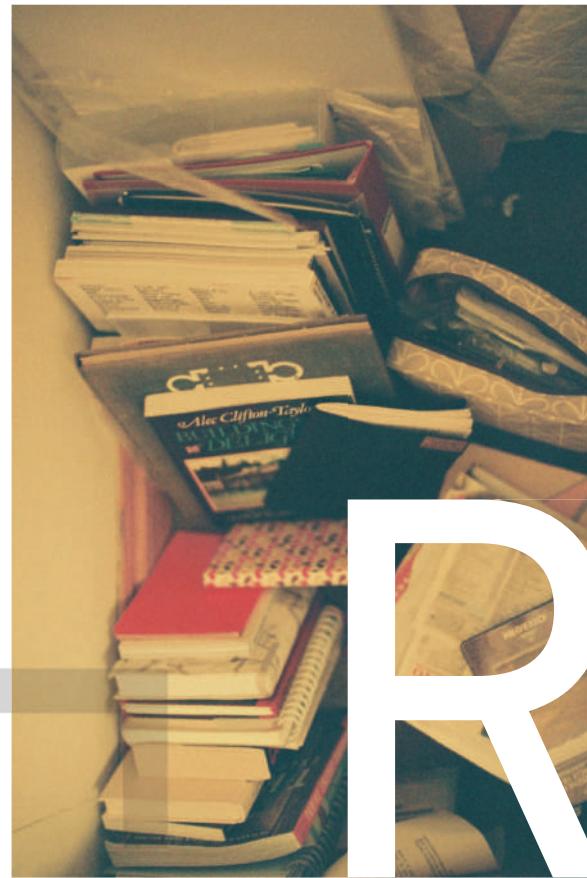


vertical enclosure / hong kong





# FROM



# TO



Rooms:  
Olivia Harrison  
Diana Smiljkovic  
[4th Year Architecture]

**LauraLombardi**

Laura Lombardi is a designer living and working in Brooklyn, New York. Her eponymous label was established in 2010. All items are proudly made by hand in New York City from new, recycled, and found materials.

**\_Ingo\_1**

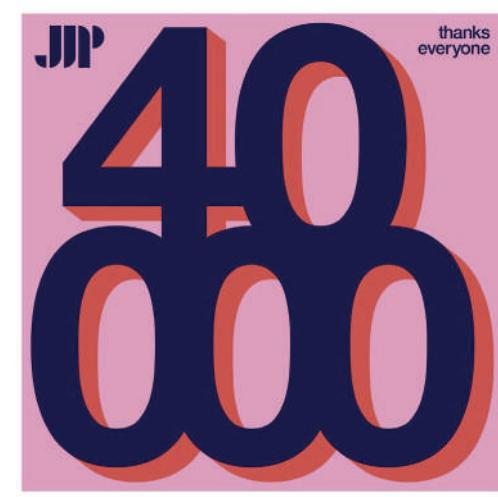
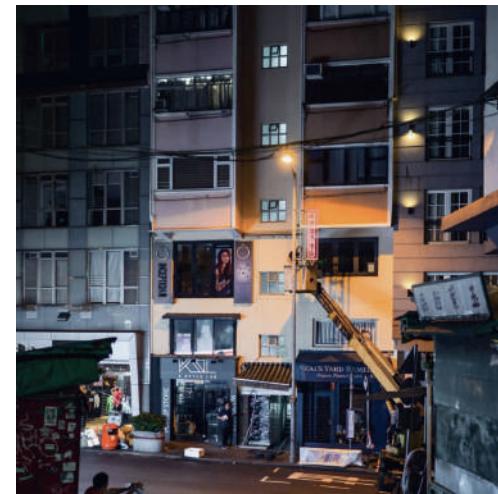
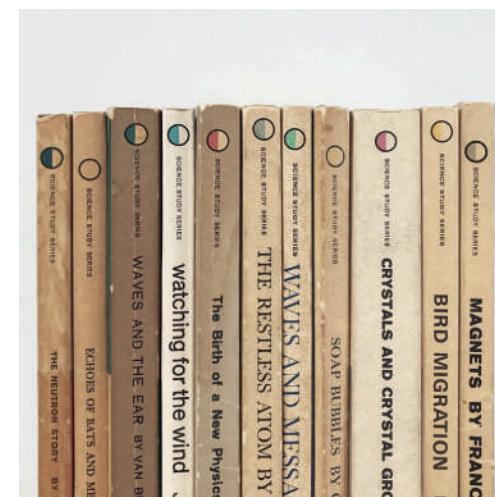
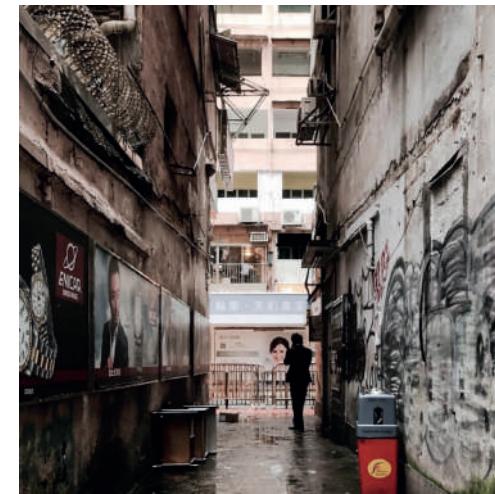
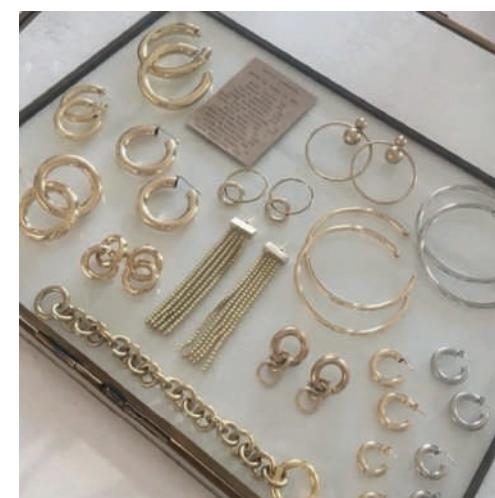
Hues of pink, blue and white, the pastel theme to the graphics created by Ingo are always beautiful and elegant. The artist from California regularly releases their work, with short and simple captions.

**Kingymak**

A photographer and architect from Hong-Kong, documenting urban life in his city. The photos are vibrant and busy, showcasing the complexities of an urban environment and the layers of architecture woven within the streets.

**montagueprojects**

Julian Montague is a Buffalo, N.Y.-based artist, graphic designer, illustrator, and photographer. He employs his design, illustration, and photography skills in a series of art projects that explore the peripheral features of the domestic and urban environment.





# GUESS WHO?

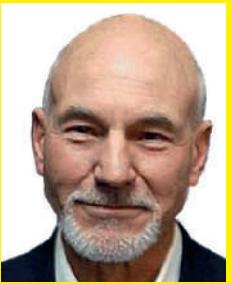
By Olly Ridgley

## BEARD EDITION

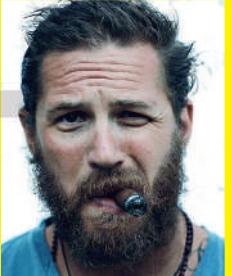
Match the beard to the building



Only one word is capable of truly encapsulating Anne Hathaway's Cottage, and that word is 'delightful'. Likewise, the kempt beard of Sir Pat here politely screams tea cakes, fire places and pruned hedges. Everything is going to be okay.



A



B

A man of many beards, Tom has made a living from playing wild, manly characters. 'Old time-y macho' deserves to be an architectural style in its own right, typified by remote log cabins, Brexit and the kind of pubs you don't order food in.



C



Bold minimalist shapes and lots of polished surfaces.

Experimental explorations used to enhance the artists' understandings of equally respectable subjects. One is a detailed study in the field of materiality, construction and philosophy, the other is a building in Finland.



D



E

The cosmetic untruths of Bath's Southgate retail area fit surprisingly well into the era of Donald Trump. It is architectural Fake News. An easy target for lazy metaphors, it simply should not exist, like a Hagrid beard on a baby.



F

While it may look dilapidated at first, humanity can learn a lot from the facial hair of Keanu 'Good Guy' Reeves. Forget the paparazzi and mean people on the internet, imperfections are cool. This beard is the essence of Keanu Reeves, which also makes it the best on this list.

Olly Ridgley

**OMG!**

1

2

3

4

5

6

A 3, B 6, C 2, D 4, E 1, F 5

Answers

27

# Coffee Break

No one loves coffee as much as architects. The simple coffee bean has played an important role in cultures worldwide, influencing people's lifestyles in different ways.

The first coffee house opened in Damascus in 1530 and shortly after this fledgling coffee culture spread to Europe and beyond. Some 500 years later, it has transformed the way in which people socialize, engage in conversation and tell stories. Whole rituals or events revolve around the preparation and enjoyment of coffee. This is a little insight to the diversity of coffee culture that exists outside the studio.

The coffee plant called coffee arabica originated in Ethiopia as early as the 10th century. The Ethiopian legend says that coffee was first discovered when a goat herder noticed his goats were particularly agitated, jumping around on their hind legs after eating 'berries' from a nearby bush. Curious, the shepherd bit into this mysterious berry and felt the energising effects and summoned a monk from a nearby monastery to share his discovery.

However the monk disapproved of the powerful berries and threw them into a fire. The fantastic smell of the roasting beans attracted the entire village to try them. The monks then found the uplifting effects from the coffee bean beneficial to keeping themselves awake during prayer and hence coffee became an important part of their spiritual ritual.

From Ethiopia coffee spread to Yemen where it was also used as a spiritual intoxication when chanting the name of God. From Yemen coffee spread to larger cities, such as Damascus, Mecca Cairo, Baghdad and eventually to Constantinople in 1554. Turkish coffee is the finest grind of coffee powder, it is prepared unfiltered which means it is drunk with the grounds. It is made by placing the powder with water and sugar in a copper saucepan (cezve) that traditionally is heated on a bed of hot sand and froths once heated.



**Irish coffee**  
Served with Whiskey and whipped cream.



**Espresso**  
An Italian take on coffee. It literally means 'when something is forced out' referring to how boiling water is forced through the pressed coffee.



**Greek Frappe**  
Invented by a Nescafe employee by accident in 1957 who couldn't find any hot water to make his usual instant coffee so decided to shake the powder with ice and water - making a foamy ice cold drink.



**Kaffest**  
A traditional coffee from Finland, usually enjoyed with cheese curds in the hot drink.



**Cafe de Olla**  
Traditional Mexican coffee served with a cinnamon stick and in a clay mug which is believed to enhance the coffee's flavours.



**Cafe Bonbon**  
Originally from Valencia. It uses espresso and condensed milk at a 1:1 ratio. It is usually served in a glass to achieve the visual effect of separate bands of colour but it is stirred before consumption.

