

Editors Letter

This publication sprung from a rather unassuming office building in Dublin's Liberties during the winter of 2019. For several weeks, my Thursday afternoons were spent on the top floor of 157 Thomas Street, where I spent my time with a cohort of curious minds as they researched, explored and developed the work that you now hold in your hands. This is issue two of ZZz; an arts and ideas journal produced annually by NCAD's Bureau+ Studio.

This issue explores the theme of 'environment'; a somewhat fitting subject-matter in a year that has been so heavily dominated by our climate emergency. As environmental destruction continues to make our future ever more uncertain, ZZz asks what might be done to help prevent further damage. Yet, as these pages reveal, our theme goes further than simply the biological definition of this word. Indeed, within these pages, you will find texts and images that wrestle with the spaces we reside in. Simple moments are captured by pen and pixel, while words and markings map the streets that we move through. This is a collection of minds that are fascinated by the spaces we exist in; with many questioning the conditions that shape our world and some even wondering how we might shape it ourselves.

One could almost argue that this very issue is the product of its own environment. While the office building it was made in might, at first, looks rather unassuming, it is the home to a new generation of design practitioners who are eager to affect the world through the power of their various disciplines. Issue two offers us a glimpse into the passions, concerns and interests of several young designers in Ireland at the very end of the 2010s. This is a space for bold and curious thinking. Welcome to ZZz.

Philip Kennedy
Dublin, December 2019

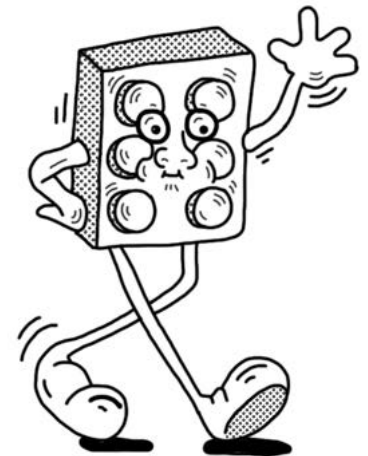


Illustration: Kelly O'Dowd

Overconsumption

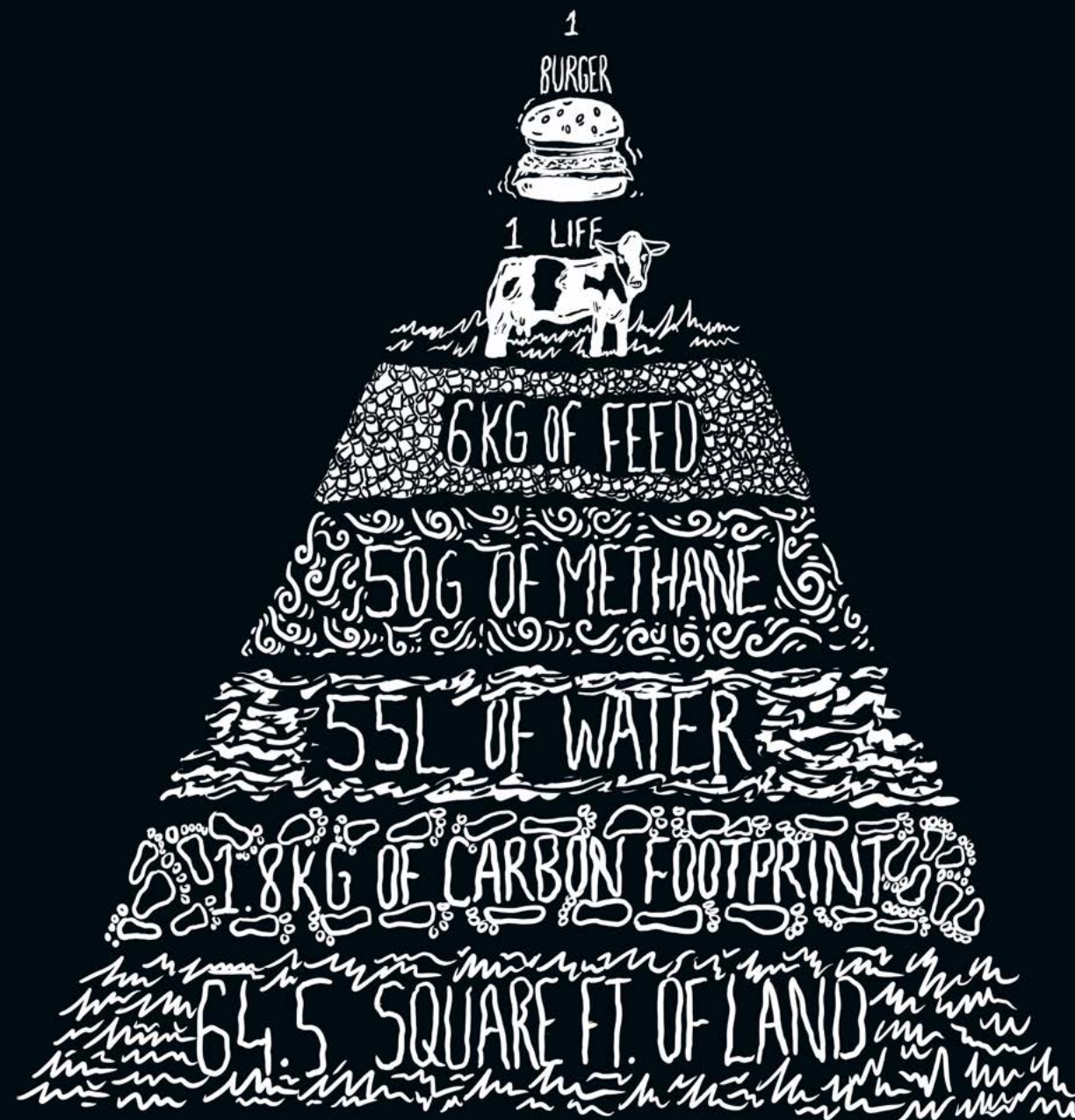
Kenya Dempsey

The world is in crisis mode and while some people are living in ignorance, others are changing their lifestyles in order to give hope to the future. It's clear that if we don't change soon the effects will be irreversible. If we continue to consume the way that we do, *the effects will be devastating.* Deforestation will wipe out one million species as land is scathed for grain for livestock. This means loss of natural beauty, plants, trees, animals and insects, just so we can eat meat. The land needed for livestock will continue to grow as the population grows with an estimated ten billion mouths to feed by 2050. Greenhouse gas emissions will rise and methane will continue to pollute the air. Animals will be forced to live in more cramped conditions, encouraging factory farms which will spread disease and increase the need for antibiotics used on livestock. If we keep emptying the oceans, soon there will be nothing left. Due to our plastic consumption, the fish that we eat is now filled with it too and yet overfishing continues. How can we go on like this when there is an alternative? *What can we do to stop this from happening?*



we face fishless oceans by 2050. be a conscious consumer.

Meat consumption needs to be cut down by at least 50% and it's our responsibility in the developed world to make this happen. If we all went vegan, the world's hungry would no longer be hungry. Forty million tonnes of food would eliminate world hunger yet twenty times that amount of grain is fed to farmed animals. If we all ate a plant-based diet there would be more land for the growing population and wildlife. This would mean less animals going extinct, more beautiful forests and landscapes and healthy fruit, vegetables and grains available to the world. To put this in perspective, a ten acre farm can support sixty people by producing soybeans, twenty-four by wheat and only two by cattle. We would also be less resistant to antibiotics as we would no longer be consuming animals that have been pumped with them since the day they were born. Along with this, there would be a decrease in obesity as well as various cancers and other diseases and the bottom line is that billions of animals would avoid a lifetime of suffering. No longer reared just to die. We can continue to live in ignorance, put all the work on future generations or just hope it will all go away. But it won't. We need to make the change now *before it's too late*.



our resources are becoming increasingly strained. be a conscious consumer.

10% of the world's species will die out in 25 years. be a conscious consumer.



over consumption is killing us. quickly. be a conscious consumer.



On Architecture, Colour and the Phenomenological

Jonathan O'Grady

Here contains some thoughts and concerns about the relationship between architecture, the built environment and art, and how the potential synthesis of all three could result in a total visual creation, one which is unambiguous, biologically rooted, and indistinguishable from daily life.

**“Art attempts to establish far-reaching new relationships between the known and the as yet unknown optical, acoustical, and other functional phenomena so that these are absorbed in increasing abundance by the functional apparatus”
(Moholy-Nagy, 1969, p.30).**



Merleau-Ponty comments: "the civilisation in which I play my part exists for me in a self-evident way in the implements with which it provides itself" (1962, p. 405). The world is known to us through the way we interact with it. Our bodies are our primary investigative tool, and we are self-identified by our ability to sense and react to stimuli in the world. This is derived from what Merleau-Ponty calls the 'body-schema', the acquired habits and anticipatory actions from previous experiences that have remained stored in ourselves. These are automatic actions that allow rapid and instantaneous response to situations of which a similar instance has already been experienced. In this sense, as is further posited, the self is defined not by 'I am' but rather by 'I do'. We are self-aware because of our ability to respond to the outside.



Since the beginning of visual creation, we have had a special consideration for colour and its effects. It is a given that humans must extract colour from their surroundings, understand its relationships, its effects, its tensions. Colour is a biological force, one that the surrealist Laszlo Maholy-Nagy was keen on emphasising. Upon the great proliferation of photography and its influence on art and modernism, Moholy-Nagy identified the separation of artistic painterly practice into two fields: one of colour-composition and one of representational composition. He noted the need for painting to concentrate on the inter-relationships of colours and the forces they created (1969, p. 8). Photography could represent the world beyond any painterly ability, and so the painter must concentrate on that which photography cannot equally convey: colour.

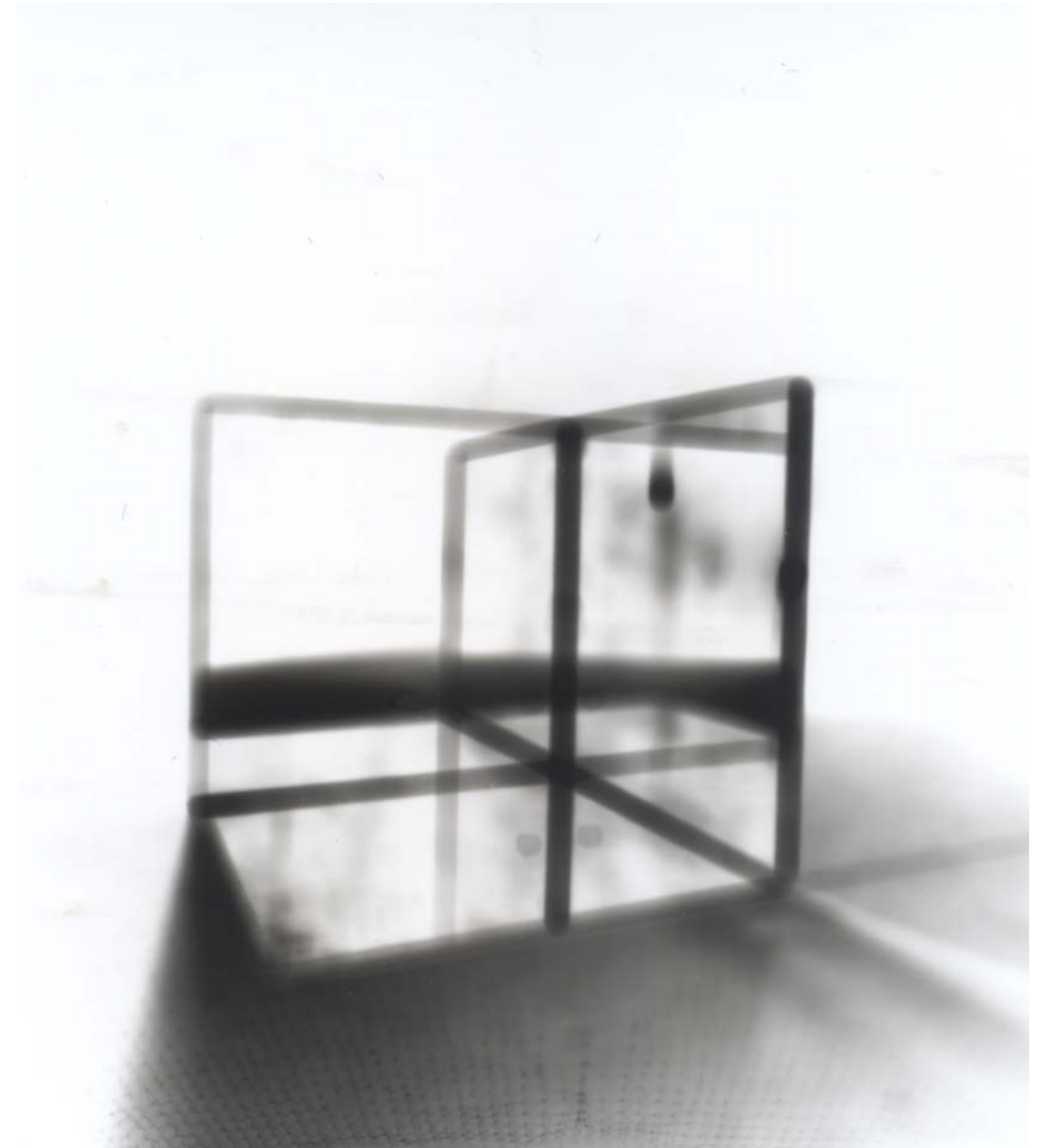
Colour is a primal force, that consists of primal relationships that form the foundation of all visual practice. As Moholy-Nagy comments: "the observable variations between the painting of different periods can be explained only as periodic formal variations of the same phenomenon" (1969, p. 13). Artists of all periods have responded to colour in the same way, however differing in stylistic or thematic ways. This makes one consider how colour might be effective environmentally, how it might have manifested itself outside of the picture plane to influence the creation of our own environment.

A synthesis of colour and architecture would, according to Maholy-Nagy, create the potential for a total work of art, one that is to proceed from a "biological necessity, and culminate in a universal necessity". This would require the fusion of architectures particular forces, such as material, structure, stability, etc, with that of colour, derived from the materials of which the structure is composed. Those elements of concrete, brick, steel and stone should provide the colour harmonies and relationships that are necessary for those who inhabit the building.

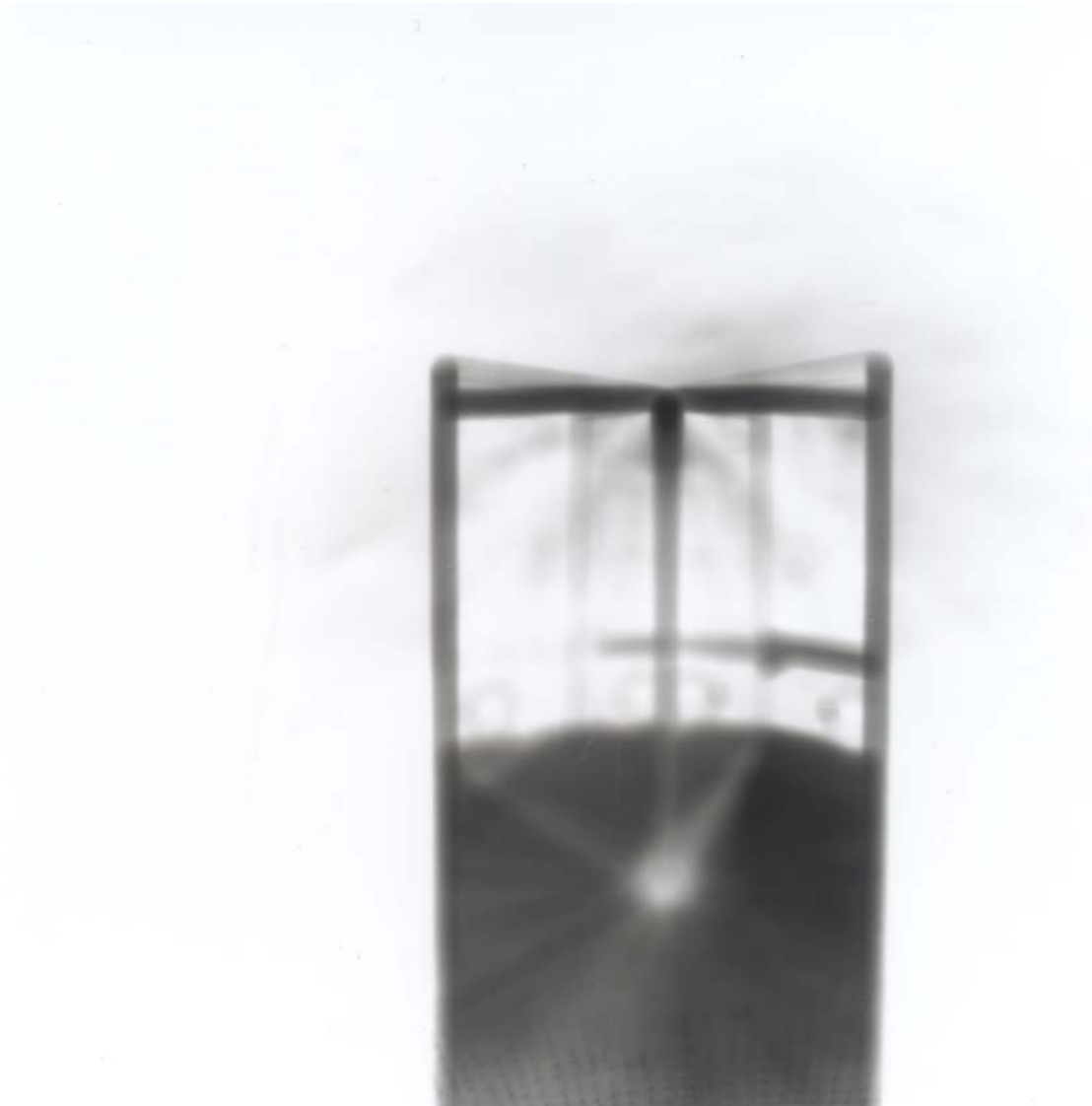
How can we understand colour and its manifestation and effect in our built environment. Buildings often take uniform shape and hue, unflinching in their assertion of the values they so often stand for: capitalism, power, coercion, the creation of docile bodies. It is the architecture of the past that seems to be so often admired and revered for its beauty and synthesis of its elements. One need only look at the Pantheon in Rome or St. Paul's Cathedral in London to witness how form, material-colour and space cohesively produce a profound experience, one that is universally understood. "The very first of all cultural objects, and the one by which all the rest exist, is the body of the other person as the vehicle of a form of behaviour" (2003, p. 406).