# recently graduated#

Article Swap with TU Delft magazine:  
[Pantheon//](#)

For my graduation project I investigated the creation of a "sustainable" international air hub in the Caribbean region. The aspect of sustainability has multiple implications not only obvious ones such as electricity or carbon footprint, but also social, economic and cultural.

The task of the project quickly became very complex. Apart from designing new airways, taxiways and aprons, phasing the construction and researching the economic feasibility, I also had to make sure that the airport became the cultural gate to Cuba and a symbol of their identity. Based on their historical cultural heirloom, I devised a concept where passengers entering Cuba would pass through the different Cuban architectural/cultural phases and passengers leaving the country experienced a transition from the identity formed by the airport to a global identity.

After a universal architectural concept was established, in order to achieve a certain level of feasibility, I turned towards multiple simulations software. First, in order to accomplish an efficient airplane taxi time, the design of the taxiways was simulated using multiple CAD software. The next simulation was done upon part of Havana's infrastructure. I needed to know how the increase in passengers flow would impact the already outdated Cuban road/high-ways. Therefore, multiple simulations were done upon the routes towards the airport and mainly on the existing and newly designed junctions around the airport. At the same time, I also made an infrastructural concept of renewing the railway path from/towards the airport. After I finished the infrastructural design and I established all the in- and out-flows, I went back to the architectural concept and within a global terminal masterplan, I created a simulation of passenger flows. This process, also known as behaviour modelling, was necessary in order for the final architectural design to have an efficient passenger movement. Therefore, within a passenger flow simulation software I assigned multiple actors, such as family

members (that drop or pick up), passengers (who have checked in or not, with luggage or not), staff members etc. During the simulations, certain patterns started to appear. These patterns eventually became architectural embodiments. Of course, after the design was finalized, I reran the simulation in order to see if it was as efficient as designed.

After completing all the simulation and having a sound base for an architectural design, I started shaping the terminal. In order to tackle this task I relied heavily on physical models as well as on sketches. Nevertheless, as soon as my design reached its full size and scale, of 1 km by 500 m, it was very hard for me to work within the realm of scales models, I needed to experience the design on a 1:1 scale. This is why I turned to the tools provided by the Virtual Reality environment. With the help of our faculty VR Lab led by Arno Ffreeke and Arend-Jan Krooneman, I was able to place an immense amount of CAD information in Virtual Reality, the entire airport design. Then at certain phasing moments, I used the VR model in order to design and make certain geometrical and material changes. Most of the time I was doing these changes alone, nevertheless, at some points I also did this together with my tutors. While they were experiencing my design in VR, they could point out certain areas/details that needed to be tackled.

This entire process of research, simulation and design resulted in my final graduation work. //



# Foodie's guide to London on Placement

One of the most exciting aspects of moving to London is the exploring the myriad of cuisine options, now that you can afford to eat well.

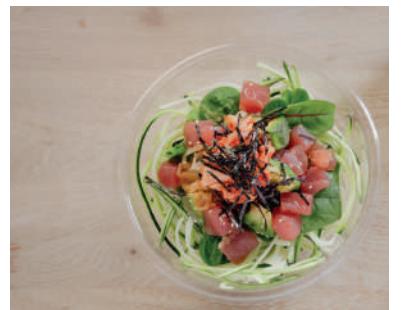
Here's a growing list compiled over two work placements- bon appetit!



① Flat Iron



- ② Stax Diner
- ③ Jinjuu Soho
- ④ Pizza Pilgrims



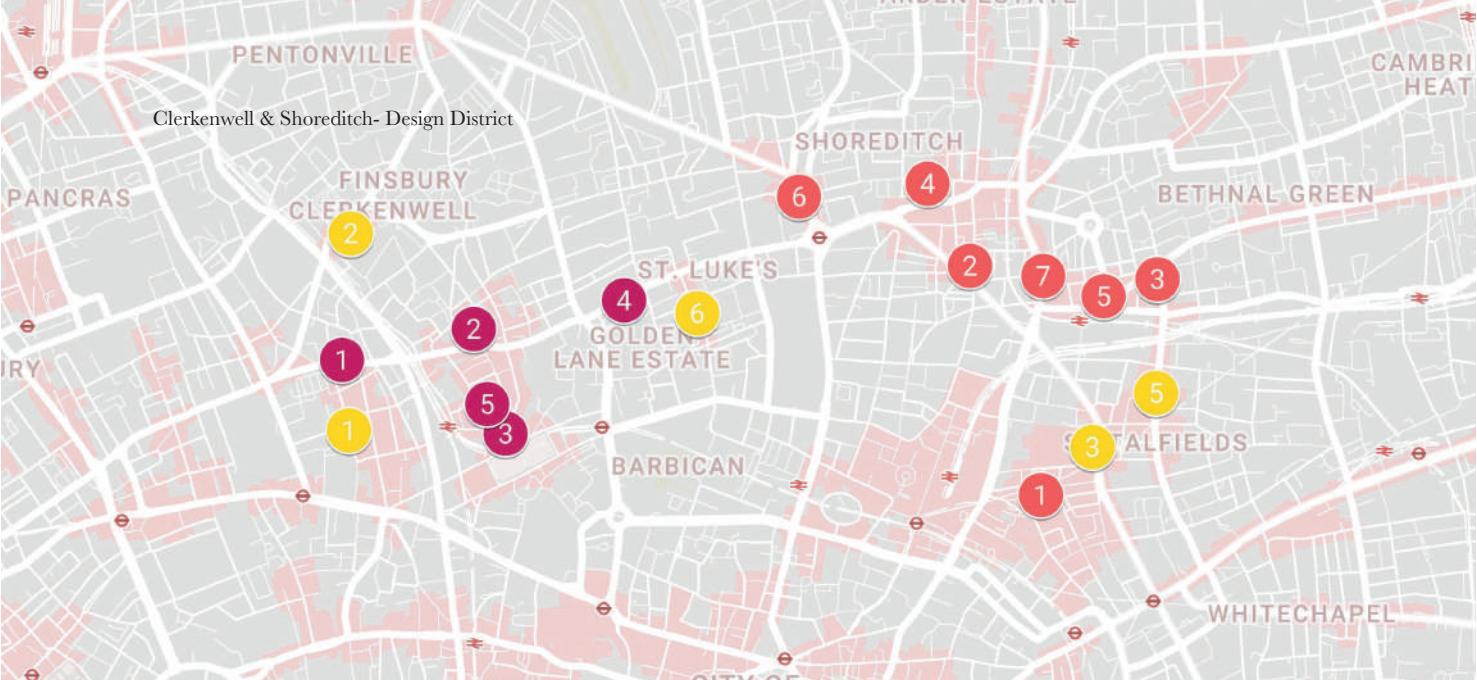
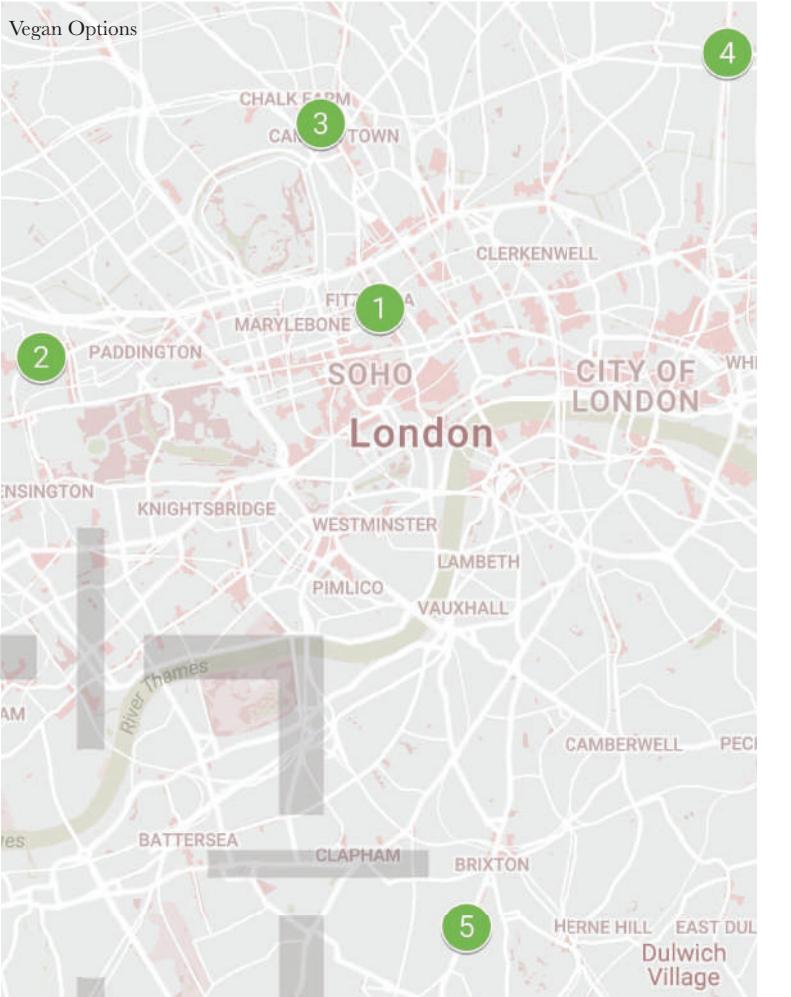
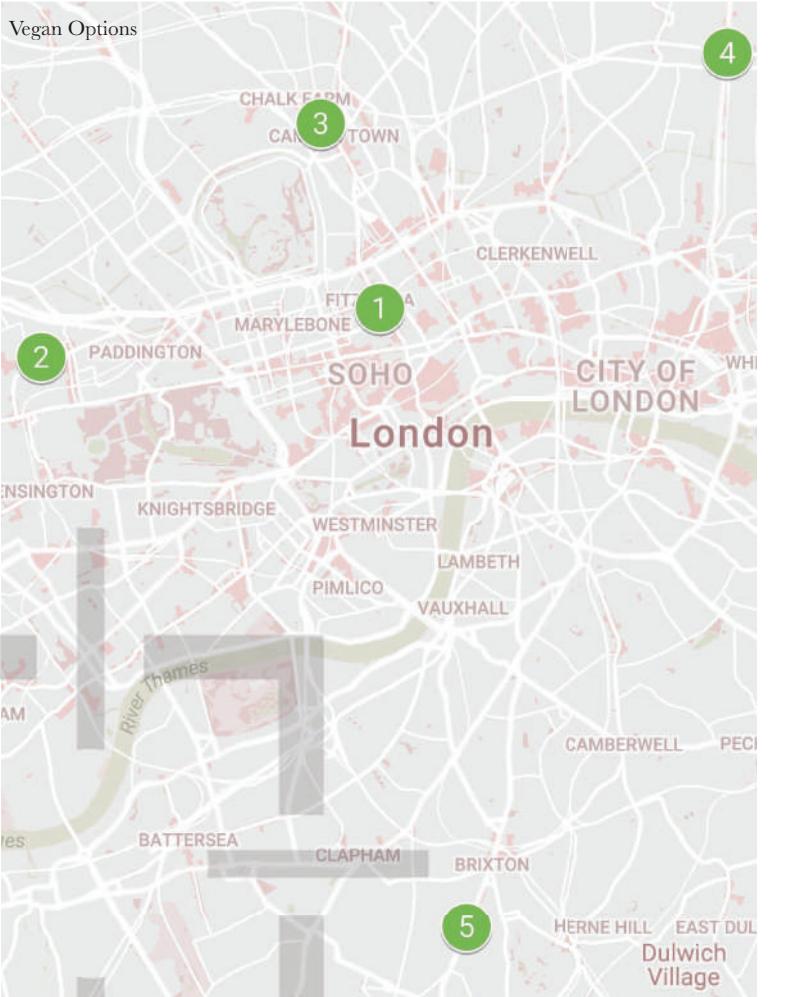
① Rawligon



- ② Farmacy
- ③ Mildreds Camden
- ④ Fed by Water
- ⑤ Alkaline



- ⑤ Tombo- Poke & Matcha Bar
- ⑥ DUM Biryani House



① Ngon Ngon



② The Modern Pantry

③ Atillios



④ L'Artigiano

⑤ Bench



- ① Ottolenghi
- ② Flat Iron
- ③ Beigel Bake
- ④ MEAT mission
- ⑤ Dirty Bones



⑥ Ceviche



⑦ Dishoom

- ① Leather Lane Market
- ② Exmouth Market
- ③ Old Spitalfields
- ④ Borough
- ⑤ Brick Lane
- ⑥ Whitecross Street Market
- ⑦ St Katharine Docks Marina



# URBAN SEA

The parallels in territory, infrastructure and narrative of sea and land: why the sea is of growing importance for the professionals of the built environment.



## Sea and land

This article looks at the correlation between the sea and land in regards to human inhabitation under three sections; territory, infrastructure and narrative; drawing the parallels of how both sea and land are being and have been perceived. Moving from an interdependent relationship to an exploitative one, my essay concludes by speculating the possibility of reconvening sea and human and how this is of importance to the professionals of the built environment.

*"The further we go back into history, the more we see personality disappearing beneath the wrappings of collectivity. And if we go right back to primitive psychology, we find absolutely no trace of the concept of an individual. Instead of individuality we find only collective relationship or what Lévy-Bruhl calls participation mystique"*

Human relationship with the sea and land was primarily conceived as a 'participation mystique' - an interdependent relationship where both sea and land have been portrayed as much more than their physicality; a conceptual presence for worship - through philosophy, spirituality and the arts; in this respect land has been shaped as space for dwelling, whilst sea has been a reflectance of inner emotion, described with a full spectrum; from wild and harsh to serene and calming.

I have chosen this topic as the sea has been a place of inspiration and escape for me, open space implying infinite measures, void of a corrupt built environment. However, I have grown to understand that these untouched surfaces have masked the damage held beneath. A space whose built environment has transformed from being solely within its natural capabilities to that of an environment influenced by the unnatural actions of man.

Studying the interfaces between land and sea through the lens of territory, infrastructure and narrative, I argue that not only land, but sea as well, has become susceptible to the implications of the current mode of development. As humans are terrestrial creatures, the mistreatment of space is generally perceived as an urgent matter to address on land for professionals in the built environment whilst the similar mistreatment of the sea is rendered invisible, diluted in waters foreign to terrestrial eyes.

These urgent matters, such as global population growth and rising sea levels, realise land to be scarce: *land is becoming sea*. The interdependent and sacred relationship one might associate with historical mindsets towards the two has been lost as economic appropriation and the global importance of infrastructure have accelerated on land and now sea: *sea becoming land*. As seas modulate modes of climate variability, provide the moisture for most of rainfall over land that supports agriculture and cities and store much more carbon than the land and atmosphere combined, they are most important in the functioning of the Earth System. Therefore as we enter the Anthropocene, it is important for the professionals of the built environment not only be involved in the terrestrial activities that coincide with the urban metabolism but also regard the sea as a vital part of this metabolism.

## Territory

Regarding territorialisation as a source of economic profit, I introduce the notion 'appropriation' - the act which reduces the relationship between two subjects to a servile one; subject and object. Territory has been used as an appropriation tool, which in effect results in the compartmentalisation of space to house certain activities which induce economic gain. Appropriation has been perceived terrestrial as land ownership developed from feudalism to enclosure, yet parallels can be drawn to that of the sea. Here I look at Exclusive Economic Zones (EEZ) in the sea which are the equivalent of Special Economic Zones (SEZ) on land. SEZ's emerged from the formation of free ports as to optimise the flow of maritime trade. Through the centuries the establishment of each free port has been accompanied by that of a 'free city' (SEZ), resulting in a symbiotic relationship of operations conducted on sea and land. Both share similar types of legislation that act semi-autonomously from their host nation and as a result have accounted for trial rectifications formalised as Marine Protected Areas (MPA) and National Parks.

Tension in approaching the governance of the sea has been apparent since the formation of the UN's Convention on the Law of the Sea (UNCLOS), where the very spatial context of water has been put to question. Its geological attributes however make it more resistant than land to be treated as fixed territory. This results in zonal organisations of space that seek to transcend the geo-physical difference between firm land and fluid sea through a "periodic enclosure and parcelisation of the sea" (Camping and Colás). These zonal organisations; terrestrial waters, exclusive economic zones (EEZ) and flags of convenience (FOC); introduce the similarities in appropriation of sea to that of land.

The very composition of SEZ's correlate to that of EEZ's. SEZ's are said to be a dynamic crossroad of trade, finance, management and communication "and in recent decades they have emerged as a powerful global form, evolving rapidly into an economic prescription to incentivise growth in developing countries". SEZ's allow for the sorting and manipulation of goods; involving the refining or curing processes and manufacturing, drawing similarities to EEZ's which are composed of offshore extraction industries, offshore wind/energy industries as well as fisheries<sup>1</sup>. Both seen to act as spatial forms of property where circulation of resources is controlled.

Recent accounts show how SEZ's are transforming into cities. They formulate a hybrid city, ridding of certain urban attributes whilst hosting residential, business and cultural programs. They discard the native context and offer a generic proposal of architectural intervention becoming "a widely copied template for what might otherwise have been conceptualised as civic urban space" (Easterling, 2014). And as codification of EEZ's (under UNCLOS), is the greatest enclosure in human history covering 35% of the seas, and containing 90% of the world's fish stocks.

It can be imagined that a similar urban evolution (as with SEZ's) will affect the EEZ's; if not happening already. Much like sovereign territory, EEZ's have constructed a legal framework nationalising the rent accrued from offshore extraction, as well as circumventing other crucial national legislation such as taxes and wage and labor rights, further confirming the correlations between land and sea.

As a result of such matters, protected areas on land have been disclosed as to rid of the option of sovereignty for development. Such areas on land, as well as the growing concerns of sea appropriation, have inspired ecologists to advocate for marine protected areas (MPA) and Hope spots to be created so to secure the protection of the seas in certain places (less than 6% of the seas).

## Infrastructure

Through the ever-expanding system of routes and connectivity a civil servile relationship is created as space is to be respectfully crossed whilst at the same time superseded.

After WWII the rise of real estate led to the regionalisation of cities in first world countries, opening up new territories for development to stimulate the economy. From then on the transport system (both on sea and land) has been at a parabolic rise. Infrastructure used as a medium for the promotion of industry lead to the world becoming globally mobile. A matrix of networks embedded into the urban, rural and extra-terrestrial resulted in most commodities, down to the neighbourhood scale, being available solely due to the global industries. These urban necessities; building materials, food and energy have all been made possible due to the interweaving of networks.

During the mid-twentieth century, the highway network successfully replaced the rail network. The highways were projected to solve the city's traffic problems yet have both continually inflated in size and never relieved congestion. The design and implementation of these infrastructure technologies have submitted to "perennial cycles of obsolescence and replacement" at a rising rate of constantly overwriting existing networks.

The sea, has been treated in accordance to terrestrial factors where exploitation and exploration have been the motives. As is stated in 'The Sea: a cultural history':

*"The implicit understanding has usually been that people set off in boats inspired to do so by some compelling rationale deriving from their experience of the land".*

The sea has in such cases been deemed as a plane for transit: an in-between space that is used to accelerate the circulation of commodities. This is apparent through the development of sea lanes (routes determined for trade creating an immaterial infrastructural network), submarine communication cables laid across sea beds between land-based stations (enabling the transport of digital data such as telephone, internet and private data) as well as sea lines of communication; routes between ports, used for trade, logistics and naval forces. Both highways and sea lanes act as single hermetic corridors; identified spaces whose

exclusive purpose cannot be regarded for any other programs. It is visibly apparent that our environment is dependent on such infrastructure. As Koolhaas states "*The urban plane now only accommodates necessary movement, fundamentally the car*" deeming the city to have evacuated the public realm. Whilst infrastructure marks our terrestrial built environment visibly, it does so in the seas invisibly (making the sea even more susceptible to exploitation). As more is invested into the logistical infrastructure to smoothen mobility for the socio-economic and political activities executed at the sea, it becomes clear that capital profiteering creates more spatial implications as the networks being constructed define the matrices through which the sea can be operated from much like the highways and railways of the land.

## Narrative

Both sea and land have held metaphysical attributes portrayed through philosophy, spirituality, the arts as well contemporary society. The immensity of the sacred associations with sea and land portrays an interdependent relationship; a cyclical system. However, in this section I show how this comprehension of the invisible has now diminished to a concept.

Evident from Greek mythology, Aboriginal spiritscapes to Christian monastic ventures, both the sea and land have been empowered with ancestral energy. What can be identified is that land has been understood as space for dwelling, whilst sea has been portrayed as space of pondering; too powerful for the taming of man. Being associated with the sublime, the sea has been a grand theme through which it is employed as a metaphor rather than as lived reality: regarded as a monumental body and respectfully associated with the human condition. Both the land and sea's conceptual associations transcend through a plethora of narratives, however I will focus on their primordial conception through mythology's primordial gods, Gaea and Pontus.

Gaea is the great mother of all creation, the primordial earth goddess; and Pontus, her equivalent, the primordial sea god. Gaea conceived mortal creatures as Pontus fathered all sea life. Both have been regarded as all-producing and all-nourishing representatives of the Earth system.

From both Gaea and Pontus descends an intricate family tree of both sea-gods and earth-gods whose statuses are ever so detailed. Some associated with fear; such as Poseidon who when frustrated causes sea storms to disrupt those voyaging; and others such as Oceanus and Artemis denoted as peaceful and caring whose interests lay in the wellbeing of their lands and seas.

As both the Earth and Sea conceived a multitude of gods to govern their territory and functioning, both have been rendered as equals in character. The equal worship of sea and land was vital for a fully functioning ecosystem in civilisations throughout history.