We understand our own place in the environment, and its behaviour in space in relation to the behaviour of the bodies of others. We learn through our actions, as understood through the body-schema, and we also understand through observing others act. Indeed, our eyes, the optical mechanisms by which we view the world, interpret the distorted space around us, filling and compensating so as to form an understandable image in our mind.

The photographic camera, somewhat of an extension of the eye, or perhaps a substitute, witnesses space in all its distortion, faults, disturbances, creating a purely optical image. It is this ability to see the world as its reality that brings us closest to an objective way of viewing our surroundings.



“I am photographed, by the light of the world,
queried in my lack by its gaze”
(Lacan, 1997, cited in Foster, 2011)



Much like painting and architecture, photography has its own particular characteristics, which have been wrapped up and bound by tradition. Photography, as a sort of culmination in the easel painting tradition of representative composition, has majoritively been used for the creation of negatives, and subsequent printed images, indexical to its subject. Such preoccupations fail to make considerate use of the light-sensitive quality of the photographic medium. Through the likes of Man Ray and Moholy-Nagy, the photogram, a technique of cameraless photography, reveals a whole new way of exploring the relationships of chiaroscuro, form and volume, and depth that photography concerns itself with. In projected-film, photography finds a way of synthesising with architecture. Here, light is the only real medium, being sent across and suspended in space. Anthony McCall creates films that concentrate on the essence of the medium, the light, the projection, and the form it takes. McCall's solid-light films trace cones, lines and forms in darkened spaces, engaging the surrounding architecture, engaging bodies in containers of light. We must learn the work, our understanding is only of its footprint and it is impossible to know the totality of it. One questions their situation in the world, and the scathing judgment of the omnipresent light of the sun.

Merleau-Ponty, M. (2003) *Phenomenology of Perception*. London: Routledge
Moholy-Nagy, L. (1969) *Painting Photography Film*. London: Lund Humphries
Foster, H. (2011) *The Art-Architecture Complex*. London, Verso

Innovation as it Stands Today

Conall Casey

Today, more than ever, innovation has become more accessible than ever before. The barriers to inventing or creating something new are at an all time low chances are if you have an idea, you can make it happen Just a few decades ago this was only a reality for a select few people, but today access to Innovation is much more attainable for the majority of people. I'm going to be looking at what I believe got us to this point, things like breakthroughs in emerging technologies, new manufacturing methods, the effects of the internet on innovation, and where I think it will lead us in the future.

So, what is it that has changed to make inventing an easier task than it has ever been before? This can be broken up into three main categories: how we learn, how we implement, and how we share. A lot has changed in these areas over the years and, in my opinion, the creative process of making something has evolved into a more linear pathway. I think there is a lot of work going into the streamlining of these processes, and I believe that the internet and social media have played a major role in changing and evolving these processes into what they are today. Everything is on the internet, this has it's advantages and disadvantages, I would say a huge advantage is education. If you need to know how to do something then more than likely there is a YouTube video to guide you through it. The game has changed somewhat now because a single teacher can have an audience of millions on YouTube where as, prior to this, the limit was the capacity of the classroom. Not to mention YouTube is totally free. There is no monetary barriers on the internet for the vast majority of things. On top of this generally you get

the best teacher, without a limit on how many "students" a teacher can acquire on YouTube. It is very easy to find the absolute best lesson in whatever the given topic is.

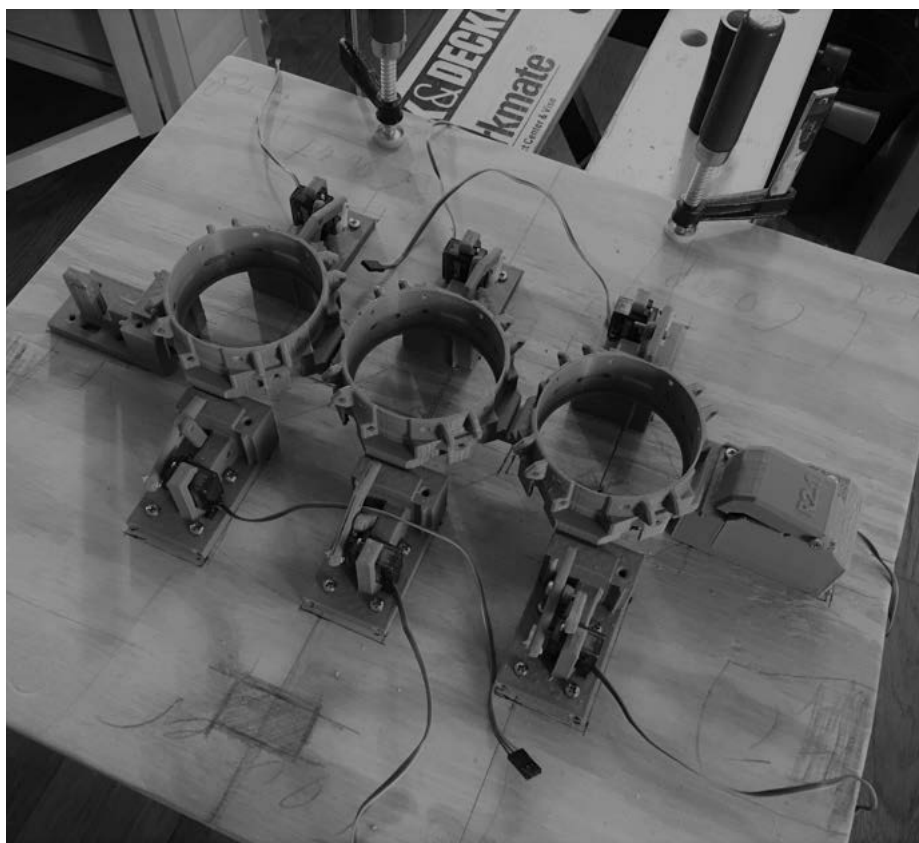
Location is becoming much less of a problem with online schooling and courses, services like Skillshare are paid but have incredible resources. Comparably, to get an education fifty years ago, you had to be close to an institution or move to one and, of course, be able to afford it in the first place. Nowadays, with an internet connection, there is an abundance of things to be learned wherever you happen to be. It is impossible to comprehend the wealth of information on the internet, and to think you can have it all in your pocket. As a designer, I lean heavily on information online and whenever I don't know or understand something my instant reaction is to "google it". I find most other designers or makers I know do the same.

After consuming as much information as possible from the bottomless well that is the internet, what is next? How do you start creating whatever it is you want to make? Things have changed a lot in the prototyping and small scale manufacturing, with the largest breakthrough of course being the advent of 3D printing. I really can't praise 3D printing enough – the flexibility to create nearly any shape or form into a hard plastic is a huge jump forward for makers on a budget. Before, the main barrier to 3D printing was cost and time, now with the technology maturing, 3D printers can go for as little as £200, leaving only time as a minor downside. As long as your willing to wait around a bit, a 3D printer will prove invaluable for prototyping and making. Computer-controlled tabletop cutting

machines are slowly becoming cheaper, workshop equipment is more affordable, and hand tools are becoming more and more obsolete as we begin to automate everything. In my opinion it's becoming less important to be skilled in physical making and more important in knowing how to work machines that will automate the task for you. Outsourcing is common practice – don't have a 3D printer or CNC machine? There is an app for that and you'll get the part in the post in a few days. As far as sourcing material and parts goes eBay and Amazon are your best friends, you can find anything on there, often in kits with instructions on how to use them correctly.

The process of having an idea and making it a reality has changed vastly over the last decade. With these resources and methods, innovation has become more abundant than ever. A perfect example of this in practice is BPS Space. This company creates scale rocketry components aimed at closely matching the pace and advancement in the space launch industry. Despite its impressive ambitions, this company consists of only one person: Joe Barnard. BPS Space is also a YouTube channel where Joe Barnard documents his process in building rocket systems similar to what SpaceX is doing, just at a smaller scale. over-leaf are some pictures of experiments and his making process.









After coming across some of his videos on YouTube I was impressed with the depth of knowledge he had in engineering, design and literal rocket science. Upon finding out he had no formal education in any of these fields I was even more impressed. No masters in engineering; no degree in rocket science – but hilariously enough he does have a degree acoustic engineering! Approaching a task such as actual rocket science with absolutely no experience sounds impossible. A few decades ago, it definitely was an impossibility, but today it is possible, and more and more talented innovators like Joe Barnard are taking advantage of these opportunities. People like Joe are pushing the limits of what is possible to accomplish within the new parameters set today. You really can learn nearly anything you want to, and it's becoming much easier to create anything you want to now as well. I think the environment of innovation has transformed dramatically over the last decade. An opportunity is there for makers and innovators, especially students, so I implore you to take advantage of it while you can.



Dublins Cinemas, 1960-2020

Áine McGee

In a time of cultural loss and turbulence in Dublin City, many historical buildings are being demolished and rebuilt as offices and hotels with little regard for preservation on the character-rich structures that make Dublin the city that it is. In 1956 there was 56 cinemas located throughout the city. Most villages and suburbs had their own cinema. While many of these often architecturally beautiful buildings have been rebuilt over time, few still stand. Perhaps the mass closure of these cinemas over the past few decades is testimony to the cultural shift. A desire for convenience, streaming on Netflix. Access to films and shows on television and frugality. The closure of cinemas and theatres is also rocketed into fruition by the increasing value of land in the City Centre.

The Screen cinema which opened in 1984, welcomed foreign-language films, American independents and future cult phenomena to a satisfactory, if somewhat 'lumpy, old-school cinema space' saw closure in 2016. One of the more recent closures of the tens of cinemas that have disappeared throughout the decades. While cinema outings are evidently not as popular as they were in the 20th century, Dublin still has 7 operational cinemas. The Lighthouse in Smithfield offers independant and foreign arthouse films similar to the IFI in Temple Bar. For blockbuster showings, cinema-goers have the options of multiple Odeon cinemas, the newly revamped Stella in Rathmines and what was once home to Irelands largest cinema screen: The Savoy on O'Connell street. Despite many of the former cinemas operating in character-rich buildings, the interiors were far from romanticised. Back in the mid 20th century an adventurous

entrepreneur could acquire such a venue cheaply, 'buy a few boxes of crisps, rent a print of Alice in the Cities and make themselves a pocket impresario' with little regard for quality or comfort. The former Lighthouse cinema on Abbey Street was such a place. Smoke filled rooms furnished with uncomfortable seating and few snack options. Despite this, many old cinemas offer a guide to the rich and former state of Dublin. The two maps shown demonstrate the contrast in cinema locations in Dublin in the Mid Century and Dublin today.



2020





What is justified in the eyes of survival? Animal cruelty, stimulation and globalization shape the boundaries of this piece in this video collage of self shot and found footage, this is the first piece of a three part series exploring the theme of environment and focusing on the line between survival and savagery. A raw, animalistic compilation of footage is accompanied with amplified experimental audio to set the tone of this piece. Its intense audio and video highlights the line between survival and savagery. There are two human natures depicted here one that society has constructed for us and one that history has wrote us, brutality, insanity, and animal instincts are the main themes of this piece. Would you know yourself if you were put in survival mode?





I WANT YOU TO PANIC

Part of a series adapted from Puppyteeth that highlights Animal cruelty, stimulation and globalisation. I want this series to amplified the line between survival and savagery progressing towards the theme of savagery and civilization. human nature has been moulded around the idealism of social constructs and capitalism, people who don't abide to society are then depicted as inhuman, Savagery does reside in all of us and empathy is what separates us. A common interpretation of this two-fold system holds that confrontational aggression is an understandable consequence of the human race and deliberate violence comes from non-evolutionary sources such as evil individuals or ideologies then is empathy our only hope? What is the cost of being savage in a supposed civilised world?

All PIGS MUST DIE

This is the final piece in this three part series invoking the theme of environment, from exploring the line between survival and savagery to how savagery and civilization can coexist in a supposed civilised world, this final piece will represent how capitalism and schizophrenia don't coexist in today's western society. Instead from a young age society has spoon fed us to believe what is right and what is wrong and it is immoral and evil to stray away from social constructs. Western society's innate herd instinct has allowed the government, the media, and even the principles of economics to take advantage of each person's unwillingness to be cut off from the group. What's more, those who suffer from mental disorders may not be insane, but could be individuals in the purest sense, because they are by nature isolated from society. Lacanian argues that schizophrenia constitutes one of the few authentic forms of rebellion against the system's tyrannical imperatives.

What is justified in the eyes of survival?

There might be a moral argument that stealing food for yourself or family is a justified "survival crime." The idea of survival crime is not a new concept, it is the latest fad in criminal-justice activism, where homeless, poor, and working class people are being penalized harsher and made an example of for committing petty crimes. In my opinion any enforcement of these laws is a violation of their basic human rights. It is criminally wrong to steal a loaf of bread to survive, but morally it isn't wrong to let these same people die in the streets. Local governments should stop enforcing any laws that criminalize homelessness and criminalize poverty, and repeal the laws put in place. There are two human natures; one that society has constructed for us and one that history has written for us. We as individuals have to decide what path we follow depending on the environment we endure everyday, the hardship, heartache and obstacles that society throws at us. Would you know yourself if you were put in survival mode?

There is a very thin line between survival and savagery. Human nature has been moulded around the idealism of social constructs and capitalism, people who don't abide to society are then depicted as inhuman, Savagery does reside in all of us, and empathy is what separates us. A common interpretation of this two-fold system holds that confrontational aggression is an understandable consequence of the human race and deliberate violence comes from non-evolutionary sources such as evil individuals, or ideologies. As a consequence of this is empathy our only hope? What is the cost of being savage in a supposed civilised world? Western society's innate herd instinct has allowed the government, the media, and even the principles of economics to take advantage of each person's unwillingness to be cut off from the group. What's more, those who suffer from mental disorders may not be insane, but could be individuals in the purest sense, because they are by nature isolated from society.



Hushed spaces

Adam Burke



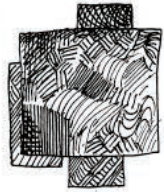
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laughs at the
cooking show on TV





Keelan sits content
on his phone as daylight
fades behind while the
tall buildings of dublin
city give way to smaller
structures that are
more spread out.