Such associations peak through to contemporary society from accounts of human attitude towards the sea and land on a micro and macro scale. Either the

## Call for professionals of the built environment

The relevance of the professions associated with the built environment is defined narrowly in the macro scale of the Earth System. It is deducted to the sole qualities of physical structures; whereas most of the changes in the globalising world are being written in the language of architecture and urbanism.

Drawing parallels through the sea's and land's historic and current model of treatment through territory and infrastructure supports my understanding that the sea is an equally important factor as land at displaying the increasing problems of the mode of development. As Easterling argues, these problems are being addressed by covering the existing Urban System with slightly upgraded, yet still indeterminate versions of their predecessors. An alarming urban system which professionals in the built environment adhere to. However, if architects and urbanists look beyond the building and neighbourhood, to see the matrix of space in which those buildings are suspended, they can recognise that the profession trains them to be the very people who can analyse, decipher and manipulate such large systems by "reaching into the giant macro-organisational strata." Such a change can be executed by developing a way of design which involves the expanding of its form-making repertoire to that of where the object of design is not only the thing, but also the interplay between things as well as shifting the emphasis from sustainability to resilience, and the spatial scope from the city to the whole urban network: the sea and land combined.

*"Space is currently the underexploited medium of innovation that brings to designers another relevance with different aesthetic pleasures and political capacities."* And as space is not only associated with solid land, but that of fluid sea, I call for a shift where we question the existing mode of the profession and expand our current investment to the bettering of our relationship to land, to that of sea as well.

*"It is only when we fully comprehend the extent to which the sea is constituted as a domain in its own right - separated from the land symbolically, socially and practically - that the fuller significance of any such reconciliation of the sea to the land emerges. If we started by separating the maritime and the terrestrial, we end by seeing that in bringing them together again lies the possibility of bringing about a restoration of cosmological balance."*

# Nothingness

A critique of the current state of modern architecture which seems to be rooted on a pile of nothingness



Nowadays, modern architecture seems to be completely lost in between the lack of a modern architectural theory on one side, and the fast, frenetic progress of design technologies on the other. These are rapidly changing how architectural design is delivered and constructed. This scenario has led to a point in which architecture has lost its connection with both processes; the use of computer programs and other modern tools, as well as the theoretical background. This leads to a general feeling of disorientation and disconnection which can be perceived both inside the buildings and in the public realm. Buildings no more relate neither to the city nor to the embodied traditions of a society, the consequence being that spaces have become abolic. Additionally, the figure of the architect has recently undergone major changes to such an extent that it is now possible to differentiate between two types of architects. One is the super-star architect, whose aim is to use architecture only to increase his fame, and the other is the architect which has lost control over the design either because technologies have taken over or because the control has shifted to the hands of the contractors.

One of the reasons why this concatenation of phenomena has occurred at a faster pace in recent years is due to the lack of a solid architectural theory supporting the development of modern architecture. If we look back in time, it is possible to notice how strong architectural movements which deeply influenced our society, such as Modernism, Neo Classicism and Renaissance, were all supported by a strong theory which was there to guide the development of architecture and its construction progress. In this way architecture could not only move forward from what was already been built and theorised, but also have a great influence in society and lifestyle. A great example of this could be the application of perspectival theory in Renaissance cities which gave order and rigour to the urban realm, or the more strict and planned organization of the Modern cities where the grid was the guiding element determining the location of future buildings. Nowadays, architecture seems to have lost the TRANSLATION of an architectural theory materialized in tangible contextual buildings and liveable modern cities. The result is the loss of character, influence and power of architecture.

In addition to this, the fast development of new technologies has made architecture much more insensitive and disconnected from our culture. This scenario has led to a situation where new advanced computer programs are almost taking control over the

A plane.  
A wall.  
A feeling of space.  
A sense of perspective.  
A person looking down,  
Another looking up.  
The void.  
The disorientation.  
A pile of nothingness.  
Modern architecture.

architectural design with the consequence that architecture is becoming a mere form of data. This phenomenon has on one side facilitated the development of organic forms and shapes, which were unthinkable in the past, but on the other it has generated a type of architecture which feels completely alien to our culture. New computer technologies should have been used to support the design process and its links with the design industry to move architecture forward and progress from the previous knowledge so that a link with the past can be kept alive. These new forms of architecture seem indeed to have broken the connection with the architectural tradition, not only because they push the design to the very limit, but also because they require forms of constructions which are completely new and only rely on new materials and technologies.

In a modern world where problems of alienation and social eradication are depriving the society of our rooted traditions, architecture should become much more self conscious of its role as a leading agent of society to foster progress and social development. At its current state, architecture has not yet been able to translate the modern inputs of technologies and use them to design contextual buildings responding to our culture, therefore our roots and traditions. Moreover, architectural theory seems not yet putting enough effort in guiding architectural design to become more thoughtful with the consequence that abolic buildings result in the development of alienating urban environments. Modern architecture would hugely benefit from the TRANSLATION, therefore the practical materialisation, of modern architectural theories which would translate in buildings which not only respond to the physical context but also to the social and cultural ones. Architecture has still a long way to go before it will again be elevated to the state of liberal art, freed from the corruptive influences of progress and globalization.

*"Still a long way to go for architecture until it will be again elevated to the state of liberal arts."*

Language. The core, most basic and rudimentary element of any culture. It defines the identity of a nation and its people and unifies them. Its presence in art, poetry or literature is obvious and undeniable, but how does architecture communicate what nation it represents? Can architecture be a means of translation and can it present us with solutions to the challenges we are facing?

#### Vanity fair, variety fair

The World Expos have always been known as competitive architectural beauty pageants, showcasing global technological advancement and sophisticated design. Although the last two Expos held in Shanghai and Milan respectively seemed to embrace the shift towards sustainability and have started to address some of the global issues such as hunger or the scarcity of resources, Expos still remain "the same kind of vanity fair that we've seen in the past", as Jacques Herzog admitted in an interview with Florian Heilmeyer after leaving his project in 2011. What no one can deny however is the fact that the Expos showcase a unique level of thought and architectural refinement, focusing the attention of the whole design world every 5 years. Currently halfway between the last and the next World Expo, is it not a good time to reflect on what do they mean and how do they mean it?

#### Comprehensible context

National pavilions have been a core part of the World Exhibitions since the beginning, enabling different countries to advertise and promote themselves internationally. Appointing famous architects has been a means of ensuring that the project gains a worldwide media recognition, but what makes a truly successful pavilion is a well-conveyed message. In terms of representing countries it is even more difficult since the context they are supposed to reflect is miles away from where they actually are erected. Moreover, they must translate this very same context to a language understandable by people from all over the world. Each of the three national pavilions from the 2015 Milan Expo described below has presented the culture it represents in a very unique way, each using a different form of the same language – architecture.

#### Feed the body, feed the soul

The theme of the 2015 Milan Expo was "Feeding the Planet, Energy for Life". The Koreans decided to take it one step further and actually use their diverse culinary practices as a means of advertising their country, not only by exhibiting it inside their pavilion, but also by the pavilion itself. Its shape was inspired by the Moon Jar - a traditional pottery vessel in the shape of a full moon. The idea of adapting a traditional shape for new use echoed the theme of the Korean exhibition, which focused on how the vernacular culinary practices can be adapted to resolve XXI century challenges. Sounds familiar? It should.

**"These traditions are based on Koreans' long-held belief that nature is not an object to be conquered by humans, instead it is to be revered and understood."**

This sentence found on the official 2015 Expo webpage could easily be used to explain the philosophy behind the current sustainable trends in architecture. Biomimicry, optimisation, flexibility or polyvalence, they all stem from and should aspire to minimise our footprint. The Koreans seem to have created an inspirational exhibition not only for those interested in food fermentation, but for architects and designers as well.

#### agri-culture

A timber, openwork box from a distance seems like another copy of Kengo Kuma's midori-inspired lattice structures. The closer one gets though, the more one realises how different the Polish Pavilion is. Everyone has heard of and probably sat on furniture made of wooden fruit boxes and pallets in a trendy beer garden, but a Polish studio 2pm Architects has taken this idea one step further, stacking hundreds of wooden crates on top of each other to create all four elevations of the pavilion. Why? The design refers, quite directly, to one of Poland's main agricultural exports – apples. A timber box, hiding an apple orchard garden on the roof terrace – brilliantly simple and meaningful. In the modern, globalised world, export seems to be a reasonable means of identification for a country – recognisable abroad, may actually have the power to boost its economy as well. What is more surprising, however, is celebrating the rural identity of a nation – not many have the courage to do it in the times of innovation, global communication and technological advancement. The problems of overcrowded, polluted cities have priority over those of towns and villages. Was the Polish Pavilion trying to bring our attention to those? It poses a question whether culture, nowadays centred in and strongly associated with urban agglomerations, can be present and develop in less densely populated areas. That includes architecture as well, and the impact it has on the regeneration of its surroundings.

#### The glamorous challenge

Given the amount of glazing, steel and the extent of use of air conditioning in the United Arab Emirates, an Expo pavilion which takes into account climate and context may come to many as quite a surprise. Designed by Foster + Partners, the pavilion was supposed to suit climate both in Milan and the Emirates, where it has been reconstructed after the 2015 Expo. Abu Dhabi's skyscrapers have little to do with context (unless one takes other skyscrapers into account, of course), but the pavilion's architects looked at the historic desert cities and their self-shading streets. A maze of cool, narrow walkways is confined within red-pigmented GRC walls, whose surfaces are rippled to resemble the texture of sand dunes. The way in which the natural landscape is translated into architecture is subtle and well-considered, taking into account its native context as well as historical precedents. What's more, the architectural theme of a desert landscape hints at one of the greatest challenges the UAE, and a growing number of countries worldwide, is facing – that is water scarcity. As Gerard Evenden, the senior partner involved in the project explains: "Our design highlights the challenges of sustaining life in a desert climate, while demonstrating how efficient passive design solutions can help to support sustainable modern communities." As idealistic as supporting sustainable modern communities sounds, the most disturbing problem regarding water scarcity in UAE is not the lack of it, but its distribution within the community itself. Unfortunately, wealth and resources control in GCC countries is a less trendy (or politically correct) subject to present at a World Expo that stuns the public with glamorous, extravagant pavilions. The present trend of sustainability seems to be satisfying the critics, giving the organisers and sponsors a reason to congratulate themselves, rather than being a starting point for the World Expos to become a not only a means of communicating the challenges we are (or will be) facing, but also an area to present practical solutions to them that are accessible to all at the grassroots level.

#### The aesthetic of sustainability

3 countries, 3 very different approaches to the idea of translating the context of national identity onto a completely blank canvas. Even though the level of their architectural refinement varies depending on scale, budget and timeframe, the ideas they tried to embody show how adaptable architecture is in terms of being a means of translation. It seems not to be a unified language though, but a collection of many different dialects. The beauty of more and more pavilions lies however not in their obvious aesthetics or extravagant innovations they incorporate, but their sensible and sensitive approach to cultural identity and its elements which can contribute to a better future. There is a question emerging, answer to which we will know in less than three years' time. Will the 2020 Dubai World Expo continue the trend of sustainability and problem-solving, and will it try to present us with more accessible and practical solutions, or will it be just another showcase of expensive temporary projects only dressed up as environmentally and socially conscious?

# A Multilingual Conversation:

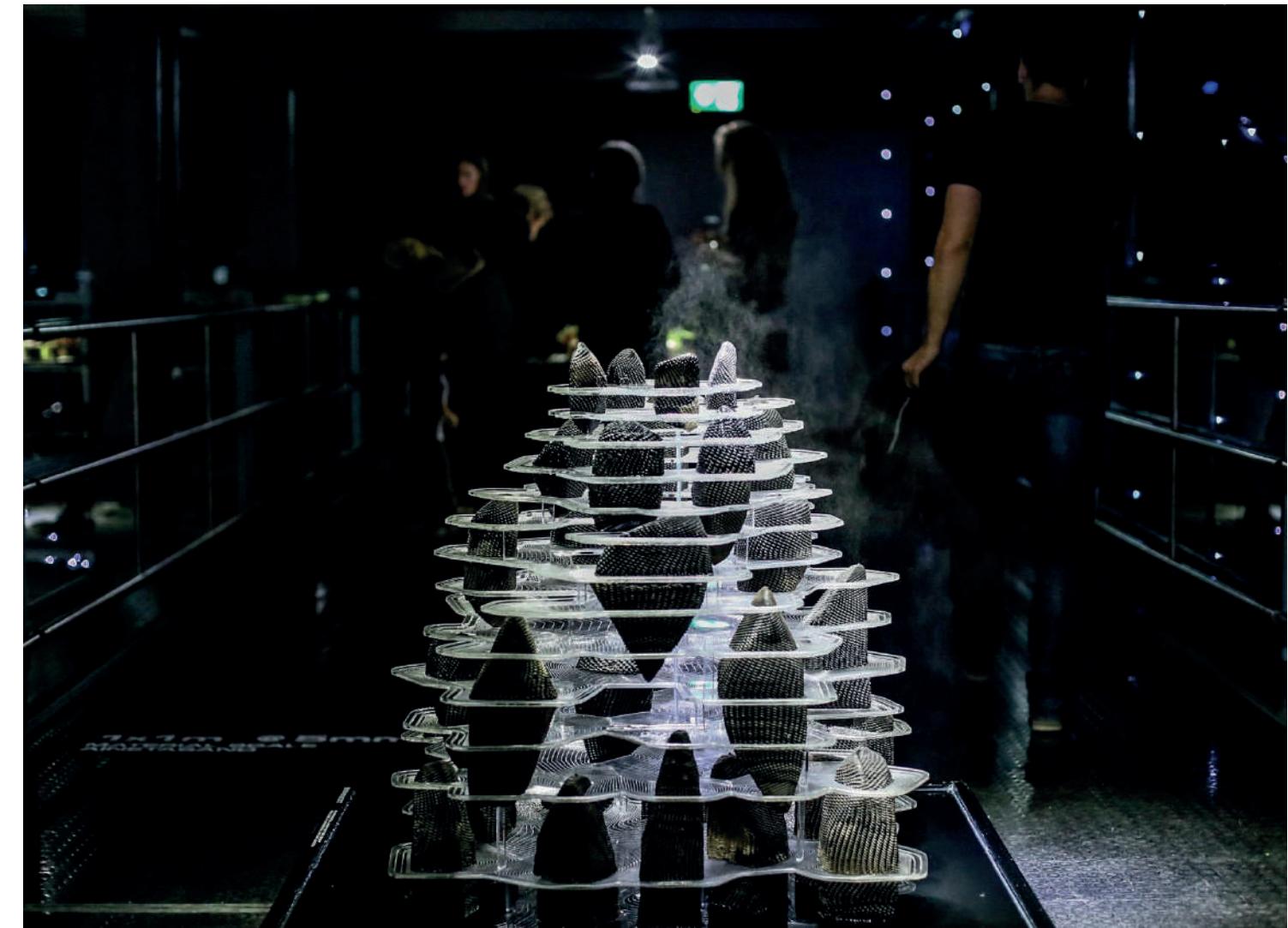
the Architecture, Language and Meaning of World Expos



# SEEM[N]EST

The Tallinn Architecture Biennale of 2017 revolved around the theme of 'Anthropocene Island', questioning the interrelationship between the artificial and the natural in the context of Paljassaare. A man-made byproduct of Peter the Great's extensive military construction in 1912, the peninsula in North Tallinn has since been engulfed by nature and is now prized among Europe's most vital breeding grounds for birds.

The installation, SEEM[N]EST, by Studio Unseen explores the potential of 3D printed ceramics as porous microstructures that can similarly be overtaken by nature and become a part organic, part man-made ecosystem for plants, birds, and insects.





## The Bath Education

Humans, like clay, are created shapeless. Through experience and learning we are moulded, but if left to stand, we will dry and become set in our ways. From that point on you must either fire the clay to finalise the stagnation, or throw it back into the mix to start afresh.

At Bath we are fashioned to become 'highly critical falsificationists' through Karl Popper's philosophy of critical rationalism. In a crit at Bath the worst thing you could ever say is; 'because I like it to be like that.' Instead we come up with long explanations of why it is the way it is, making it seem like a logical and rational choice given the flawed premises we present to the critics. However, over the years we learn to design in a more rational, procedural way, rather than post rationalising everything. This leads to very thought-through buildings that stand up.

To put it very crudely, at Bath we are very product driven. The importance of process is emphasized, but difficult in practice. Nor is it explicitly represented in the marking criteria. However, they have started to implement self-evaluations and to some extent include process as well as the final product. The downside to this product-driven approach is a loss of innovation, because we lack experimentation. Of course, we do have incremental advancements, but we rarely jump head-first into unexplored territory.

This year's Basil Spence Project was a big change. The final year bachelor group project between architects and engineers, has in recent years resulted in monolithic concrete structures winning the competition. Therefore, this year's brief demanded a demountable structure to house an exhibition about craft. This resulted in a great variety of interesting buildings, many of which tried to go beyond what is currently feasible, such as semi-structural ETFE-cushions, fully eco-conscious building methods and numerous moving structures. Nevertheless, a few groups found it difficult to resist the temptation of a good piece of monolithic concrete!

We are constantly told that we are amongst the best schools of architecture in the UK.

We are also highly sought after in practice, due to our practical skills and ability to design rational, buildable structures. Without going into how the university rankings are judged, the latter point about employability is rooted in capitalism and the instrumentalisation of our craft. The great emphasis on critical rationalism leads to very sober buildings, with a clear final output. You would only see a fancy looking building if the shape is serving a rational purpose.

At Bath we are around 100 students in each year of the BSc. We have personal tutors in groups of 6-12 students, but these tutors change each year and sometimes between projects as well. This means we are exposed to various viewpoints throughout our learning, and in crits we get additional feedback from other tutors and outside visitors. Sometimes our personal tutor for said project forms part of the crit-panel to help articulate the process, while at other times the students are left alone presenting the end product and post-rationalising their decisions.

While this gives a more varied input, one critique is the tutors are simply too similar and too 'Bath'. Most education benefits from tradition, rote learning and facts, however, architecture can be a fast-moving field, so we need to think ahead of the curve, or we will fall off the tracks. Bath has over the past decades moved away from lecture-based learning, which can resemble a more open-minded approach as each student is encouraged to take charge of their own learning. Architecture is often viewed as an art; however, I strongly believe there are certain facts that we would all benefit from learning. A criticism from the students is also that the Bath canon of architecture is too narrow.

An education, often advertised as a commodity or a good, should instead strive to be at the top level of economic transactions; a transformation (Pine & Gilmore, Experience Economy). Hence, it is a fine balance between developing the individual enquiring mind versus simply imparting facts and figures. However, the free, self-directed learning

method also leaves some students to get stuck in a single track. On one side this portrays them as narrow-minded, but it can also lead to them becoming expert or specialist in their narrow branch.

As clay we do have a say in our transformation, though most of us will be turned into bricks, a few of us may through hard work, ruthless treatment and convoluted processes become beautiful ceramics. At Bath, Ibstock and Arup help to make some cracking good bricks, but despite our lack of an art department we do also shape a few magnificent pieces of ceramics.

We are all aware of the dangers of driving and most of us are horrified at the thought of letting a phone distract us from the road - and yet increasingly cars are lacking the physical, tactile buttons to control music, instead favouring more complex (but more feature-packed) screen based consoles. Due to this 'development' the very essence of a good interface has been lost - simplicity and accessibility.

While this user interface in a car might not be a problem for people with disabilities, who are often restricted from driving, this example highlights the rate of progression at which digital technology is changing the interfaces we use on a daily basis. In many cases the interfaces are becoming overly complex, for some people their complexity makes them obsolete. If you were blind or struggled with technology now imagine trying to close the blinds in an office fitted with a touch screen Crestron system.

Over the past hundred years technology has been creeping into our buildings but even the simplest interfaces have struggled to be universally accessible, despite alternatives being available. The modern domestic toilet flush for example has evolved from chain to lever to button - but in most cases that button is a tiny recess into which your fingers uncomfortably press which is unsuitable for people suffering from arthritis. Outward facing palm flush buttons are available but rarely used. Light switches in the UK and US are tiny yet sit on a large plastic back plate, their small surface area often means a disproportionate amount of force is required to turn one on or off. In continental Europe it is more common to see the whole of the back plate used as a switch - understandably easier for a broader range of people to use and takes up no more space. As buildings become 'smart' the way we interface with them is becoming ever more complicated; like the modern car, touch screens are appearing on the walls of homes and offices in lieu of switches. Often where switches remain there is now a huge array of them controlling more lights than are necessary. When first introduced to a smart switch system chances are it takes you multiple attempts to get the right switch and in the process the projector has changed input and the screen folded away, imagine trying to operate this with a system a sensory impairment.

The purpose of technological advancement is to drive an improvement in the quality of life, and for the most part it has. Nothing in human history has enabled people, especially those with impairments, to do more than technological advancement. However as we move into the digital age the rate of development is becoming ever faster paced and the decreasing price of tech means it is often incorporated into buildings and products for the sake of ticking 'features' boxes. It is important that we do not let technology run away from the user and remain considerate of all our potential inhabitants in the details of our design.

# Designability



Translation of a dream

Waking up from a dream and attempting to piece the fragments together to form an incoherent depiction

## Architecture in Animation

Regarded as the 'Japanese equivalent of Pixar', pioneered by the visionaries Hayao Miyazaki and Isao Takahata, creating films of fantasy and wonder, Studio Ghibli's stories cater to both young and old. Their works are not only centred around compelling characters but also immersive environments, from fantastical worlds of spirits and magic to a modest Japanese high school of the 1960s. Taking inspiration from the reality of brothels to Welsh mining towns, Ghibli presents these subjects through the seemingly innocent medium of animation, translating complex, mature themes from reality into film as to bring light to these important topics.