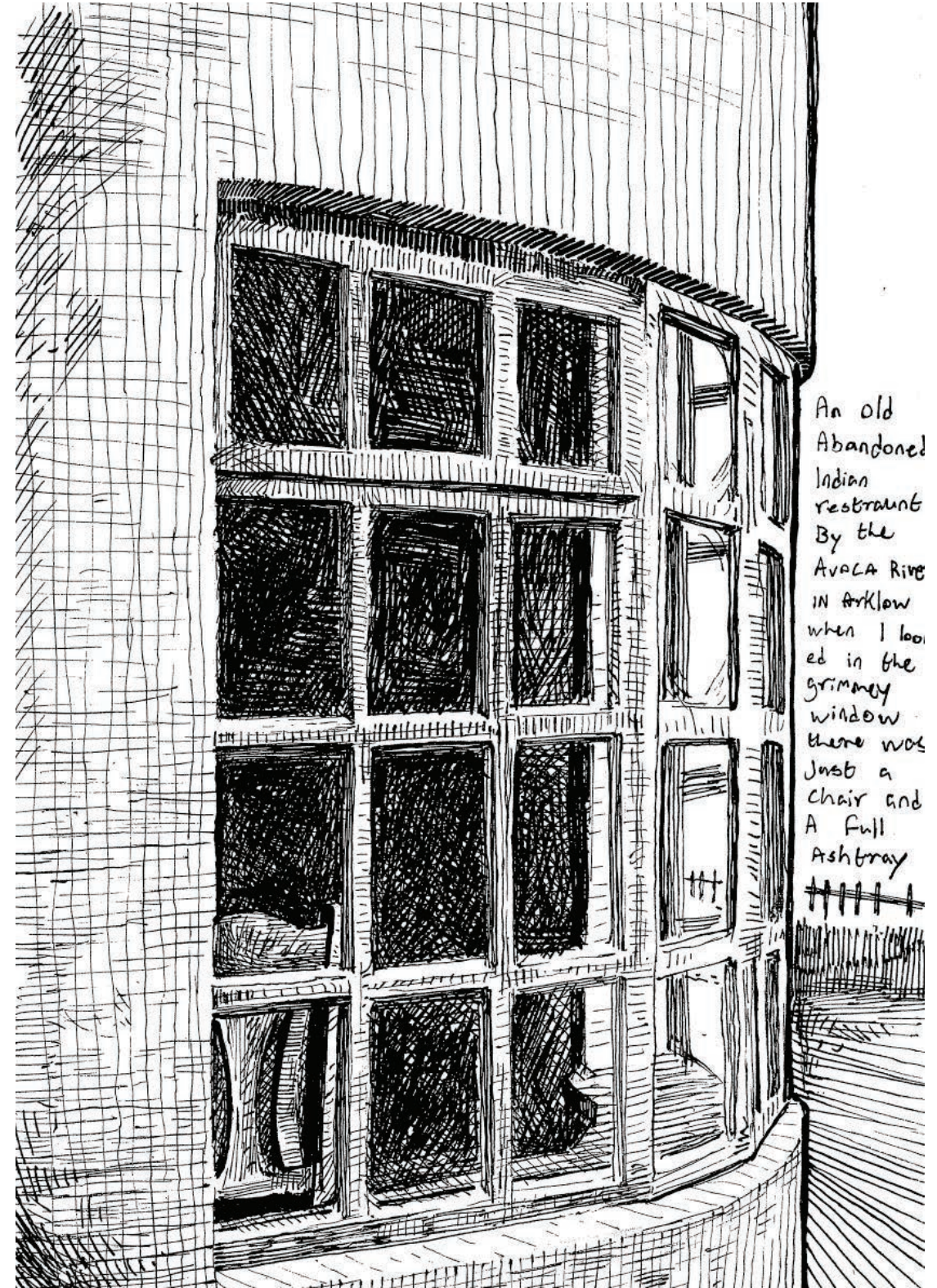
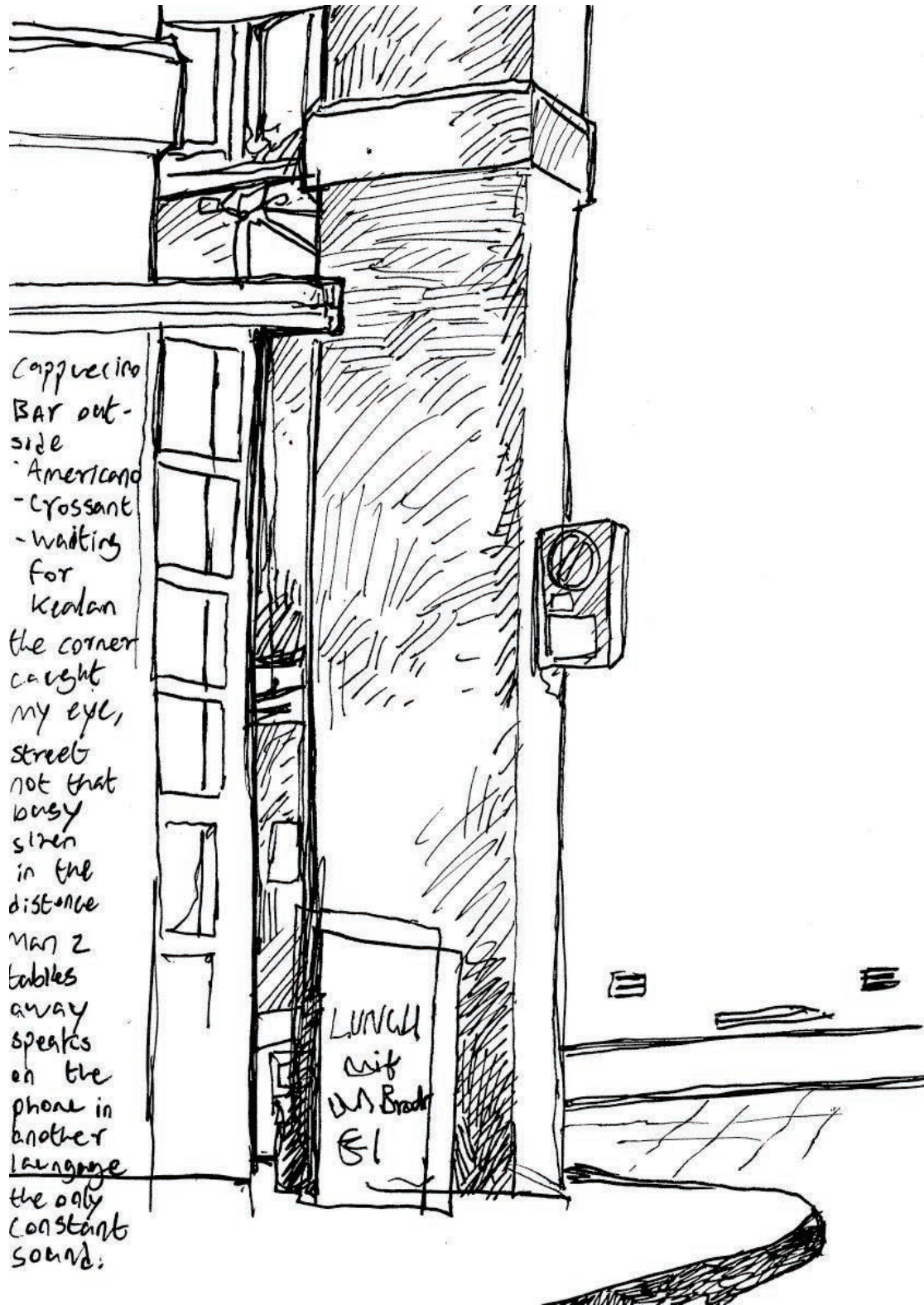
A woman speaks loudly on
the phone to her father
about hospital Appointment
And it makes me wish
I put in my Earphones
before I started drawing.
And now im very envious
of Keelan and his headphones



The house is an ice box
so I light the fire and
as I do I become
excited for the warmth
I will soon feel. the
yellow orange light flickers
of the logs, coal, fire
grate and stones that
make up the
wall, while the Rain
Knocks on the nearby
door and window, but
it is Answered by
the crackle of the
fire in front of me.



Bus Arrives - Bus Delayed
for half an hour
I stand in the que
can not
wait to
get home
to have
Dinner



Would You Eat Your Waste?

Angela Domingo

In 2050 there will be more plastics than fish in the sea.

About 13 million tons of plastic are dumped into the oceans every year, affecting biodiversity, the economy and potentially our health. In some cases, the damage is visible: animals strangled by abandoned fishing nets or dumped plastics. In many other cases, the damage is invisible. Marine animals ingest microplastics. Fished from the sea, they are then sold for human consumption. This causes us to ingest the plastic that they carry in their bodies. Studies have proven this. Disease and intoxications can come from ingesting plastic. When scientists undertook a study in Europe, they discovered that 80% of those examined had microplastic in their stool. While governments and big business may hold the solution to such problems, we can do our bit too. Try to reduce your use of single-use plastics with the aim of everyone reducing their level of plastic waste.

Here is a small list of things you can do on a daily basis to reduce your level of plastic waste:

- *Say no to straws, we are not children anymore, we can drink directly from the glass without any problem.*
- *Always use reusable bags.*
- *Avoid chewing gum.*
- *Buy boxes, not bottles, like the detergent.*
- *Buy food in bulk.*
- *Reuse glass jars.*
- *Use reusable bottles and glasses.*
- *Don't buy packaged juices, you can do it by yourself (natural fruit is wonderful)*



Your Health is Your Wealth

Tim Adam Barker

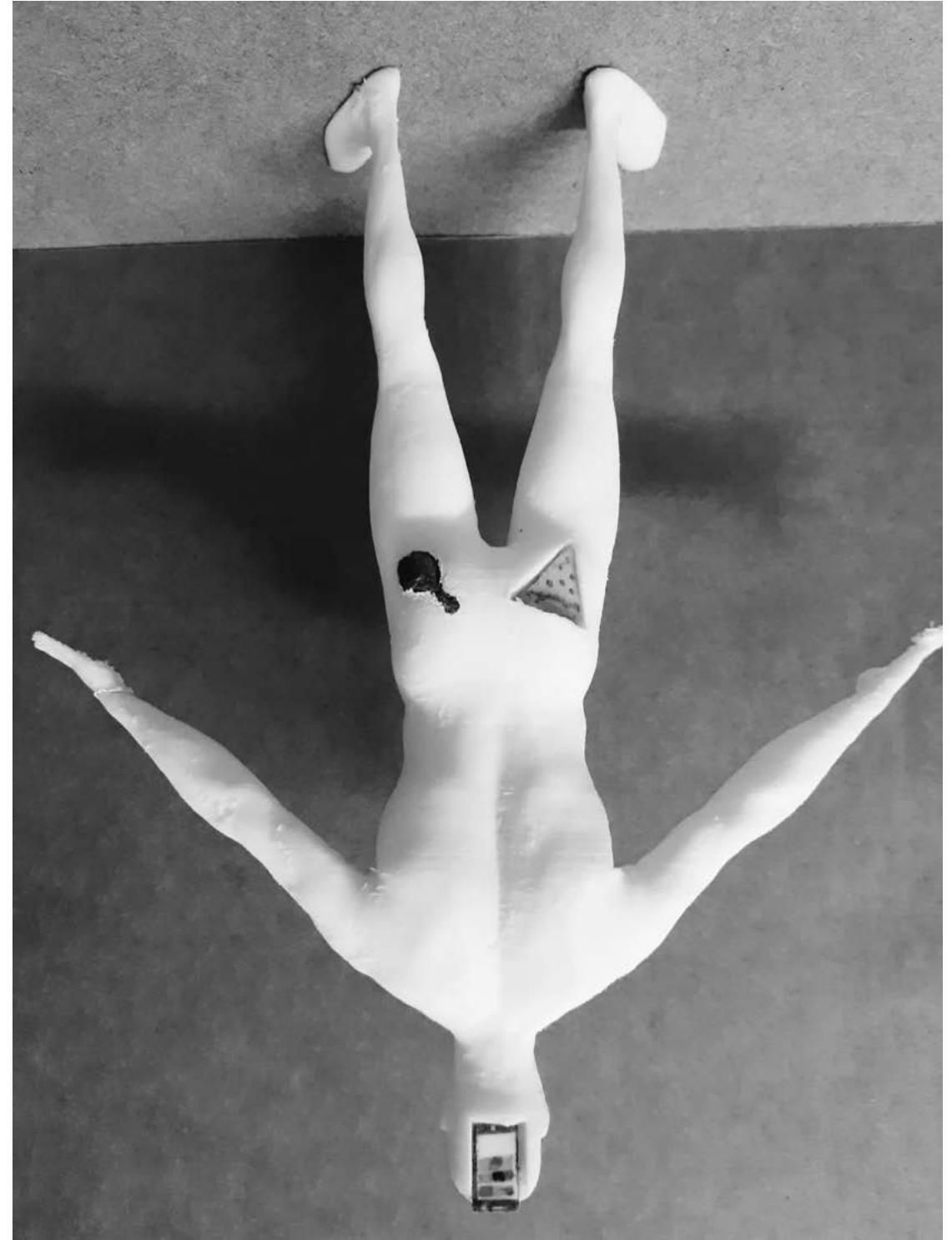
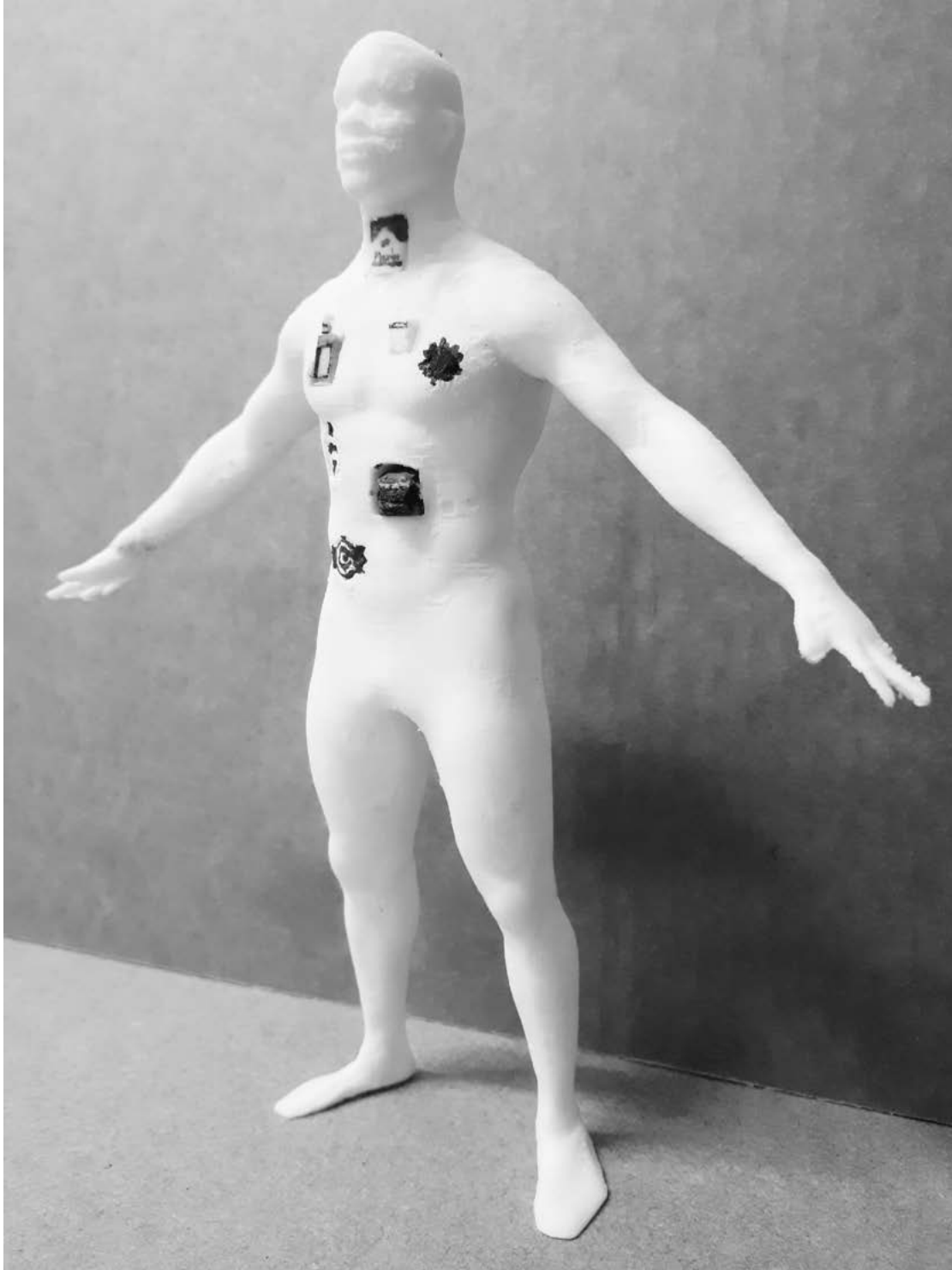
In today's busy society it is not uncommon to let yourself go in one way or another. Everyone is in a big hurry to get places, meet deadlines, consume media and whatever the fastest food is, all in the attempt to do what? Survive or be happy? If that were truly the case everyone would be living healthily and sick with joy, but that is only a small part of the population. In fact, only 4.3% of the world population qualify as "healthy" suffering from 0 debilitating illnesses. You may find this hard to believe from a first world perspective, but with the rise of obesity, cardiovascular diseases, cancers and the return of several vaccine treatable illnesses, we aren't doing too great. Through my research I found a lot of disturbing information surrounding the environment of the body, and how important it is to take care of it because at the end of the day, or your life, you are what you eat.

In a strange turn of events we currently live in a time with both the healthiest people that have ever lived, as well as the unhealthiest. Olympic athletes, modern medicine and gene therapy have all reached beyond what was possible for humans in a few short decades. We are now able to pick and choose genes using CRISPR to improve or remove desirable traits and hopefully eradicate a lot of hereditary diseases within a few generations. Unfortunately this is only in the testing phase and the majority of people aren't in Olympic health. In my own life, 3 hours sitting on a bus and 6 at a desk every day has deteriorated my core strength, which leads to spinal, abdominal, digestive, respiratory and mental deficiencies. Everything affects your health, not just what you eat. Without exercise you're paving a path to future problems that are more painful than a bit of sweat.

Our stressful lives lead us to seek comfort in other ways, and not everyone has a hobby or time. Luckily we have become the masters of instant gratification, whether it be fast food, media or less pleasant substances, the chances to indulge oneself are comparable with the wealth of the roman empire. Awareness into food science is spreading almost as fast as fad diets through our endless media, and hopefully within our generation there will be food regulations to help curve the calorie epidemic. However, drug and alcohol abuse seem to be on a steady rise since the 1970's. In Ireland, the most common drug is cannabis amongst young people with cocaine a close second. There are even recent articles claiming the most severe cocaine addiction is found in rural areas by farmers or in the private sector by nurses to sustain long shifts.

Everyone is aware of the health risks involved, from memory retention to life threatening heart attacks, but as long as you don't see these effects you are highly unlikely to change your habits. The war on drugs has only sped up sales and it is the consumer who deals with the consequences, rarely the suppliers.

In conclusion, it is your body and you only get the one. Taking your health for granted and turning it into an inhospitable environment is your own doing and most of the cures will take a lot longer than the comfort that burger gives you. We often claim we don't have the time or resolve to fix these things, but you have to remember, you are in the driver's seat here. No one else is going to sort it out for you, only you have control over your internal environment.