### Spirited Away

Ghibli's most famed and successful film finds Chihiro, a ten-year-old girl, lost in a world of spirits where she is forced to take on a new name, 'Sen', and work in a Bathhouse for spirits in order to save herself and her parents who are trapped in this world. The Bathhouse, inspired by the Grand Tea House in Jiufen, a former Japanese colony in Taiwan, has above its entrance in writing the character 烏 or 'yu', meaning 'hot water', a reference to 'yuna', women who worked in Bathhouses, which effectively operated as brothels, in the Edo period. This is further backed up by the naming of the witch who owns the Bathhouse, 'Yubaba', and the forced changing of names from Chihiro to Sen, reflecting the custom of women signing over their names to their madams in such brothels. Ghibli's animation here enables the viewer to experience the Bathhouse through Chihiro's perspective, that of a child, and in doing so highlights the issue of prostitution, of which the Bathhouse is a symbol. This juxtaposition between an innocent perspective and the portrayal of mature themes makes for a beautiful yet haunting film experience.

### Castle in the Sky

One of Ghibli's oldest films revolves around a girl, Sheeta, and a boy, Pazu, trying to find a legendary 'Castle in the Sky' whilst trying to keep a magic crystal out of the hands of military agents. In creating Pazu's home, the Slag Ravine, Miyazaki was greatly influenced by the Welsh mining towns that he visited during the strikes of 1984.

*"I admired those men... I admired the way they battled to save their way of life, just as the coal miners in Japan did."*

This resilience is reflected in the character of Pazu, in the way that he fights to save Sheeta throughout the film and is illustrative of the relationship between the characters and their environments.

This theme about the relationships between people and their environments continues through the symbolism of the Castle itself. In the film, when the protagonists come across the Castle, they find it overrun by nature, a utopia of sorts, until the human characters come and bring ruin to it – in this way the Castle is representative of the

Within the Castle itself is a magical doorway – a portal of sorts through which we witness the ongoing war; as throughout the film Howl ventures through this doorway out into the battlefield in order to sabotage the war machines of both sides – pacifism and a distaste for conflict being essential to his character in Miyazaki's anti-war commentary. In this film Ghibli effectively uses the castle as the viewers window into a 'fantastical' war-ridden reality, highlighting the cost of war – that of human life and destroyed environments. Whilst the animated reality of this world may be exaggerated, sadly the effects of war seen in the film are not – Ghibli's animation here shows that they are as senseless in fantasy as they are in reality.

### From Up on Poppy Hill

This film, grounded more in reality as opposed to the fantasy of many other Ghibli works, centres around a girl, Umi, and a boy, Shun, and their endeavour to preserve the 'Quartier Latin', their school's run-down clubhouse, which is in danger of being demolished as construction for the 1964 Olympics takes over the city of Yokohama. At the same time the characters are having to deal with the legacy of the Second World War and the Korean War, ever present in Japan during this period. From this, a conflict between old and new arises which Umi outlines early on in the film:

*"Ever since the wars, it seems the whole country is eager to get rid of the old and make way for the new, but some of us aren't so ready to let go of the past."*

Throughout the film the characters reflect on how to honour 'the old', of which the beloved clubhouse acts as a striking symbol, whilst also looking forward to 'the new', which the upcoming Olympics represent. The efforts of the students in the film to renovate and protect this old building, which serves as their rallying point, is illustrative of the fact that the country need not completely abandon its history in its endeavour to reinvent itself. In this way Ghibli creates an incredibly sensitive narrative illustrating the theme of conservation in the face of avid progression.

### Concluding Thoughts

In what are regarded as 'films for children' by some, Ghibli creates exaggerated realities through its animation, accentuating topics which are important aspects of the real world. The translation of these themes into the stories which we consume as viewers is powerful in that it brings attention to these matters, it raises awareness of these issues to a wide audience of young and old, and creates a heightened understanding amongst people who may go on to implement change. The themes present in this art are derived from life; a cyclical relationship ever present in Studio Ghibli's films in which fantasy is derived from reality and reality derived from fantasy.

We have collected some of the most poetic, surprising, succinct and moving words which do not have direct counterparts in any other language. Words that you may not have known, but ones that most definitely describe something you have felt before, and how you will surely feel at some point in life.

# translatable un words



cafune  
Brazilian Portuguese

*the act of tenderly running one's fingers  
through someone's hair*



ya'aburnee  
Arabic

*you bury me*

both morbid and beautiful at once, this word is a declaration of one's hope to be outlived by their lover, expressing the unbearable pain it would be to live without them





## Torschchlusspanik German

*the fear of a closing gate*

the fear of diminishing opportunities as one ages



## mono no aware 物の哀れ Japanese

the transient, wistful awareness that everything beautiful is impermanent, combined with a rich enjoyment of this short-lived beauty

*the pathos of things,  
sensitivity to ephemera*

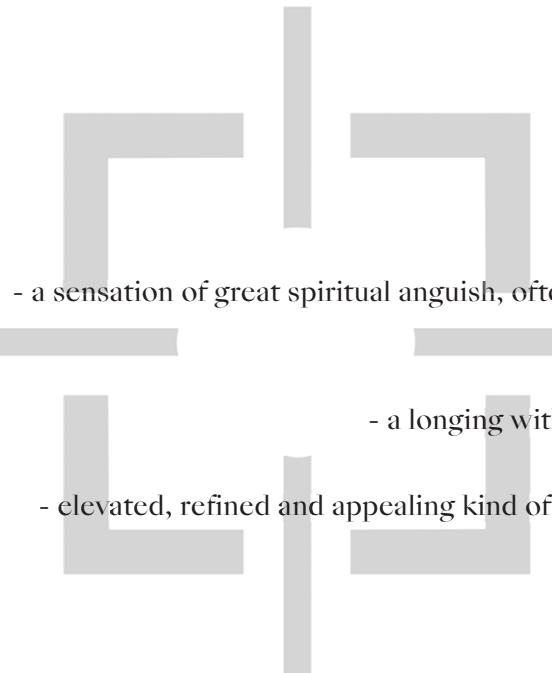
## iktsuaropok Innuit

nervous anticipation for a guest, leading you to constantly look outside the window to see if anyone is coming





**toska**  
ТОШКА  
Russian



- a sensation of great spiritual anguish, often without a specific cause
- a longing with nothing to long for
- elevated, refined and appealing kind of existential boredom



dustsceawung  
Old English



contemplation of the fact that all dust used to be something else -  
the walls of a city, pots, a book, a tree.

d  
u  
s  
t  
s  
c  
e  
a  
w  
u  
n  
g  
  
is always  
the  
u l t i m a t e  
destination

# A Turning Point for Social Housing

My home in London sits perfectly between two council estates. I can see the stark, grey towers from my bedroom window, looming over and engulfing the landscape. They stand twenty stories high, demonstrating stereotypical architectural features for a 70's housing block. Even if you were not aware of the stigma tied to council estates, the brutal concrete facades of the towers instantly creates the illusion of a place of hostility. The connotations the architecture of the estates gives to those that live around them, is usually of danger and fear. They melancholically look over the city, forgotten and left to pass in silence.

The residents of the estates are some of the poorest and most vulnerable people in our society, becoming daily victims of prejudice just because of the buildings they live within. There is no hiding from the dilapidating towers, that would remove anyone's dignity. The link between our environment and wellbeing is so close, that it seems irrational to not make council housing a place of safety and comfort, to improve the lives of those most in need.

Theresa May announced last summer, in response to the Grenfell Tower Tragedy, that an extra two billion pounds would be put towards social housing in the UK. On reflection of the council estates currently in the UK, it is clear that within both the architecture and master planning, there are flaws in the design, to the point where it is simply detrimental to the residents' lives. So that raises the question, what changes can be made to the design of council estates with the extra funding?

Just by looking over the channel into France, we can see how the architecture of social housing can be executed successfully, providing residents with homes to nurture them rather than inhibit them.

Carre Luminere; a development in the outer suburb of Bordeaux that was designed by LAN architects in attempt to reinvent community housing; focuses primarily on the idea that the homes should not be fully completed but it be up to the residents to make the space a home. From witnessing the interiors of council flats in the UK, this quality could prove to be hugely beneficial due to the needs of each family being so specific. The architecture just becomes an envelope for people to explore and exploit to their individual needs. Simply by having a little more effort directed towards the social housing, allows the residents to feel valued and a part of the community, rather than shunned away. This would naturally have a multiplier effect to reduce crime rates, anti-social behaviour and other results of feeling outcasted from a community.

At the end of the day, the problems associated with council housing are not going to be completely solved with a few new developments over the coming years. However, a changed mind-set towards the design of the built environment is an essential starting point. By administrating the beauty, we would to a standard public building, to an estate instead, we could help to alleviate some of the connotations associated with estates.

Alain De Botton stated in his book, the 'Architecture of Happiness' just how much the architecture of our homes and our wellbeing are linked.

*"We need a home in the psychological sense, as much as we need one in the physical: to compensate for a vulnerability. We need a refuge to shore up our states of mind, because so much of the world is opposed to our allegiances. We need our rooms to align us to desirable versions of ourselves and to keep alive the important, evanescent sides of us."*

So, for some of the UK's most vulnerable, a home to feel proud of and to feel safe within, is so important. To nurture and protect them, rather than isolate and belittle them. To see the next generation of children that will live in the estate nearby my home, grow up away from the stigma of the cold tower blocks and instead within beautiful buildings, would for me, show the ultimate change in the UK's approach to housing those in poverty.

The general aesthetic of the French social housing is also considerably lighter and more beautiful than the towers in the UK. The white façades, with large windows and a landscaped site, instinctively looks inviting and a place to feel proud to live within. This ultimately would have an effect on the residents living within, perhaps even elevating the stigma that comes hand in hand with the name "council estate", enhancing a feeling of pride for one's home and increasing the level of care that is given to the building.

Paris also learnt from its previous mistakes of social atomization, isolating social housing from the city's core, marginalising the residents and resulting in riots like the Banlieues in the 2005. Therefore now in Paris, social housing is increasingly integrated into all neighbourhoods, minimising the segregation between rich and poor. Tete in L'air by KOZ architects does this successfully, by creating a "Small scale utopia of wellbeing and pride", making it fit seamlessly within the mixed community.

Despite London boasting mixed housing developments, it was obvious after the Grenfell tower incident that the architecture differs greatly. The density is one of the main

dividing factors, estates often overcrowded and towers filled completely. This is quite ironic considering there is around 2270 empty properties in central London alone. If London was to take the Parisian approach and fully integrate social housing within the community, these empty properties could be a starting point for the new developments. Beautiful architecture could be designed and the homes would become an asset to the community, rather than an eyesore.

# Modern Architecture's Relationship with Vernacular

Buildings are becoming less and less suited to their environments. All around us, glass and concrete structures with little to no regard for their surroundings are being built. The problems of heating, ventilation and light are confined to afterthoughts as cost and aesthetics take priority. The shift in approach to building design is quite new; it is only made possible by the technological developments of the previous century. Before the industrial revolution, issues like cooling could not be tackled by mechanical systems or technology. Rather, they were tackled by methods that had evolved over centuries. Regular people responding to their environment and slowly but surely, over generations, adapting their dwellings to best suit the conditions around them: vernacular architecture.

Vernacular architecture, at first glance, can appear uncomfortable and unrefined; the cave dwellings of Cappadocia are, for example, are not the aesthetic standard for which most Western architects would aim. Neither is the fortress of Wa, Ghana. Their ability to elegantly respond to climate conditions, however, is a different kind of beauty: a beauty that Western architecture is losing and would do well to recapture. As climate change and worries about the energy consumption in our construction industry grow, vernacular architecture provides a clear solution.

Take, for example, the problem of cooling. When Kabbaj, Kettani and Siana were tasked with designing the Guelmim School of Technology, cooling was one of their major obstacles. Rather than relying purely

separated by small courtyards. This allows for full natural ventilation in all areas of the dwelling to remove excess heat from the scheme.

The desert of Morocco experiences large diurnal temperature fluctuations. These variations in temperature can be taken advantage of. Take, for example, the "Pueblo Houses" of New Mexico (Fig. 6). Their high thermal mass means that during the hot days, excess heat is absorbed by the building and "stored". At night, when the temperature lowers again, this thermal energy is released to reduce the need for nighttime heating. The Guilhem also mitigates the effects of high diurnal temperature fluctuations by incorporating high thermal mass into its design; the entire scheme is constructed from concrete, a decision which also allowed to the architects to achieve sleek, precise aesthetics.

The Guilhem School of Technology is a perfect example of a building translating the principles of vernacular architecture to suit modern needs and create a scheme decidedly contemporary. It proves that Vernacular architecture needn't be unrefined. It draws from architectural precedent from all over the world to create a cooling strategy that is perfect for its site in Morocco. It exemplifies the ways in which vernacular principles are undeniably applicable to the contemporary architectural movement.



Fig. 1: Guelmim School of Technology - Kabbaj, Kettani and Siana

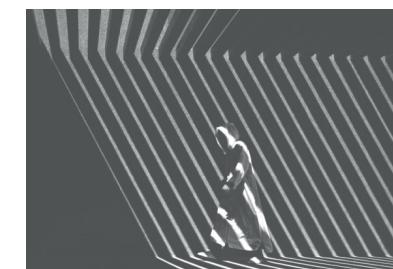


Fig. 2: The shading strategy on this pathway at Guelmim is not an "add on", but rather a fundamental part of the building's aesthetic.



Fig. 3: The Jaswant Thanda in India. The scheme managed to handle extreme heat by incorporating shading seamlessly into the form of the building.



Fig. 4: The Gurunsi village in Burkina Faso incorporates courtyards into its design.



Fig. 5: The Guilhem School of Technology also makes use of courtyards and open spaces to break up the form of the building and make the natural ventilation of the scheme easier.

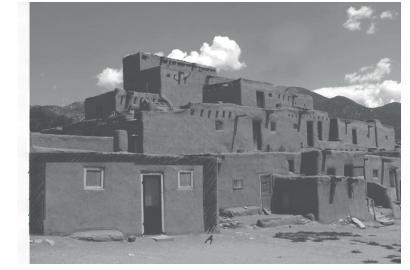


Fig. 6: "Pueblo Houses", New Mexico. The high thermal mass of the building materials help to mollify the effects of high temperature variations throughout the day.



Case Study House 22, Los Angeles  
Architect: Pierre Koenig  
Photographer (left) : Julius Shulman



High Court of Justice, Chandigarh  
Architect : Le Corbusier  
(right) Photographer : Lucien Hervé

How does one experience architecture without being present in the space? To understand the form of a building you look at models. To understand the function you look at sections. To understand its integrity you look at structure. Yet architecture is more than its combination of parts and functions. To understand it you need to experience the space. Without being there, that experience is conveyed through photography. The world's first known photograph using a camera was of a building - the View from the Window at Le Gras by French scientist and inventor Joseph Nicéphore Niéce - and ever since then, photography has been the translator of architectural spaces.

When we photograph space we capture it in its three-dimensional, completed form. Drawings and visuals can be perceived to convey the same job, yet it is photography that manages to capture the essence of a space - and portrays feelings that a computer visual simply cannot.

## photography translating architectural space

However, architecture holds a rather complex relationship with photography. On the one hand, photography enables the translation of space, whilst somewhat transcending this two-dimensional limitation. On the other hand, a photograph merely represents one fragment, one moment in time. Photography is never able to represent the entire sense of a building, or even a significant part of it. Architecture is often far too complex to allow for such a simple transition. Yet photography still remains to be the primary representation of architecture.

Iconic photographs of certain buildings have in some ways created a new identity for the architecture. These photographs represent a very specific aspect of the space. Through popularisation, it is these photographs that have come to reflect the building as a whole to those who have not yet visited the space in person. A space becomes alive once it is immersed in its environment. Light, texture, people - these amongst others are what make a space tangible. These are what are represented in photography above the building itself. Each element has a huge impact on the sense of that space, and once these are changes, the experience of that particular architectural space is entirely different. Take light for example, a certain lighting condition is not constant, and when in conjunction with variations in exposure and aperture, a single photograph can represent an architectural space in a way that no one could ever truly experience in person. Depending on the viewpoint, this strong relationship between architecture and photography can be perceived as artistic virtue or misrepresentation.

Architecture over the years have collaborated with photographers. Notably, these relationships have proved long lasting when the photographer portrays the architecture in a very specific and powerful way. To both the architect and the photographer, their visions of the architecture in its 'true sense' may correspond, but to others, the chosen representation may appear to distort the actuality of the building.

There are many ways to understand a space. Photography is just one, yet arguably the most powerful. Photography represents aspects of architecture that can only be experienced in person, yet it is the question if these aspects can be experienced at all. A complex relationship for the wildly involved entity that is architecture.

# Do you need a translator?

A feeble attempt to sort the Corbusier from the Cor-bulls\*\*t

Have you ever actually heard architects?

The way we talk about our work leaves most people wondering what the hell we're on about. Is there a reason why this phrase is written in French or Latin? Perhaps it would be complemented by a fine art reference or better yet a poem. Its time to ask -what does the human scale actually mean? It sometimes feels like the wording of an idea is meant to trick us, to expose us for the idiots we really are. If nobody can grasp the importance of the re-territorialisation of scalar jurisdictions, I think its time to revise our lexicon!

It's a good thing I'm here with my unparalleled experience and intellect to guide you through the true meaning of the meaningless and to tell you what you should be doing!

Here are my valiant attempts to interpret common architectural phrases, with the assistance of an online dictionary and cleverer friends, to work out what architects really mean:

## **Axis mundi**

What it means:  
a symbol of the cosmic axis between heaven and earth, also the name of an ethereal architect in New York

What it actually means:  
this part of the building is considerably taller than the rest

## **Human scale**

What it means:  
objects that are of a size that humans feel comfortable interacting with, or a reference to the ideology of Jan Gehl's film 'The Human Scale'

What it actually means:  
ceilings aren't double height, doors are appropriately scaled, and I fell asleep in Jan Gehl's film

## **Processional route**

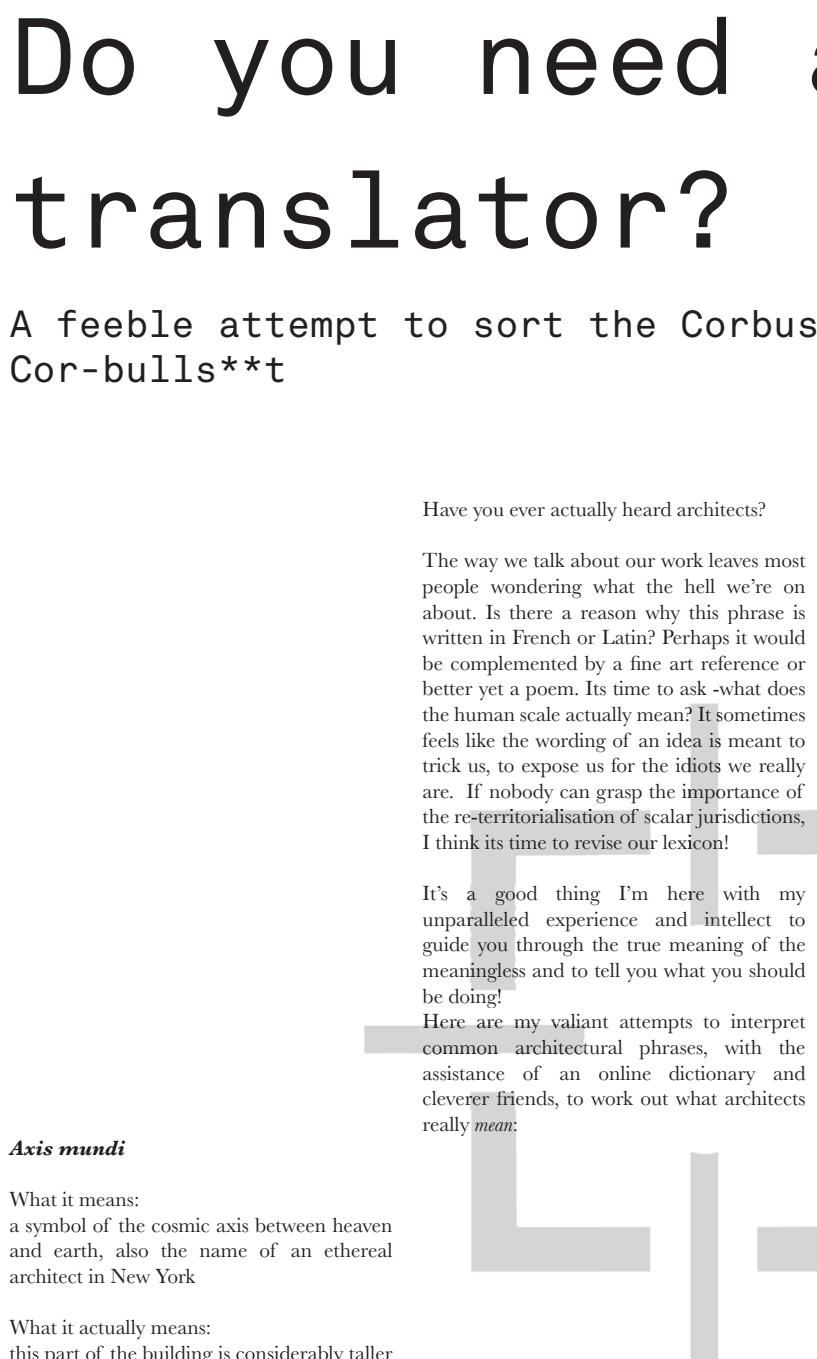
What it means:  
a theatrical celebration of movement through space