COLOUR PSYCHOLOGY

Caitlin McAndrew

Colour is something that every human being takes for granted. The majority see colour every day; from landscapes, buildings, materialistic things and even the food we eat and the clothes we wear. What we don't realize is the fact that the way we see colours gives a great insight to our own individuality, how colours affect our emotions and often our actions towards other people and ourselves. It has a bigger impact on our environment as we may think. Colour is one of our greatest resources. Louise Bourgeois believed that, "Colour is stronger than language. It's subliminal communication." Colour certainly does operate as visual communication. But what exactly does colour communicate? Well, it depends solely on the circumstances and on the perspective from which we approach it. Colour can affect our mood, actions and even our emotional state. To really understand the effects of colour, one must understand the science of colour. Many people wouldn't know this but we process colours through our brains, not our eyes.

Basic Science of Colour

Eye sensitivity causes the retina to change under different light conditions. It may vary from hour to hour and can be affected by things such as diseases, fatigue and our emotions. It has been proven that certain environments can affect how we see colour. For example, Loud sounds will decrease red sensitivity of the eye and increase sensitivity to green and the same thing can happen with strong tastes and odors. Sound increases the sensitivity of daylight vision and decreases the sensitivity of night vision. This is why loud noises at night are much more terrifying than if heard during the day.

Eye sensitivity can be measured through different wavelengths. The highest being yellow and decreases towards the wavelengths of red and blue. Interestingly enough, the eye can focus yellow perfectly without delusion, and the brain finds it emotionally pleasing. This is why yellow is used for nurseries and depicts feelings of happiness. However, the eye finds difficulty in focusing on blue, causing objects and images to appear blurred, hence why blue is seen as a dreamy colour. I've noticed the colour blue is used a lot in spas and atmospheres where a calm mood is being set. The brain is actually slower in picking up blue light, that is why blue lights on police cars require a slower flashing rate than lights of other colours. Referring back to the fact that we see colour through our brain and not our eyes, its scientifically proven that the eye records without understanding.

The brain interprets the visual information being fed to it by the eye and compares it with previous experiences. Most of the experiences which transform colour take place in the brain. This is why most people's favorite colour is associated with a happy memory or even the colour of their favorite food. I tested this theory and found that my mother's favorite colour is blue and one of her favorite memories is going on a beach holiday for the first time. My father's favorite colour is red and his favorite food is spicy food. Although, If the brain of the individual is upset in any way, it can make interpretations, which make nonsense of the data being received.

Psychological Lighting

Psychological lighting is the term that describes lighting which improves the appearance of the environment, which can improve the appearance of people within the environment. This is true in the home as well as the commercial environment. It can reflect an individual's likes and dislikes. Although, to create a pleasing environment, you need a lot more than just light, you also need to provide change, variety and colour. Too much white light can be sterile and can even cause vision to black out, and is considered emotionally and visually bleak. This is prevented by providing a variety of using colours to their maximum advantage. In saying that, however, overstimulation may cause equal distress.

People tend to prefer a warm light for recreation and a cool light for work. In general, people react to bright lights. If you were to turn up the lights and colours in any environment, then people will have their barriers broken down and they'll lose shyness and timidity. Colours can also influence productivity. Cool lights at low levels will create a depressing atmosphere but warm lights on the other hand, flatters the environment along with the human complexion. Think about candlelight and firelight. These have a warm, orange colour and are far more relaxing and friendlier than moonlight, which has a cold quality to it. This is a perfect example of how colours affect our mood. People generally prefer warm tones, which enhances red, orange and yellow hues, hence why candlelight and sunsets are seen as inviting and intimate.

Colour Theory

"Colour may only seem to be a material property but in reality, it exists only as a sensory perception for the viewer". In other words, colour is an illusion according to Harald Kueppers. There is no colour in the physical world. There are only matter and energy which both are colourless. Humans are optically in a position to understand their environment, judge their personal situation and perceive possibilities for movement, for example,

we can recognize when a fruit is ripe and ready to eat by its colour. Therefore, colour is visual information.

Even surrounding colours can have an effect on how we perceive different tones. After the eye has adapted, the same colour sample can reveal different hues, depending on the colours surrounding it. This phenomenon is called 'simultaneous contrast'. We have achromatic simultaneous contrast where the same colour looks darker against a white background than against a black. Chromatic simultaneous contrast is when a colour sample changes its appearance due to the influence of surrounding colours.

Chromaphilia

Chromaphilia is the story of colour through art. Colour is art's greatest resource. It has been central for making art for centuries. Certain colours initiate different moods in paintings. Think of the renaissance. Artists promoted many beautiful tones such as the colour gold for its ability to embody radiance and convey something specific to spirituality, which is still used in present day.

Art Therapy

Hara Stehlikova wrote a book dedicated to her students, "From the Depths of the Soul". The first specialized books dealing with the relationships between mental disorders and creativity date back to the beginning of the 19th century. It is believed that technical skills do not make one a good artist, and that the works 'made by madmen' who's minds are unpredictable can be of a high quality.

Cesare Lombroso, an Italian psychiatrist in 1988 believed that artistic ability develops in people with mental disorders as their creativity increases because their logical brain tries to escape the fear of the illogic and absurd. Not even severe mental disorders can destroy artistic capability. It has been proven that using art and colours as a way of therapy, is very therapeutic for its patients and even the therapists themselves.

These patients become withdrawn to their inner world. They overcome their limited understanding to express verbally and instead choose to use painting, ceramics, sculpting and colours to voice themselves. In psychotherapy, patients are told to think about imagining themselves in certain landscapes such as forests, caves, abysses or wild mountains and fields. The colour of the landscape can depict great information about the patient's well-being. Certain colours are seen more positive such as blue, yellow and green, where black and red can show deeper feelings of anxiety. Seas, oceans and lakes represent deeper areas of human subconscious. The process of provoking such images is seen as a cleansing process.

Brian Eno is known for his music and visual art and had received praise for his latest project in a hospital in Hove, where he produced two pieces of art designed to create a relaxing environment for patients. His work here can be described as a form of therapy, manipulating his art into creating a soothing environment to those who need it. A hospital reception is generally an anxious place, filled with people who would rather be anywhere else. However, just inside the Montefiore Hospital in Hove, a series of eight plasma screens are arranged in a pattern, displaying colours and shapes which gently transform themselves. He chose colours of blue, orange, green, purple and pink. All in a variety of different hues that resemble pastel colours. Also seen as baby colours, which naturally pleases the brain and soothes the individual. The aims were to encourage patients to reach a point where they "slow down and relax". Downstairs of the hospital is a more intense experience. There is a room named 'The quiet room' which consists of Brian Eno's trademark music with three panels subtly changing colours. Creating a place of escape and tranquil.

To conclude, Colour is very important in creating environments, manipulating our moods and our actions towards people and ourselves. Colour psychology will always be an important tool in helping us understand and accepting what makes us human. After doing all my research on tone, my eyes have been opened to the fact that colour has always and will always be an important factor in my life and everyone else's life for that matter. Colour definitely has its own unique terminology, even stronger than language itself.

Liminality and Me

Aoife Rice

Have you ever been somewhere where reality felt a little bit altered? Where you feel like you could have entered an alternate dimension? Where something just felt not quite right? Well then chances are you've experienced liminality or been in a liminal space. A liminal space is the time between the past and the future, the 'what was' and the 'next'. It is a place of transition, waiting and not knowing. Liminal space is where all transformation takes place if we learn to wait and let it form us. It's that late night run to the supermarket at 11:34 pm, a playground at night time, side allies, the empty bathroom at a small venue with the music thumping in the background, stairwells, galleries in art museums that are empty except for you...For this project I wanted to explore liminal spaces in areas that I frequent around Dublin. What resulted was a series of photographs in my favourite of liminal spaces.



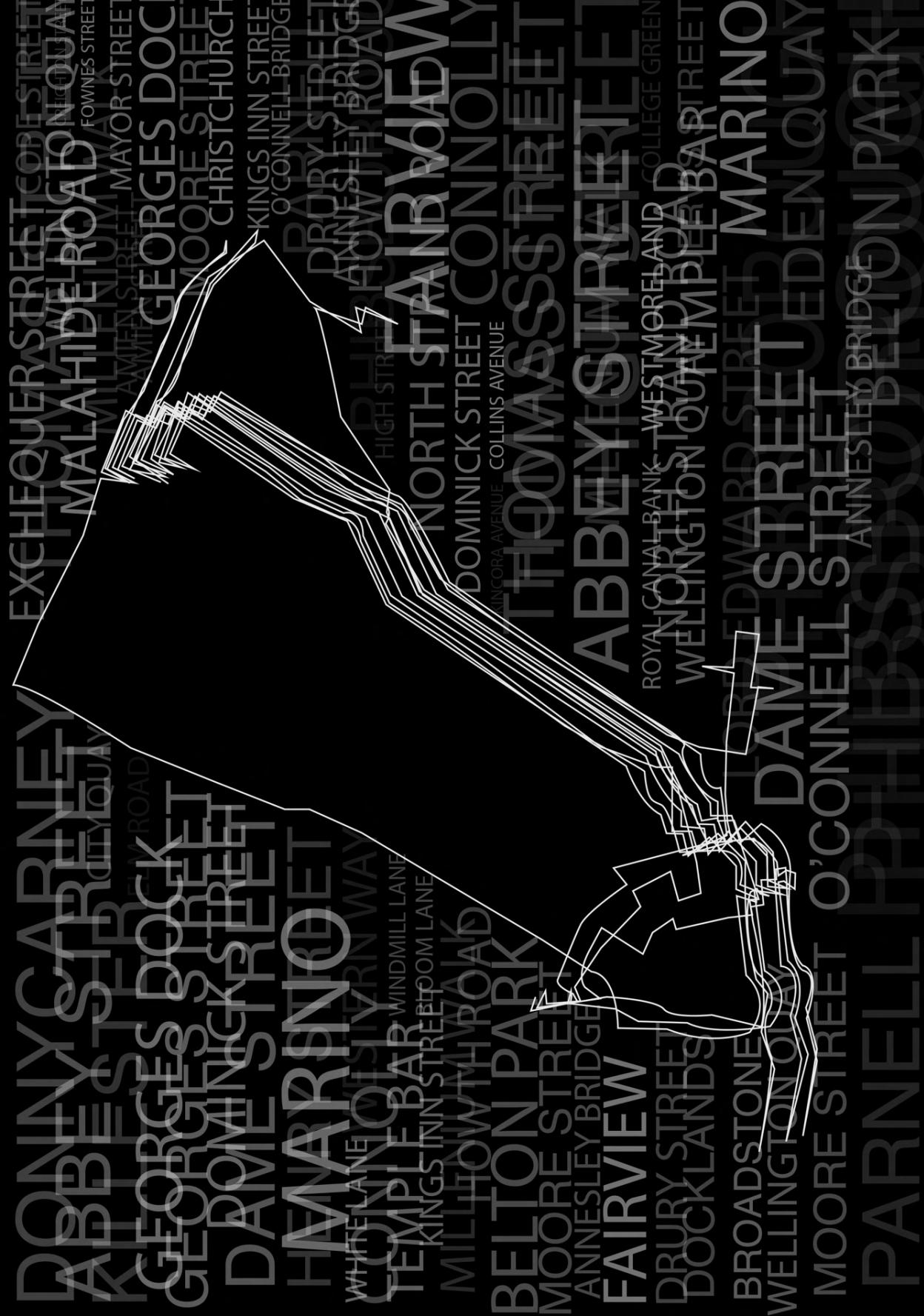




Personal Exploration

Nadine Reilly

This work documents every place I went and every thing I did over the course of one week. These are routes, names and places, all traced in motion, in line and in memory. A personal map of the environments I inhabit.



An Environment of Living with a Medical Disease on an Everyday Basis

James Comerford

Diabetes is a disease which occurs when the pancreas within the body stops producing the hormone insulin. This hormone is needed to break down the sugar that we eat, in order to provide us with energy. I am a product design student and I have a keen interest in social design. I enjoy the concept of solving problems faced by society and designing ways to fix or assist society, I am hoping to create an awareness around type one diabetes and the difficulties faced on a daily basis by individuals who have the illness. In doing this I would hope to make it possible that design students like myself, the public, and diabetics could all work together to create a better quality of life for those who faces with this sometimes debilitating and potentially fatal disease.

S. B. is a 20 year old student at the National College of Art and Design. She is a type one diabetic and has been since November 2008 at age 9. She is a third year student studying fine art painting and education. Battling with the restrictions that come with her medical disease every day is a challenge in itself. Making sure that her blood glucose are kept within a stable range as if they're not it can be potentially serious. Without insulin, she would be exhausted, extremely ill and extremely ill and possibly die. Blood glucose is in short, the measure of how much sugar is in your blood. Ideally doctors would like patients to have blood glucose records between four and six. When initially diagnosed, you are tested with a blood glucose meter which ranges from about 1.5 – 30 roughly. Type 1 diabetic monitor their blood

glucose levels through the painful routine of finger pricking and insulin injections on a daily basis. This along with counting carbohydrates and keeping their eyes and kidneys safe means a very challenging life for them.

Q&A

Do you have any medical equipment to aid you with your diabetes?

A. Yes, I have an insulin pump (which I change the needles of every three days) and I use a blood glucose meter to test my blood sugars (the amount of glucose in my blood)

Do you feel comfortable using your diabetic equipment in public?

A. Yes most of the time however there are some exceptions. For example in quiet places like lectures or classes I am slightly conscious of the noise that the pump and meter make. Sometimes if there is something major wrong the pump will alarm and it is slightly embarrassing because the music sounds like an old video game!

Do you feel any different to anyone else who doesn't have diabetes?

A. Yes and No. Different in the fact that I have to do daily tasks to ensure that I stay healthy that most people don't have to do but does this stop me from living a normal life? Most of the time no unless my sugars are either falling too low or rising too high, usually there is a reason for either and there is always a method of trying to stabilise them.

What do you have to do to keep your blood glucose at a stable level?

A. To ensure that my sugars are at a stable level, there are various things I must do. I have to count my carbohydrate intake each day ranging from roughly 190-220 grams depending on how hungry I am! Then I must also make sure that I exercise as well as take my insulin every time I eat. If I do not take insulin with food, the sugar will not get broken down and therefore my blood glucose levels will run high until I either take extra insulin or do exercise and in some cases both are required! To stop my blood glucose from falling too low I must make sure that I do not take more than the required amount of insulin or if I plan on doing any extra or intense exercise I will have to eat something worth 15/20 grams of carbohydrate so that my sugars will balance out between the extra food and exercise.

What is your diet like?

A. I can eat pretty much everything in moderation! Unless it's something high in sugar, well then I usually save it for when I have low blood glucose and need the sugar! Carbohydrate based foods are usually a must but only as long as they're not too high in carbohydrate as to avoid going over the recommended allowance.

What common dangers or problems can you come across?

A. On a daily basis I'd face challenges such as exercise and stress affecting my blood glucose, insulin injections and blood glucose testing. Exercise affects my blood glucose levels as it burns energy therefore my sugars fall and I have none, this happens when they reach 4 and below. This lack of energy comes with feelings of shakiness, loss of sight in sever cases and shortness of breath. This makes simple tasks even such as the lift being out of service and having to climb 3 flights of stairs an extremely difficult. Things like stress and worry cause my sugars to rise to above 7, which is considered to be too high so I must take extra insulin. This extra insulin is called a "correction". I take it on top of the background insulin I get throughout the day to balance the

high reading and ensure that it comes down to a reasonably lower but not too low of one. It's all about balance!

Do you have any restrictions?

A. My meal times can be quite restrictive as I do need to eat breakfast, mid-morning snack, lunch, afternoon snack, dinner, bedtime snack. So to ensure that I fit each of these meals in I must space them out evenly as well as I have to wait at least two hours between each meal. This allows the insulin taken at each meal time, to have maximum effect. My immune system is already lower than the average person so becoming unwell can have serious restrictions on me as a student, I miss time out of college because I have to stay at home and try my best to get better, being sick means my sugars run too high or too low and neither is fun when you've 3 flights of stairs to climb and lectures to attend! The technology used in my insulin pump it makes going on holidays restrictive as simple things like going through the scanner in airport security can be a problem! And roller coasters are a definite no while the pump is attached to me so I usually have to unclip it from me and suspend it until I'm done! Lastly, driving! I have not yet sat even my theory test as driving as a diabetic is difficult because insurance companies charge more for insurance with a life-long illness and insist that before any diabetic drives they must check their blood glucose first as if you were to have an accident and not have done your blood glucose before driving, you would not be covered!

I believe that this issue has become too big to be solved by just one person alone. We need a vast variety of minds to deal with these problems and help to find solutions. Perhaps you have thoughts on how we can improve the lives of those living with a medical disease. If so, get in touch.

Email: 17319573@student.ncad.ie

Built To Last.

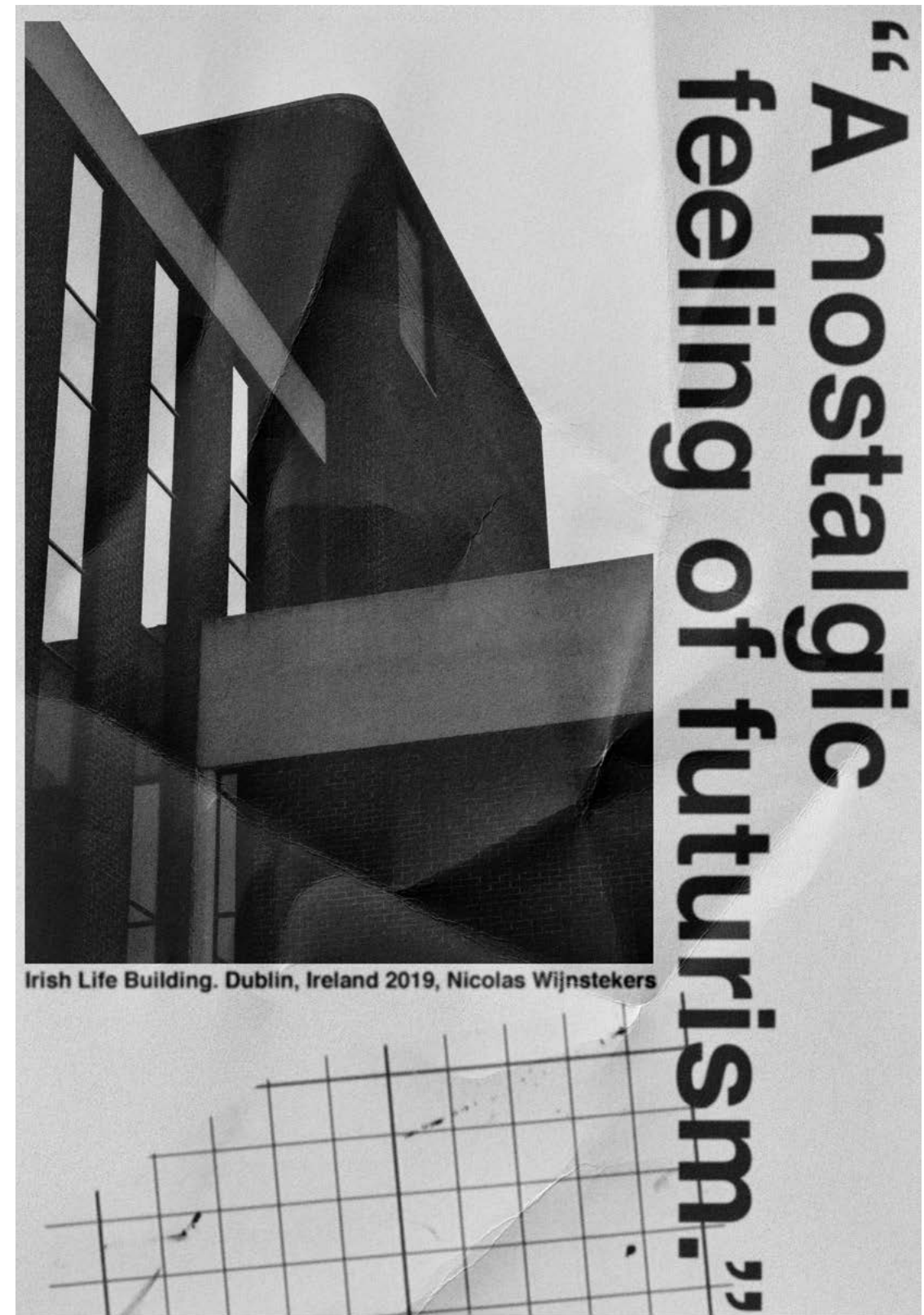


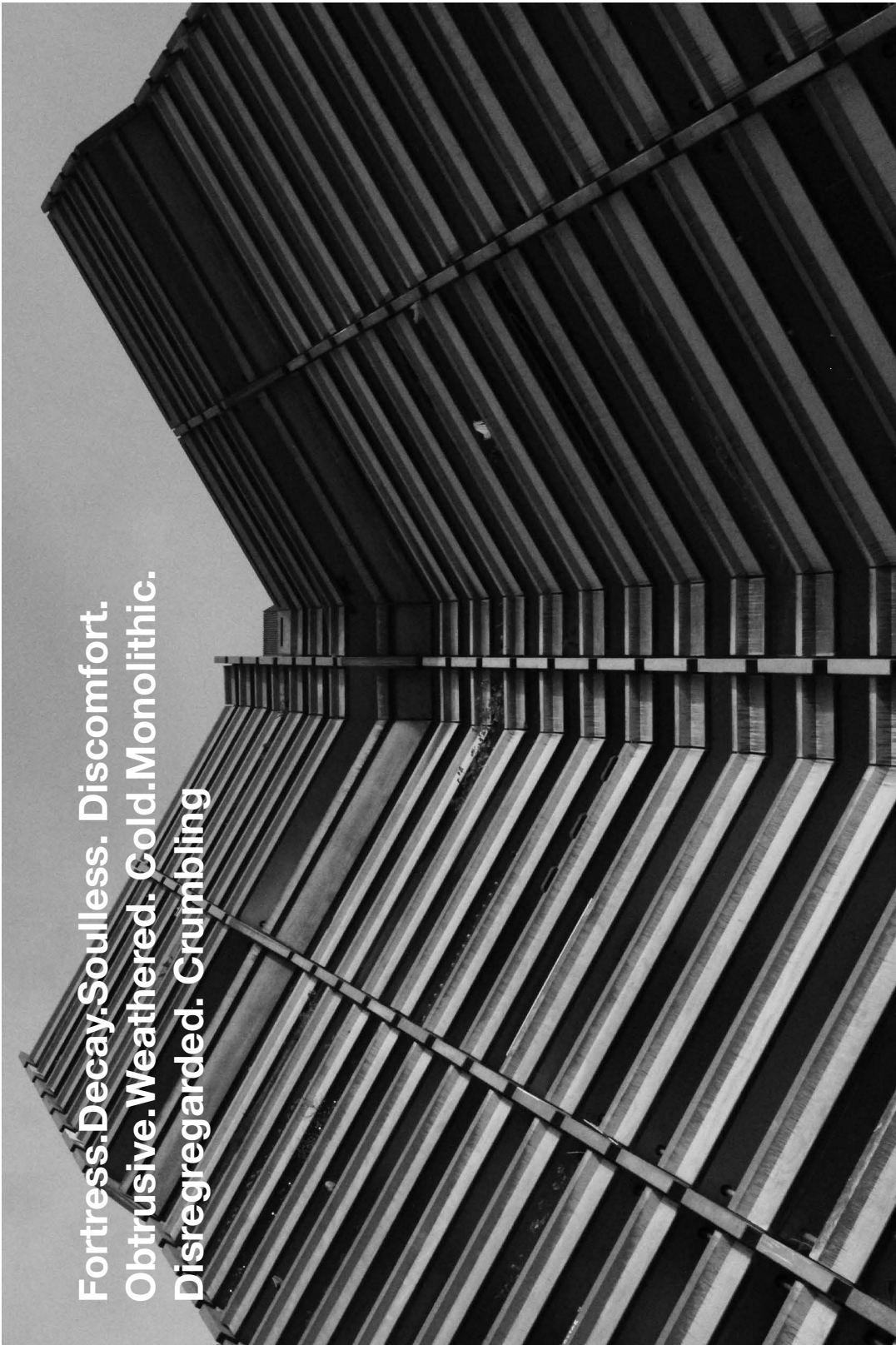
Nicolas Wijnsteker & John McCarthy

The demolition of Brutalist buildings is a growing movement worldwide. Brutalism has always been a contentious topic in architectural debate, however with increasing demolitions it has gained the attention of people outside the architectural community. The debate on whether or not brutalism is here to stay interested us, therefore the aim of our project was to understand first hand what the general consensus is on Brutalism. What makes a Brutalist building beautiful to some and hideous to others? What impact do these buildings have on the surrounding community? Why are these buildings so controversial? Our research aims to accumulate a list of qualities that belong to Brutalism with the end goal being to translate them into two pieces of furniture. One piece demonstrating Brutalism's elegant use of simple geometric shapes, textures and materials, while the second displays the cold, aged and utopian aesthetic of Brutalism.

Brutalism is an architectural style that emerged in the mid-20th century and was popularized in the late 1950s and 1960s. Brutalist architecture is commonly characterized by minimalist block-like structures often featuring exposed building materials and remnants of the construction methods used. Its roots originate from the French term *béton brut* (literal translation: raw concrete), which Le Corbusier coined to describe his use of the material. The poured concrete structure forms a large part of Brutalism's identity. This made erecting Brutalist buildings inexpensive and became a favourable method used in the construction of institutional buildings like libraries, courts, public housing, city halls, shopping centers and educational buildings. Peter Chadwick touches on this topic in the introduction to his book, *This Brutal World*.

"It wasn't just economic efficiency that concrete construction and Brutalism offered. The architects who favored it loved the material's "honesty," the sculptural opportunities, the uncompromising modernity, as well as the socially progressive intentions that lay behind the style in a climate of economic decline, political unrest, and, in Europe, the long decades of post-war reconstruction."





Fortress. Decay. Soulless. Discomfort.
Obtrusive. Weathered. Cold. Monolithic.
Disregarded. Crumbling

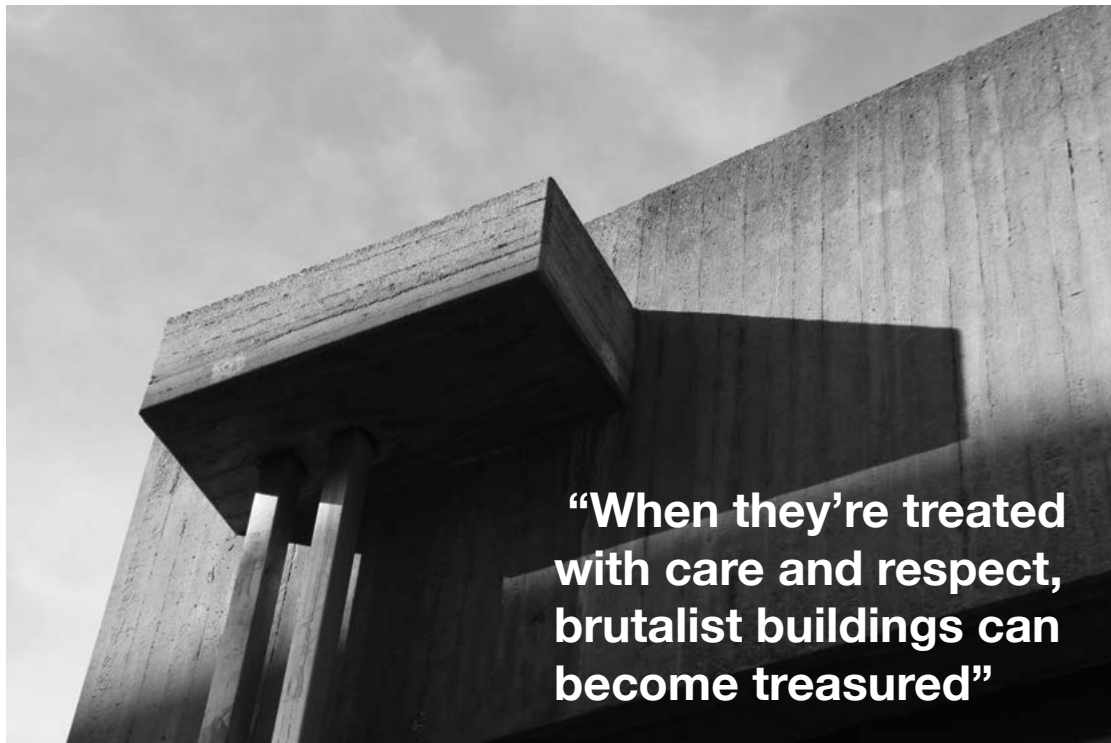


Brutalism eventually became synonymous with the socially progressive housing solutions that architects and city planners referred to as modern urbanism. With an ethos of 'social utopianism', it became increasingly widespread across European communist countries such as the Soviet Union, Bulgaria, Yugoslavia, and Czechoslovakia. While brutalism started off as an aspiring notion to a utopian future, the style was quickly outgrown and buildings started to decay along with Brutalism's reputation. Time devoured these concrete monoliths. People associated them with crime and poor living conditions. They began to weather and crumble leaving the buildings feeling cold, soulless and disregarded. As the 20th century came to a close, Brutalism came to represent the forgotten under-class with its unforgiving concrete presence and became increasingly reviled. Brutalist buildings began being demolished.

"I realize there is an antiseptic and naturally 'cold' quality to lots of the Brutalist aesthetic. people are negligent in their upkeep of these concrete monsters."

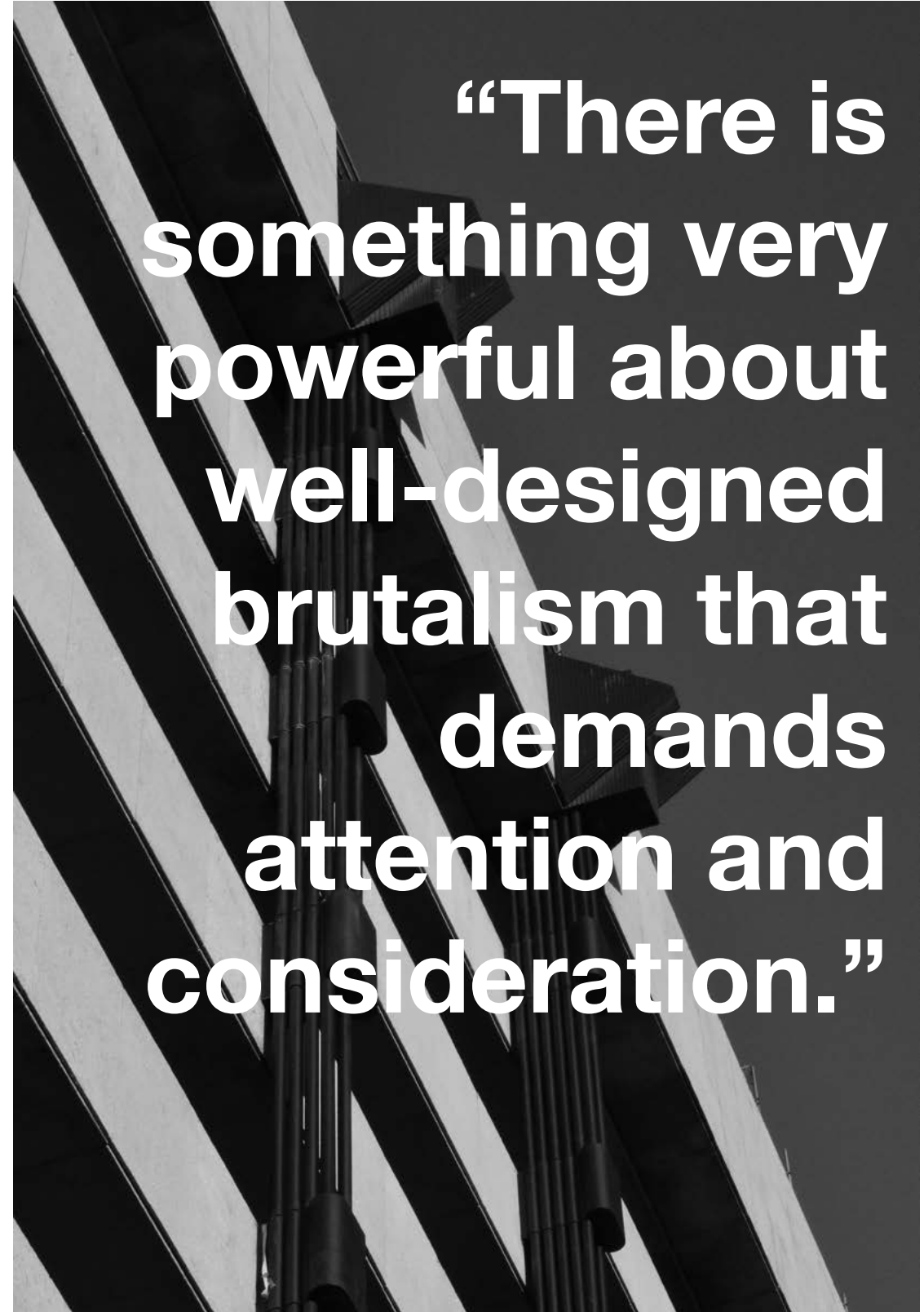


However, there are Brutalist buildings that we have come to know and love today. Many of which were typically hated by the community before people learned to appreciate them. In recent years, Brutalism has started to be critically reappraised with certain buildings being seen as architectural landmarks, keeping them safe from any threat of demolition. These buildings are treasured and well-kept as they stand to represent an important part of their cities history and architectural timeline. The Barbican and National Theatre in London, The old Central Bank in Dublin, and the Boston library all serve as good examples of how buildings have become loved through time, renovation and reinterpretation.



“When they’re treated with care and respect, brutalist buildings can become treasured”

“There is something very powerful about well-designed brutalism that demands attention and consideration.”