What it actually means:  
I ended up with way too much circulation

## **Ephemeral**

What it means:  
something that lasts for a short period of time, like you are in a dream

What it actually means:  
actually, I have no idea what it means, Tom says 'fleeting'



## **Dichotomy**

What it means:  
a contrast between two things

What it actually means:  
I already used juxtaposition

## **Reinterpreting the vernacular**

What it means:  
taking inspiration from traditional building typologies

What it actually means:  
I have accidentally designed a barn and need some validation

## **The play of rectilinear and organic**

What it means:  
The design uses the contrasting geometries of orthogonal angles and natural flowing shapes

What it actually means:  
I used right angles and also curvy lines

## **Mapping unknown relationships**

What it means:  
A layering of unconventional information to provide new connections from which to base a design

What it actually means:  
All of these lines are arbitrary

## **Negative Space**

What it means:  
The voids that are created as a result of the use of material elements

What it actually means:  
The only space that people can occupy

## **Genius loci**

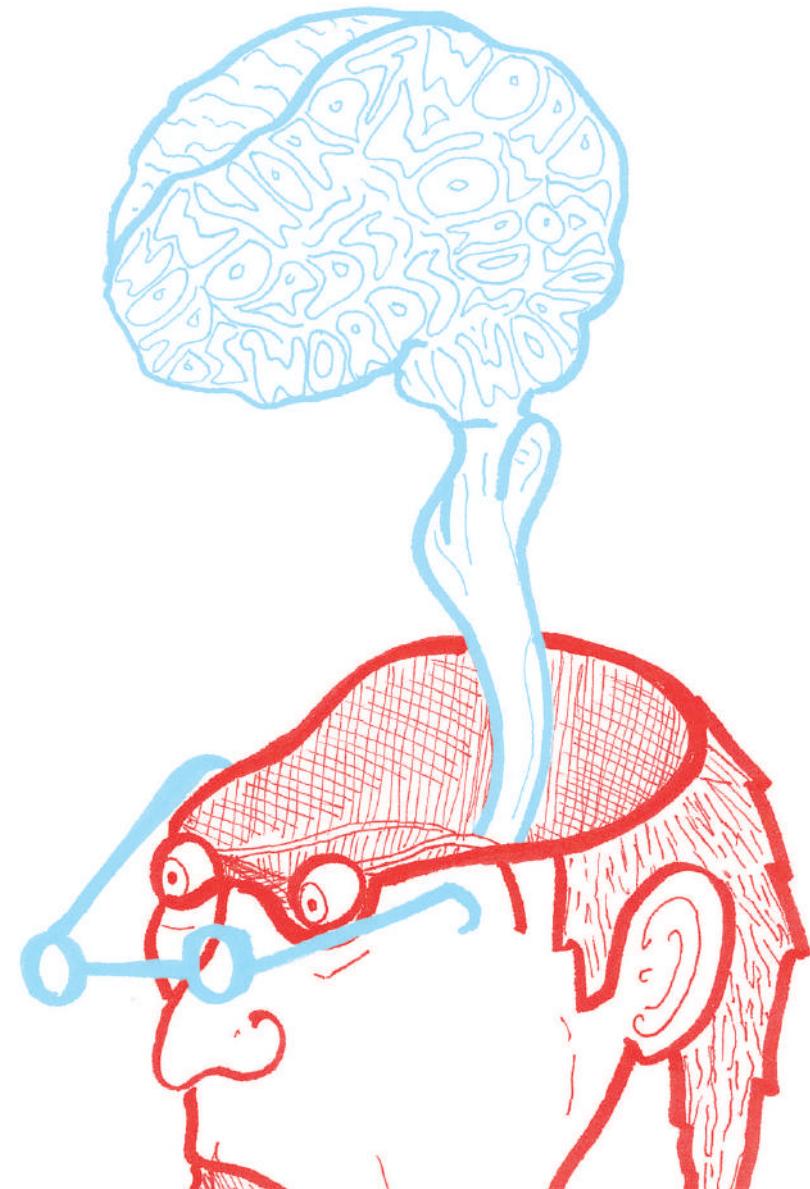
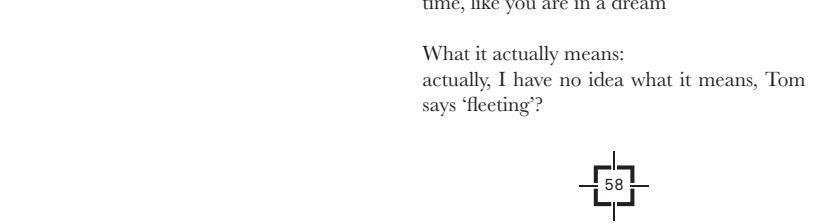
What it means:  
The spirit or atmosphere of a place (Roman mythology)

What it actually means:  
I've really gone to town on my site analysis

## **Pastiche**

What it means:  
The imitation of existing ideas and styles

What it actually means:  
I just copied this



# Politics in Architecture

"Politics has nothing to do with me." It's a phrase you often hear, especially from young people, but they couldn't be more wrong. Political ideologies creep into every aspect of our lives: our clothes, our possessions, our entertainment and our built environment. We rarely notice the influence that politics has on the everyday because the effect is so ingrained in our culture that we don't think to question the norm. I'm here to change that.

A prime example of politics in the everyday is the humble shopping mall. Austrian architect Victor Gruen pioneered the design that we are all so familiar with today: one large building with a department store on either end, and a large covered 'street' running through the middle with shops facing inwards. His flagship mall was built in Minnesota in 1956, in the early days of the Cold War, and it revolutionised the way we shop today.

In 1956, America's economy was flourishing. The population was booming. New technology was emerging at lightning speed. Politically however, things were tense: anti-

Communist hysteria was sweeping the nation and white Americans were moving to the suburbs in their millions as African Americans and other minorities moved into the cities, seeking better jobs and better rights. And it's in this political environment that the modern shopping mall emerges.

They were designed to be self-contained communities. Retail shops were the focus, but there were also cinemas, bowling alleys, churches, barbers, dentists and doctors. They were placed outside the 'blast radius' of a city, so could theoretically be used as fallout shelters in the event of a nuclear attack from the USSR. The rural location was also ideal for the millions of Americans now living in the suburbs. The proximity of the shops to each other created an ideal environment for capitalism and consumerism to thrive and the inward-facing, fully enclosed design reflected America's post-WWII insular policies.

America's Cold War era housing also reflects the inward-looking politics of the time. Before WWII, it was common for houses to have a front porch, which was used, among other things, for chatting to neighbours as they walked past and generally being involved in the local community. However, after the war, the front porch was swapped out for the more private, more insular back porch. More Americans owned cars, so houses moved further apart and communities less close-knit. And just like that, a front porch chit-chat became a thing of the past.

We can contrast this nicely with Soviet housing during the same era. The Eastern front of WWII had mostly been fought on

Soviet soil, and after the war there was a desperate need for housing. The sudden influx of millions of people released from the Gulags in 1953 did the situation no favours. Most of the population lived in overcrowded communal houses, while the elite lived in luxury. Enter the 'Khrushchevka'.

These rectangular, five storey, often concrete housing blocks were named after the Soviet leader Nikita Khrushchev who ruled from 1953 to 1964. 'Khrushchevka' were prefabricated and erected quickly and cheaply, as the USSR had little money to

spare. Designed to last just 25 years, they were modest: lifts and rubbish chutes were considered too expensive to install. Some blocks were shoddily built and were bitterly cold in winter. But despite their shortcomings, their goal was well intended: to give every family its own apartment.

The differences are stark. 'Khrushchevka' were built out of necessity, and the intent was egalitarian. The flats were affordable and intended for the masses. In contrast, millions of American suburban houses were built because of 'white flight', a racist phenomenon, and mostly for the middle and upper classes, because only those with money could afford to move. The Soviet housing blocks enhanced the sense of community with shared spaces in which neighbours could socialise, while the American suburban house stood proudly separate from its neighbours. They ranged in style and quality, reflecting America's individualism, while the 'Khrushchevka' were monotonous and identical because the state was always the client and there was little freedom of expression.

'Khrushchevka' are now being demolished in their thousands in favour of new high-rise towers in the American skyscraper spirit. Many of the communities which have developed and thrived there for generations are being split up, and people are angry because despite the poor quality of construction, the 'Khrushchevka' gave ordinary people a house they could call home and a community they could call family. I struggle to find a similar example in America. And what about modern day politics? Our current political climate worries me. As a nation we seem to be tending towards an anti-foreigner, anti-science outlook on life and I fear for what this will do to our built environment. We are already seeing a rise in 'defensive architecture' such as anti-homeless spikes, but will it be taken further? Will we see more individualistic, insular architecture that attempts to block out anything foreign or unknown? I sincerely hope not.

It is up to us, the future generation of leaders, to ensure that doesn't happen. Architecture should be open and accommodating to all, should create a community like the 'Khrushchevka', but be sustainable and built to last. It should be for everyone. It should embrace new technologies, but also welcome past traditions and histories. There is no doubt that politics affects our built environment, but I believe it can also work in reverse. When we lose faith in our leaders, we can turn to architecture instead. The built world affects how we feel, how we behave and how we think, and we must use this as a force for good.

These rectangular, five storey, often concrete housing blocks were named after the Soviet leader Nikita Khrushchev who ruled from 1953 to 1964. 'Khrushchevka' were prefabricated and erected quickly and cheaply, as the USSR had little money to

# An ode to Translation

Seeing as I have never written an article for PapersPACE and I find myself an editor I thought best to start off easy and express myself through the medium of rhyme.

I think a good way to finish is with you

Hello you,  
Consider this while I dictate:  
How do you,

T r a n s l a t e ?

The world is filled with many faces

All of which are going places  
My view on someone is unique,  
I have formed my own  
translation

One of being, not just physique,

I decipher it through my relation.

The way you speak draws many  
c o n n o t a t i o n s

The language,

the tone,

the inclination

Embrace your culture,

your heritage,

your roots

Remember who you are and all your

attributes

Translation teaches us to see things from

another view

And I hope this issue has done that for [you](#)

I S S U E 9 S P A C E  
P A P E R / S P A C E  
P A N S L A \_ S P A C E  
T A P \_ E P S P A C E  
P A \_ P E A A T A C E  
P + A P P P S P A C E  
P A P E R E P / A C E  
P A - P E R S P A C E  
T R A N S P L \_ A C E  
T R P E R = S P A C E  
T R A P S [ ] S P A C E  
P A P E - R S P A C E  
P A P \_ E R S P A C E  
P A P E \_ R S P A C E  
P A P E R S P / A C E  
T R A N S \_ S P A C E  
P A P E R + S P A C E  
P A P E R S P / A C E  
P \_ A P E R S P A C E  
T R A N S L A T A C E  
P A P E R S P / A C E  
P A P E R S + P A C E  
P A P E R S P = A C E