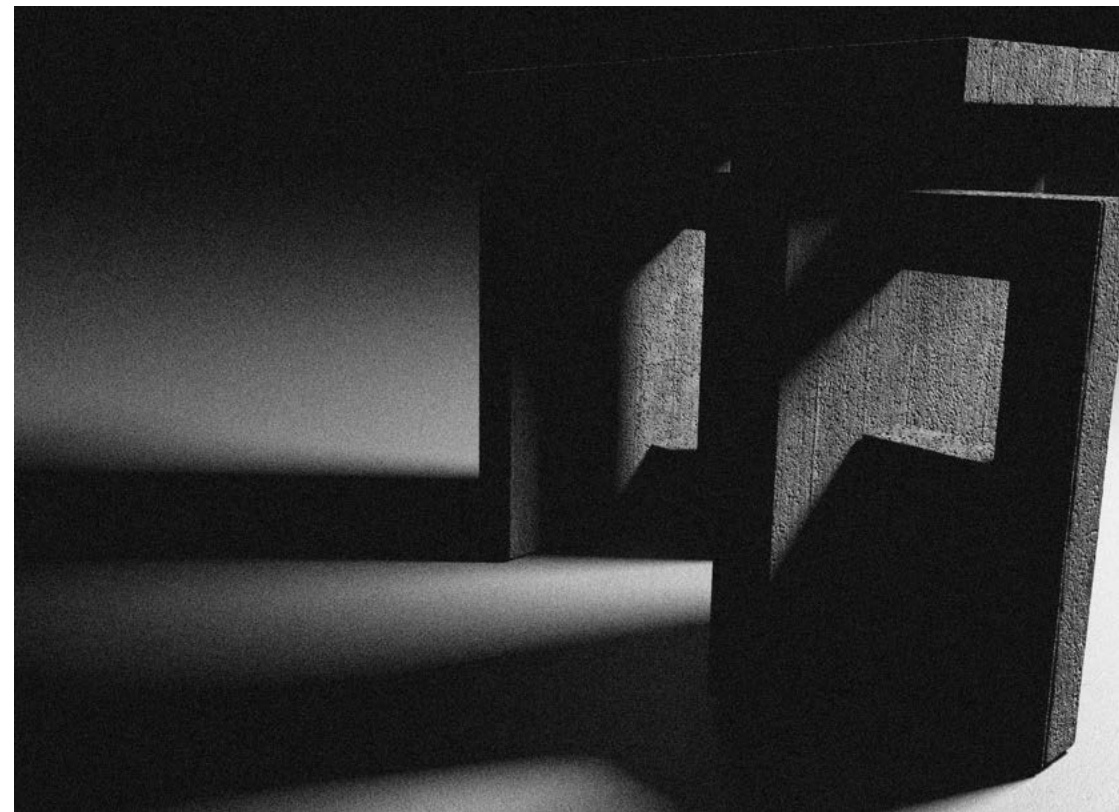
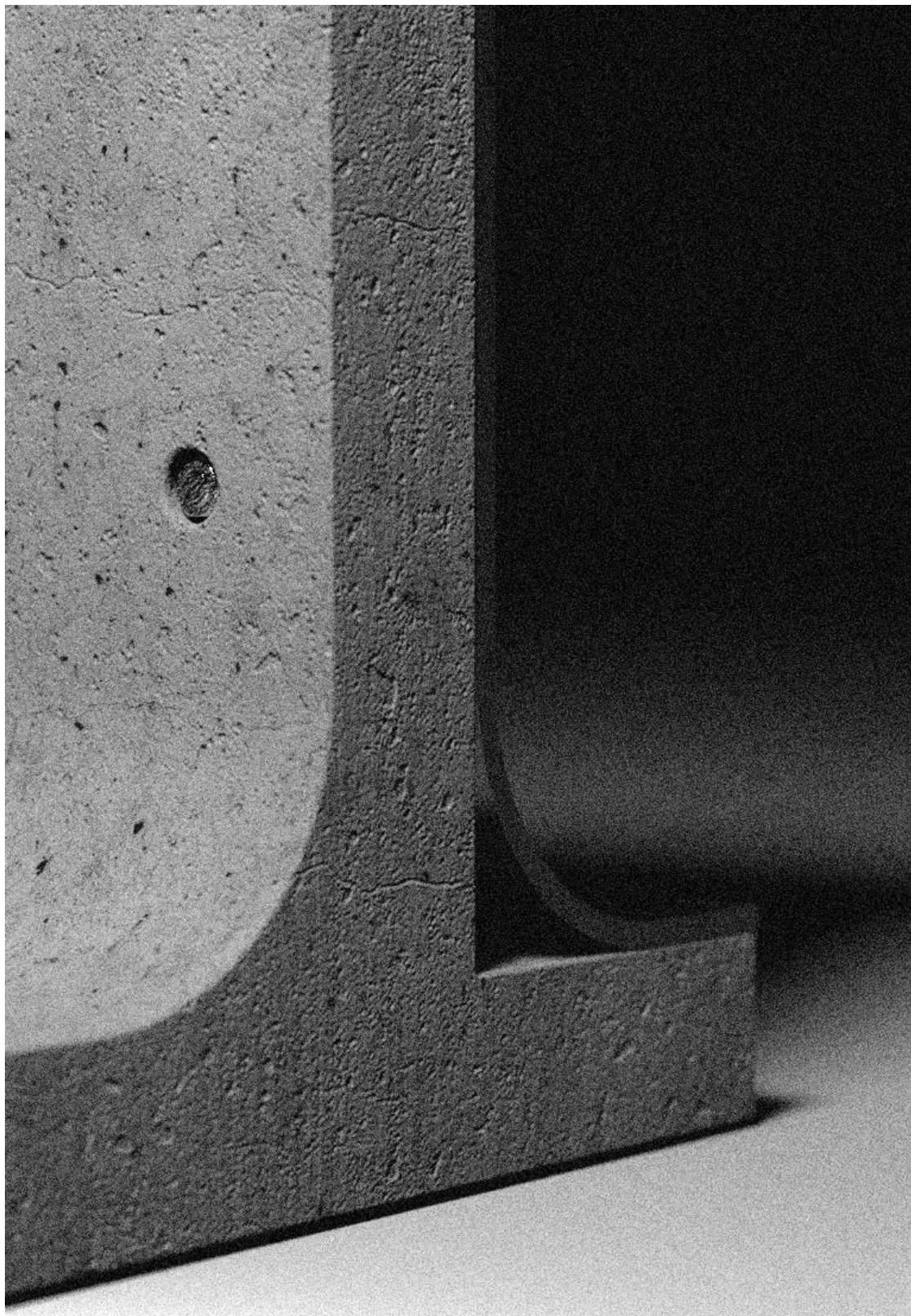




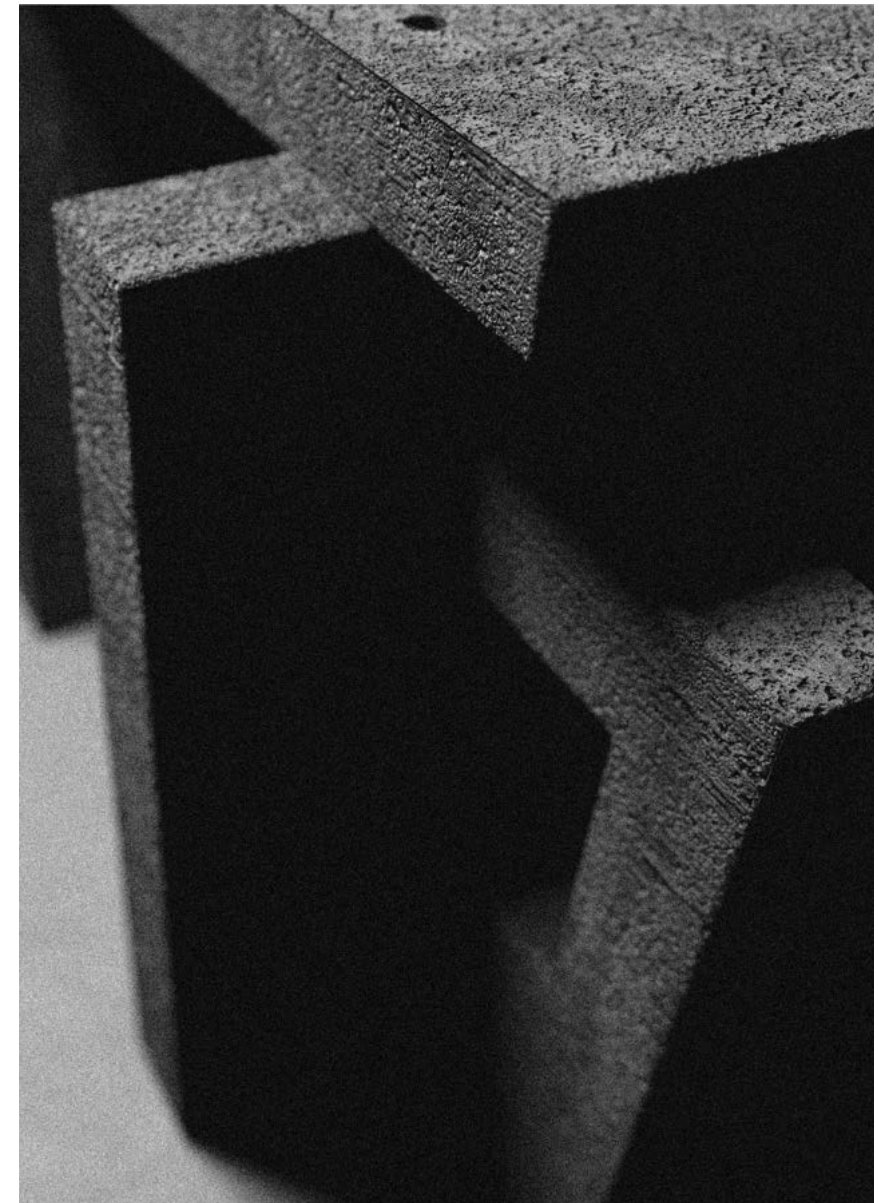
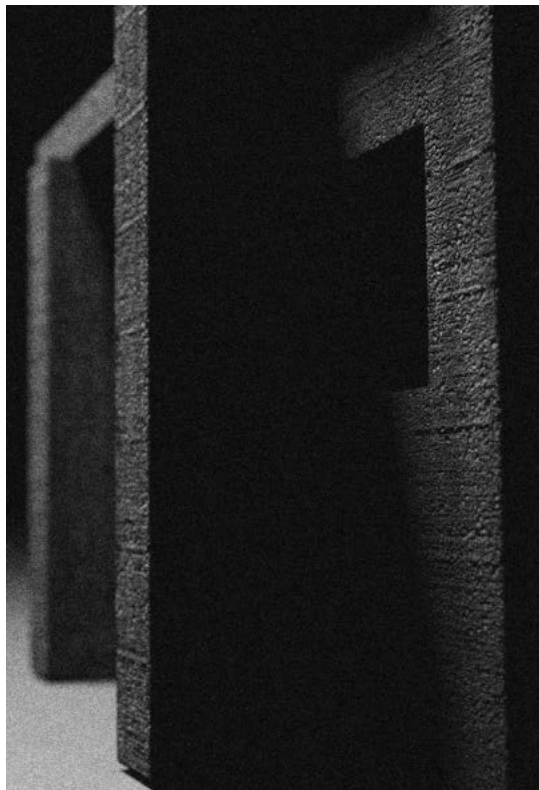
What qualities lead a Brutalist building to be perceived as beautiful? It is fascinating to compare different perspectives on Brutalist architecture. Many see Brutalism as works of art that represent a forgotten era of architecture and integral parts of our cities history. Others see them as ugly concrete blocks with an aggressive imposition and weathered facade that deserve nothing more than to be torn to the ground. We designed two pieces of furniture based on our findings, hoping to create visual representations of the different ways Brutalism is perceived.



This stool shows qualities of brutalism that carry negative connotations. It's plain and blocky, not very comfortable. And it's weathered and crumbling. It feels cold and uninviting.







In contrast, this stool presents the qualities of Brutalist architecture that are generally perceived as beautiful or recognized to hold aesthetic and functional value. A simple use of geometry and a manipulation of symmetry yields a minimal form which hints at that of a traditional stool. Allowing the user to still recognize and understand its function, but question if it's to be actually used in that way at all. The use of a formed acrylic sheet was directly inspired by the Berkeley Library on Trinity campus, which exhibits large semi stadium formed polycarbonate windows. The introduction of this material aims to slightly distance the stool from Brutalism's conventional aesthetic and to make its overall presence more familiar.

Garden Cities of Today

Lauren O'Brien

Are the cities that we live in planned out in advance? Or do they organically grow in size with every unique building followed by the next? I think most people would agree that the city environments where winding lanes with uneven paths are towered by topsy-turvy buildings bestow a certain character and beauty to an area and make it an enjoyable place to live. However, back in the late 19th century when the concept of urban planning was born, a man called Ebenezer Howard believed that cities should be planned, down to the last house, to insure gardens, public libraries, farms, pedestrian streets and many open green areas, he called them 'Garden Cities of tomorrow'.

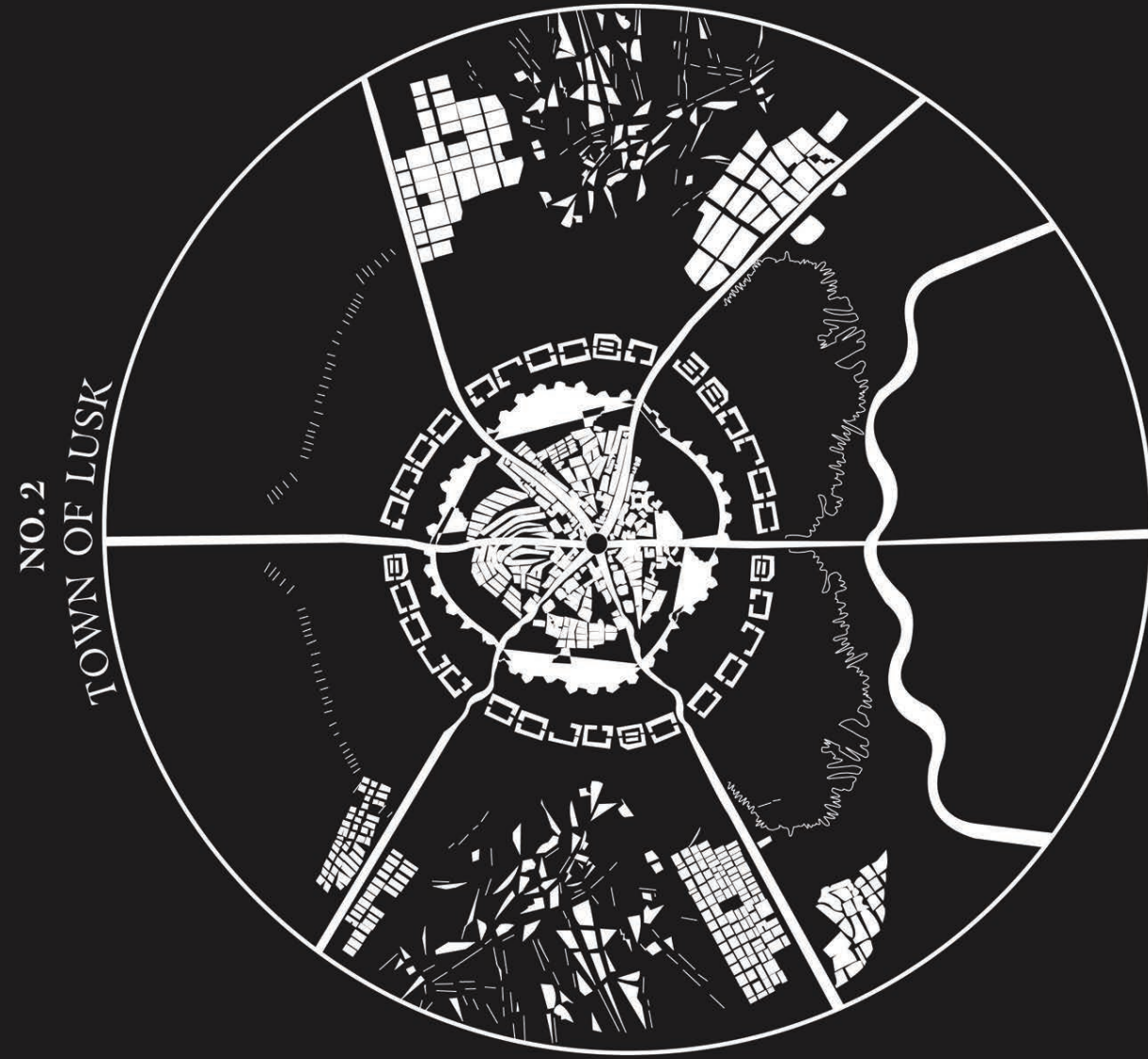
It is clear that this idea of 'Garden Cities' never really took off, most cities around the world are half pre-planned and half organically formed. It is interesting to look at the different layouts and mappings of major cities around the world, I can't say two are that similar. Considering how unique major cities around the world are, what would it look like if you tried to plan a town using their components? What would it look like if you used these components and tried to follow Ebenezer Howard's 'Garden Cities' concept?

I decided to redesign my home town, Lusk, Co.Dublin, in this very exact way. I took all the major landmarks, shops, and facilities in my town and reorganized it in Howard's circular frame. Howard specifies six main boulevards that intersect at a central garden, houses must stay in the centre of the city, never more than five-hundred metres from a green area, shops and eateries surrounding the housing in a ring, followed by facilities and larger green areas on the outskirts. A railway system connects to one of eight major lines that lead to the county's centre, all other towns can be reached by the same rail on the outskirts of the county centre just like my town.

The result is absolutely unrealistic and it resembles something out of a dystopian novel. However, I can see its merits and I think there may be a time in the future where a greater focus on nature and separating home life from work life could be beneficial. For now definitely a garden city of tomorrow, not today.

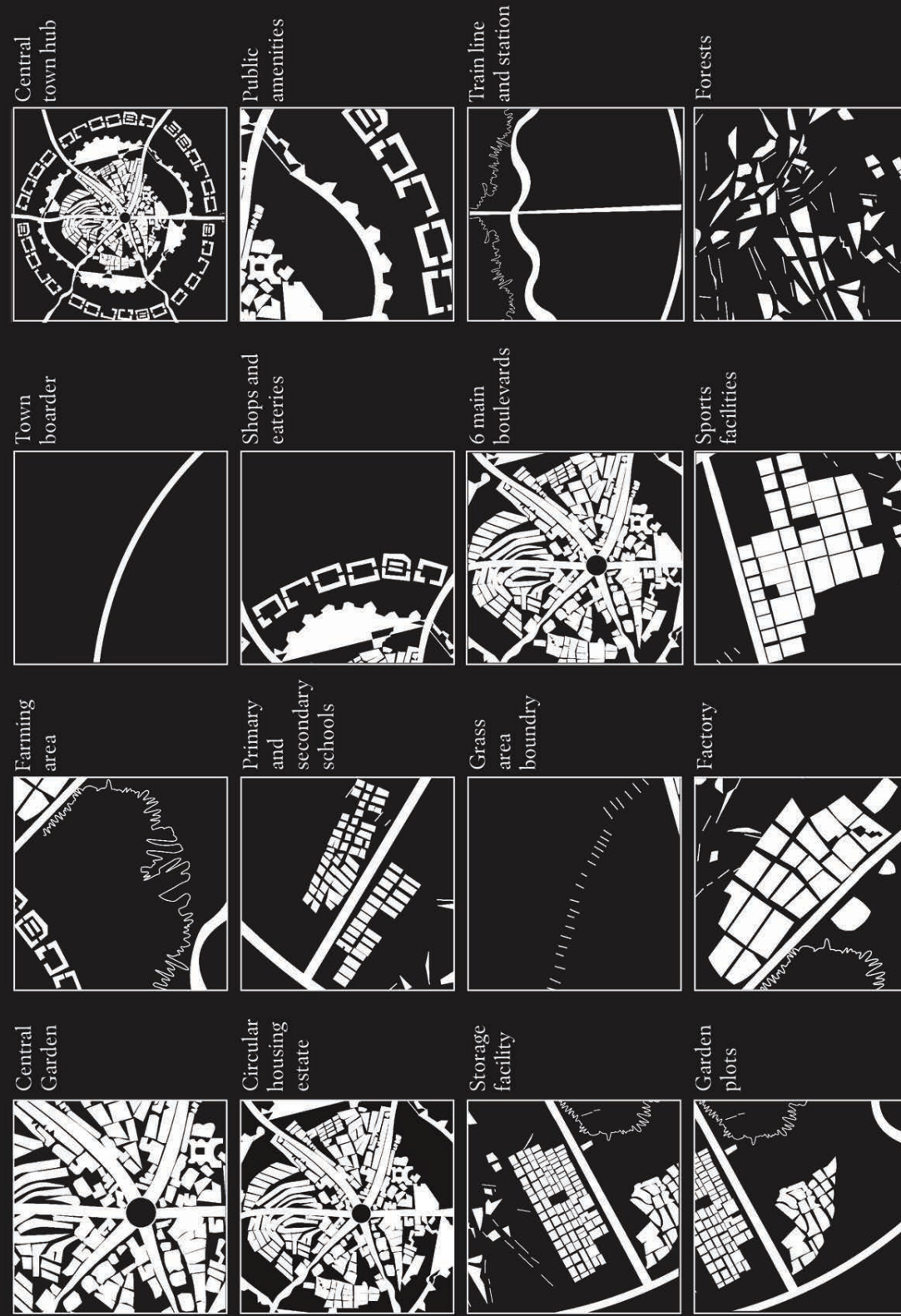
NO.1 MAJOR CITY MAP ELEMENTS





NO.3

LUSK MAP KEY



How Environments Are Affected by the Deforestation of the Amazon Rainforest

Luke Devlin

The Amazon is the world's largest rainforest and the largest river basin on the planet. More species are found here than anywhere else. The region is believed to be home to 10% of known species on Earth. But today, the Amazon is facing a multitude of threats as a result of unsustainable economic development. 20% of the Amazon Biome has already been lost and the trend will worsen if gone unchecked. The Amazon is the biggest Deforestation front in the world and interventions are urgently needed to prevent a large scale, irreversible ecological disaster. WWF estimates that 27%, more than a quarter of the Amazon biome, will be without trees by 2030 if the current rate of deforestation continues.

The Amazon contains millions of species, most of them still undescribed, and some of the world's most unusual wildlife. It is one of the Earth's last refuges for jaguars, harpy eagles and pink dolphins, and home to thousands of birds and butterflies. Tree dwelling species include southern two-toed sloths, pygmy marmosets, saddleback and emperor tamarins, and Goeldi's monkeys. The diversity of the region is staggering:

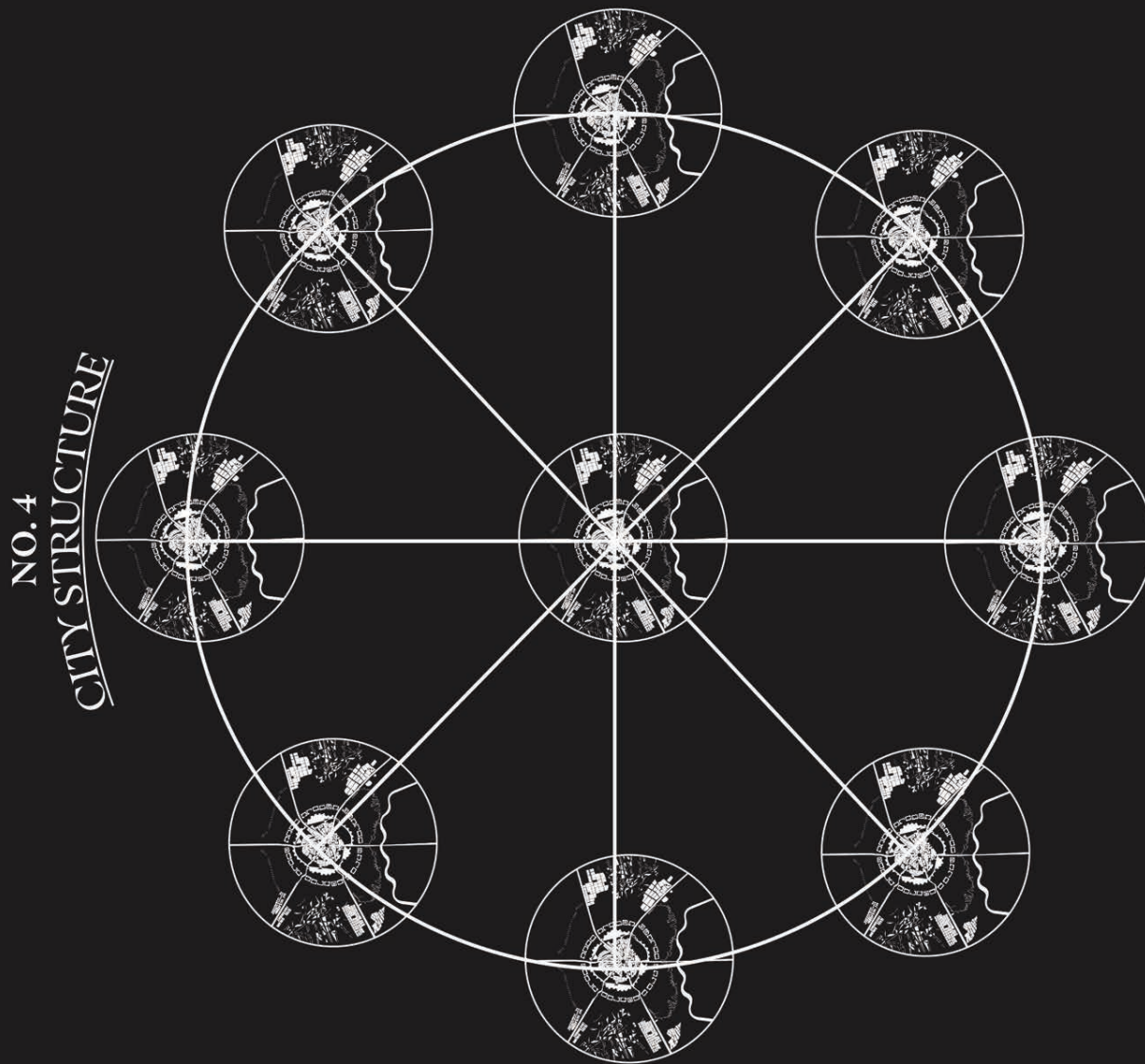
40000 plant species
3000 freshwater fish species
More than 370 types of reptiles



The South American Tapir. These hoofed mammals have come under threat as a result of illegal hunting and due to their habitat being destroyed by human activity.



White-Cheeked Spider monkey. This tree dweller has seen his number dwindle due to the expansion of farmland in the amazon and the building of new roads through the region.



Giant Otters

Amongst the cutest animals of the Amazon Rainforest these creatures depend on both land and water for survival, but they are rapidly dying off as a result of deforestation and water contamination.



Hyacinth Macaw

The main threat to this beautiful bird is the illegal pet trade, there is a market for these birds due to their splendour and this is reducing the numbers found in the wild.



Uakari Monkey

Known for its red face, this member of the Uakari tribe due to extensive deforestation has destroyed much of their natural habitat and put this monkey on the endangered list.



Countries Affected by the Deforestation of the Amazon

The Amazon is a vast region that spans across eight rapidly developing countries: Brazil, Bolivia, Peru, Ecuador, Columbia, Venezuela, Guyana, Suriname, and French Guiana.

BRAZIL The Amazon is home to the largest number of different species of trees in the world. Its biodiversity could be reduced by nearly 57% if the current rate of deforestation continues. A large majority of the Amazon runs through Brazil so it's vital government bodies and campaigners fight against this recent upsurge. Corruption and illegal logging are factors that also affect the country.

PERU Second to Brazil, Peru has the largest other part of the Amazon running through it. The main issue is down to 80% of Peru's deforestation comes from illegal activity. The government is working on stopping this, but progress is slow. A massive problem Peru faces is the fact that its economy relies on natural resources which has huge implications for the Amazon.

BOLIVIA The huge soya industry equates for a large part of Bolivia's deforestation problem. The government won't risk the country's food security by taking measures against the industry. Cattle ranching is also a big problem for the same food security issues.

Actions been taking in order to prevent deforestation Amazon Governments to design and implement "zero net deforestation" plans, create awareness and recognise indigenous peoples and local communities rights.

Amazon and other governments to facilitate cross border dialogue and review protected areas and dangerous territories.

Finance and Private Sector to open dialogues with civil society organisations and local communities to ensure appropriate measures are taking place.

Deforestation rates in the Amazon have declined over the last decade, but continue at an alarming rate. Brazil is responsible for half of the deforestation in the Amazon, but deforestation in the Andean Amazon countries, namely Bolivia and Peru is increasing. The areas showing the greatest Deforestation rates are those that have more roads. Other factors adding to the pressure in the region include an increase in cattle ranching and soy plantations, particularly in Bolivia.

Photographs & drawings from the Ireland's National Botanic Gardens



The Evolution of the Product Design Work Environment

Dehlia McCarthy

In Ireland, the gender demographic of designers falls at 25% female and 75% male, with this gap growing in more traditionally "male" disciplines. Product Design for example, has only 5% women. As a female product design student, I am curious to investigate this male dominated industry in which I am hoping to enter. I was also interested to examine the progress the industry has made in regards to the ratio of men and women and the treatment women receive both in the workforce and in college. I interviewed our female tutors Katharina Pfeutzner Phd and Caoimhe McMahon to get their perspective on what the industry was like in the early 2000's as well as spoke to my fellow female product design students Enya Carroll and Brohwyn Brennan to get a feeling of how things are now.

Where did you work previous to NCAD?

Katharina: I worked in a design consultancy called Allies. I graduated in 1998. I got a job there straight away. I wanted to work in a design consultancy for some reason and I was there until I transitioned here in 2002. I then juggled both for a further 4 years until I just gave it up and worked here full time and do my phd.

Caoimhe: I didn't get my first job until a year after college. I got a job for a company called Lecki, in Belfast. I thought nobody else from my class would be looking up north. I found them in the golden pages!

What was the male to female ratio like?

Caoimhe: I was the only woman in the office. There was around five guys and myself. They were all older than me. We were the design office attached to a factory. We did woodwork, metalwork, textiles, upholstery and assembly. It was very male dominated except for the upholstery and textiles areas. I was hired at the same time as another guy who had also done Industrial Design. It wasn't until a year later that an occupational therapist joined the team and she was the second woman. Then they hired another female designer six months after that. I think I was the first woman ever on their design team but I'm not sure. They might have had an intern or something like that. Now this was 2004, so it was a long time ago. When I was up using the machines in the factory and doing metalwork they would say things like "Jesus you never see women in here." It was interesting.

Katharina: Are you kidding me? When I started there was no other women. Then they hired an office administrator who was female after a while but there was no other female designers. Actually when I was there I'm pretty sure there was no other women in most consultancies in Dublin at the time. But there were fewer girls graduating. And also there wasn't a lot of design jobs going. I don't even know how I ended up in there. There wasn't a lot of work and a dominance of males. I suppose maybe it wasn't seen as a very friendly climate.

Do you think that Product Design as a career feels accessible to women?

Caoimhe: It's hard for me to say. I don't think I thought about if I could do it or not, I was excited to do it. So probably a person who has the right type of interests who happens to be a woman would go and do it anyway. I just kind of did things. I always had part time jobs and I was used to going and doing things. That was quite helpful because I was used to having to ask for jobs etc. Whereas if someone else hasn't had the social opportunities it might be tougher for them. I think it's more accessible now. We have the internet now. You can find out so much more about design. I wonder as well if design is a class thing. To be able to come and study in NCAD and to be able to buy all the materials. I wonder if it's like an extra barrier for everybody.

Brohwyn: I think that Product Design can sometimes feel inaccessible or even intimidating by the fact that it seems like a quite technical course and the demographic is predominantly male. These factors can often be turn-offs, I think, for girls when they are choosing their course.

Enya: I think in our college yes, I think it's really encouraged. The fact that there are female tutors is very important. If there were only male tutors I don't think as many women would sign up for the course. I would hope other colleges encourage and welcome women as much as NCAD, however it's hard to tell without talking to them.

Were you taken as seriously as your male coworkers?

Caoimhe: Hmm. There was definitely an element of proving yourself. However I saw that happening to some of the other guys as well, so I don't know if it was a gender thing or if it was because I was a new person. It was a really really supportive environment, but it was also a different time. So sexist jokes and things like that, they were kind of the norm. It wasn't as PC as it is now. They did take me seriously. There was definitely a period where I felt I had to prove myself. Definitely. And I could see the other guys had to do that too. I think there was definitely an element of locker room talk. But then as well I was kind of used to that from college. I got used to that sort of messing and banter. Also the culture in

Belfast, people use humour a lot. So there was stuff that in retrospect would have been shocking. Sometimes I feel like I'd say an idea and people wouldn't listen and it would kind of fly under the radar and somebody would say it a few minutes later. I don't know if that was intentional or not.

Katerina: Well I was young. There was nobody with me so I have no one to compare against. It's hard to know really. I think they did respect me because I was very driven and I wouldn't take any shit. There was a very male climate. It's hard to explain, like this shit wouldn't happen now. They would open up an email and there would be some semi pornographic thing going on and they would all stand around the computer and like clap each others backs. That sort of stuff would be sexual harassment now. There was no such thing then. In socialisation for example, they would organise indoor football. And of course I went because I wasn't going to let them exclude me. When I got there they said "oh girls can't play against men in indoor soccer" They said it was too rough. The head of the football place had to tell my coworkers to include me. I only did it once or twice to prove my point. But after that I had better things to be doing. They would invite other designers from other companies like LG and play together. There's always this kind of gang thing where you feel left out.

Do you feel your male classmates respect you as a designer?

Enya: I think maybe they didn't at the start of the course, since I come from a more "fine art" background, but I think now they do. They know that the girls in our class can hold their own and that our ideas and voices are valid and worth listening too. We have proven ourselves, which is silly to have to do, but we have.

Brohwyn: For the most part yes, I think I do get a lot of respect but it's not uncommon to receive comments such as "What would you know, you're just a girl". Whether it is jokingly or not, it's annoying and often discouraging.

Do you think Product Design is a "BoysClub"?

Enya: No, not necessarily, but I think that depends on who you ask this question to. When I think of good design the likes of Zaha Hadid comes to mind. I think there is always room for more women to get involved in design, and the design world as, yes there are more men than women contributing, but I think the contribution we make is all the more important. Design is human centered, and women make up 51 percent of the overall population so they should be, if not equally, more involved in the design world. I think the world in general needs to be better designed for women, but that's a different issue.

Brohwyn: I can see how, from an outside perspective, or to people who are not part of or educated in the field of design, that it might look like a "Boys Club" and that may be discouraging for women and girls to become involved. But, now that I am a part of this world, I understand that it actually can be inclusive of everybody and that design has to be inclusive of everybody in order to succeed.

Although not all the changes we would have hoped would happen have arisen it is clearly evident progress has been made. Our experiences vary from woman-to-woman but there is a definite drive for acceptance and respect and with every passing year these things are increasingly becoming the norm. The differences between the work environments of the early 2000s and the current college environment are vastly different but also strangely the same. It is important that we include our male classmates and coworkers in this issue so that they understand where we are coming from and can help us bring about the diverse design field we so desperately need.

Mars 2050

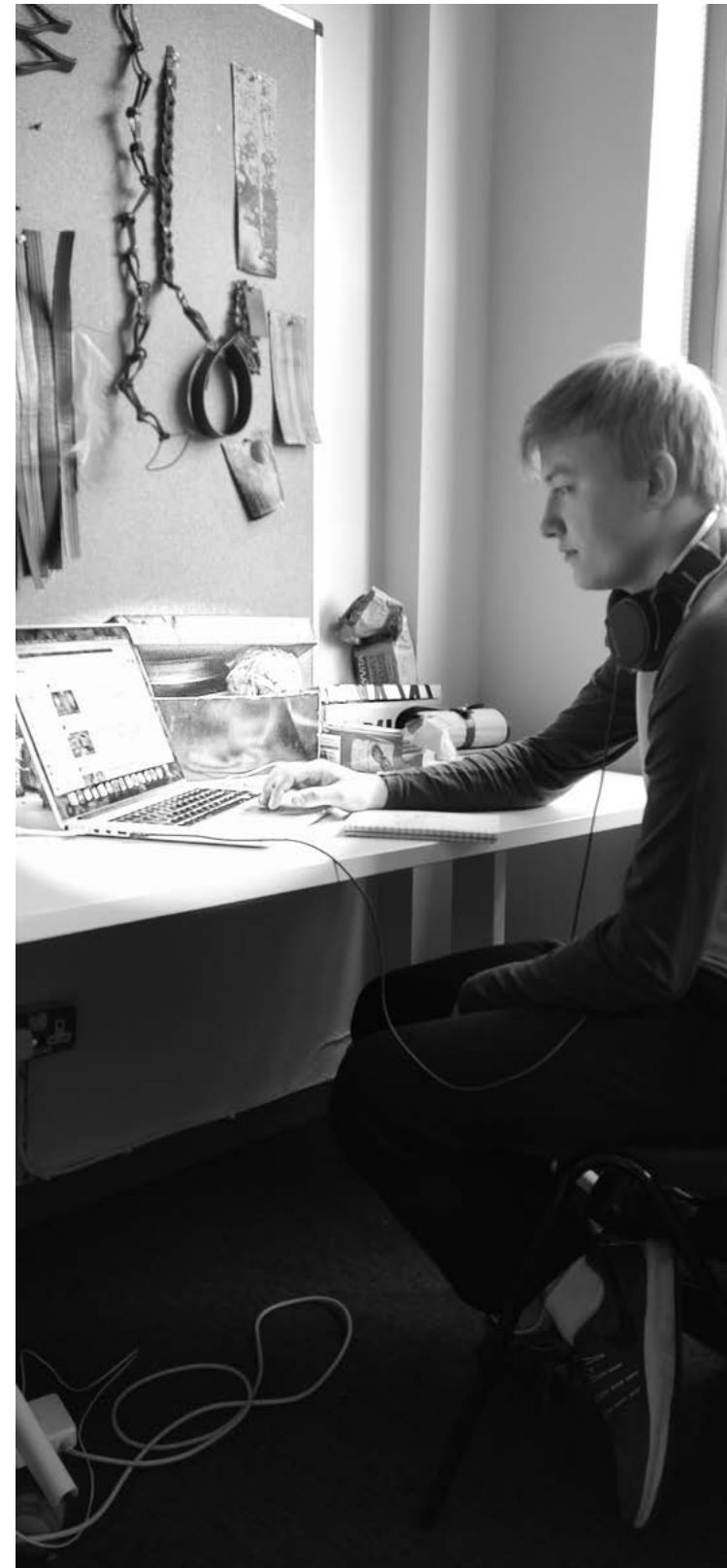
The goal of these badges is to offer an esoteric viewpoint to the next frontier for humanity: space. The next foothold is to be created by the unstoppable Elon Musk. Musk is bringing excitement and eccentricity to space travel and engineering. I wanted to reflect that with my badge designs and job titles: Lion Tamers, Tarot Readers, Professional Gamers and Illustrators are all part of this world and will hopefully be part of the world we build for ourselves among the stars. It is important to bring culture to this field and I believe that Musk and his Patron and partner Yusaku Maezawa are the right people for the job. Projects like this need to be imbued with a sense of excitement and energy. It is time for humanity to start painting the cosmos.

Jack Kearney



A Maker's Space

Brian Conway



What makes a maker's space?

Creativity flows through many different environments and through a variety of practices.

A maker's space is a place of productivity. It is full of multiple items. Some are tools, some are items of distraction. Quite often these merge into one. In spite of this, it is these things that contribute to a maker's space. The aesthetic of a space heavily influences the productivity in many ways. This is with a main focus on the senses such as sight, sound and smell. As found in the accompanied interviews, a lot of people base their productivity on the noise level within a space. Some people like a totally quiet room. Whereas others like to play music which causes them to focus. From this it creates a fascination as to what small things can affect the productivity in a maker's space.



Distractions

A maker's space is a space for productivity. One of the main interferences are the items that can easily cause a distraction. From the photos (above) it shows the highlighted items that cause both productivity but yet can also be a huge distraction. These are laptops and smartphones. To put them under the same umbrella, it can be said that 'technological devices' are a key component to being distractions. Social media is being considered an addiction to some so a large majority of people find it hard to resist the urge to check their social media apps, but also to not stay on these apps for longer than a glance. In reference to the senses also being a key aspect, noise is one of the biggest things to manipulate the productivity of a maker's space in a negative way. People chatting, music, general background noise can be quite frustrating to people and can cause concentration levels to be lowered.

With a focus on the National College of Art and Design, there a lot of making spaces. For this topic, the Product Design workshop is a perfect example of a maker's space as a lot of things go on inside this area. The workshop is a place of productivity and there are certain things that cause it to be this way.

Aesthetics are a huge contributor to the productivity in the workshop. The 5 senses of aesthetics are a factor of this. When you walk into the workshop there is an immediate smell. It is a culmination of different scents. The smell of freshly cut wood, machinery, metals, synthetic chemicals. They come together to form a generic workshop smell that applies to many similar rooms. Then there are the sounds of the workshop. The volume level of the workshop drastically changes depending on the amount of people using it. When it is quiet, when someone uses an electrical powered tool the sound is much more significant than when there are a lot of people using it. When you walk in and you hear the shrieking of wood or metal from a saw, the banging of hammers or the sound of a material being sanded. Like the smells, they all form together to make a knowledgeable noise. Finally there is the sense of touch. The feel of the wooden workbenches, the sharp coldness of a vice, the softness of a pile of sawdust. There is something satisfying about it all. With all of these senses within the workshop and you walk inside they all hit you. A switch deep down inside you labelled "productivity" suddenly turns on and you get the urge to be productive.

The workshop is a communal space and that causes a lot more work to be done. Everyone has their own working habits so people that decide to work on their own also have their own spaces and that is why the workshop is such an epicentre for productivity.



Large Making Space
Workshop

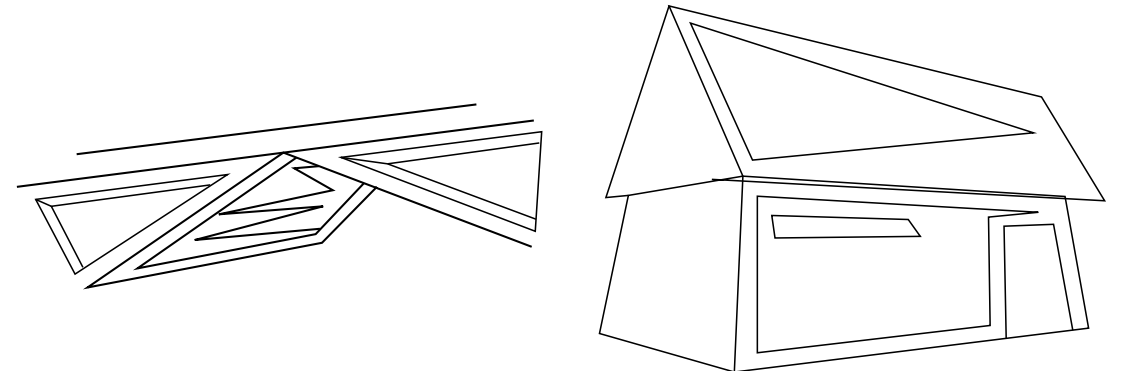
One Thing, To Another

Quentin O'Reilly

From a young age, abandoned architecture has been something that has always fascinated me. The mystery and wonder of what has been and gone is something I find very interesting; particularly how it fits into an ever-changing landscape despite being neglected and forgotten about.

In the early 1900's Detroit became known as "The Motor City" because of the growing car industry. At this time Chrysler, Ford and General Motors ran the motor industry. They became known as "The Big 3" amongst the smaller companies in Detroit because of the power they held. The Big 3 made continuous attempts to cut down on expenses which resulted in approximately 60,000 people losing their jobs while building multiple plants outside of Detroit. These companies eventually moved to more profitable destinations resulting in all these plants shutting down. People lost their jobs and income which resulted in a huge decrease in the population – not to mention crime in the city became a constant issue throughout this rise and demise.

We live in a world that is ever changing. Things hold their place until something new comes along and substitutes the present. Structures that seem irreplaceable at the time become outdated and eventually get left behind. But sometimes maybe they can hold more significant than we think. A bridge is something that connects one area to another, creating a pathway over something that might not be easily accessible otherwise. Something that can cause divide and connection. The website bridgehunter.com lets you find out about every bridge in America. This website gives you a full description on whether the bridge is still active and what it was made for. At first I was viewing the bridge as an object and nothing more. A piece of engineering with a purpose to connect, but then I started looking at a bridge in a more philosophical way – something that can cause conflict, create a divide, or build a connection between people. Many things in life can act as a bridge; something that can connect and disconnect people or a place. The river Liffey in Dublin separates the southside and northside from each other. There has always been a stigma that northsiders are poorer and less privileged than people from the southside. This divide isn't necessarily hostile. More of a tongue-in-cheek joke. It's interesting to me how a bridge can be the thing that connects people, but also a thing that can divide.



Undying Past

A series of images
inspired by retro video
games and horror.

Retro video games are filled with areas that you can see but not actually go to. It gives the illusion that the world being depicted is bigger than it actually is. For me, this created a sense of exploration and nostalgia that I did not know previously. There is also the feeling of knowing that just beyond the camera the world isn't designed; leaving a sense of wonder and possibility. The purpose of these images is to capture a similar feeling.

Paddy Butterly

God grant me strength.
Those gates looming
across the road.
Seemingly ciptic, as if
to draw me in further.
Temptation can be
overwhelming, to know
what is the unknown.





Release from the thirst of blood. Perhaps someone has ventured into these gates before me. A physical sign of danger. Must I go no further? To turn back now and not to know the truth.

Atop countless terrors. A depiction of a standing structure manifests itself in front of me. Is this real? I do not feel alone at this point. As if an evil is present in this world.





Hear now the requiem
of blood. I am drawn in
further by this illusion.
Rooms upon rooms.
Wandering. The feeling
of being watched by an
unknown force is bearing
over me stronger.

An evil prayer summons darkness.
This book. It is calling out of me.
Something is trying to enter this
world. My belief in the next dawn
becomes weakened.





A nightmare reborn. I have to leave this house before it is too late. What have I summoned upon this world? Was it a mistake, or manipulation by darkness itself.

The brink of death. Perhaps the evil unleashed can not leave this house. Finding my way out, I no longer can sense the evil and darkness as I did before.





Believe in the dawn. Light draws upon the sky. The
illusion that was is now vanquished from before me.
Although I feel a burden on my conscious, What comes
of this evenings cursed nightfall?

Critical Design and Arboretum Digitalus

Jack Flynn

Much of product and interaction design is problem solving. We see an issue, big or small, and are compelled to design solutions. But there is an aspect of design that, rather than reacting to issues it thinks ahead to possible futures. It goes by many names: Critical Design, Speculative Design, Design Fiction, Discursive Design, Interrogative Design. These all have slightly different connotations but ultimately describe the same form of design thinking.

"Let's call it critical design, that questions the cultural, social and ethical implications of emerging technologies. A form of design that can help us to define the most desirable futures, and avoid the least desirable." - Anthony Dunne & Fiona Raby.

Anthony Dunne and Fiona Raby are considered the parents of critical design since coining the phrase and the establishment of their studio 'Dunne and Raby' in 1994. They pioneered this work which they formulated at the Royal College of Art in which Dunne was a Professor and the Head of the Design Interactions course. Since then their students and other designers have built on their design thinking and a whole new design genre has developed, one focused on looking to possible and probable futures and the challenges they may bring. Within this genre, as in any genre of design, are different takes and flavours for example Design Fiction differs slightly from the well defined Critical Design. Design Fiction was built on the idea that fact and fiction can often swap properties, so in designing a fiction a designer may be laying the foundation for something real, Critical Design on the other hand focuses more on critiquing present and extrapolating possible consequences of our current behaviour.

An example of critical design called "Foragers", a speculative piece created by Dunne and Raby themselves that looks forward to 2050, when our population will have grown to 9 billion people. They asked the question of how we may feed such a large population and instead of changing our environment, Dunne and Raby surmise that people may embrace their ability to modify themselves to create synthetic digestive machines that would allow us to feed non edible material that our natural biology had previously excluded from our diet. In speaking about "Foragers", Dunne and Raby speak about the failure of countries and governments to legislate correctly for a growing population leading to the suffering of their people. In "Foragers" they critique this with people no longer rely on a system to feed them, instead modifying the individual to be able to survive without one. This would fall under a possible future rather than a probably or desirable future of course.

Another more well known example of critical design is the popular Netflix series 'Black Mirror'. The anthology series depicts a new, usually horrific, possible future each a critique on the advancement of our technologies and how they may lead us to any number of dystopias. The series made an immediate impact on its release in 2011. Black Mirror used critical design practices to create great horror, horror that impacted its viewers so hard because the scenarios felt like plausible futures. During the Cold War people's obsession with the end of the world manifested around nuclear war, and it at the beginning of this decade that our view of the end of the world switched to global warming and a tech based horror with Black Mirror marking the

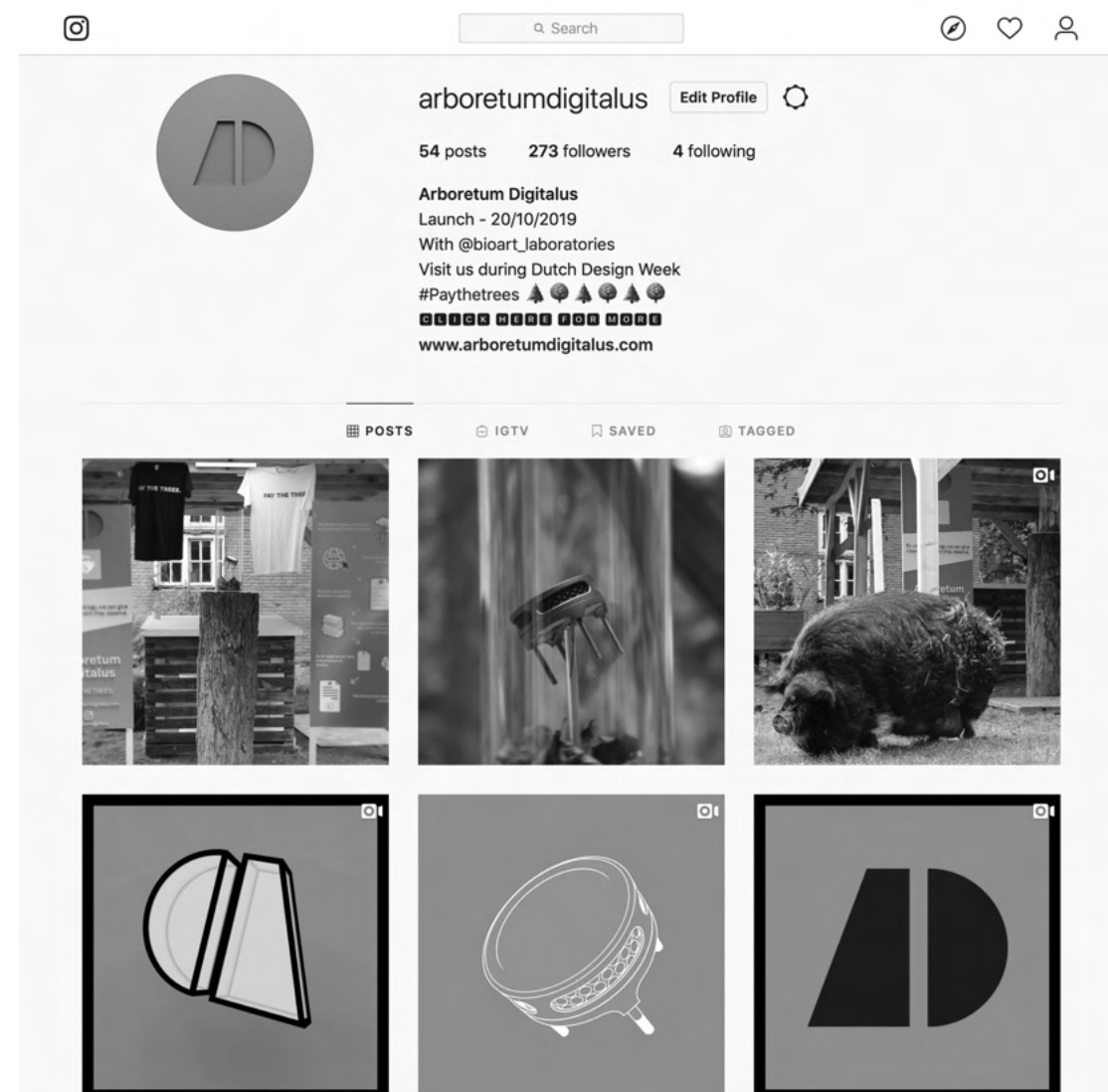
beginning of these tech fears becoming part of the general consciousness and we started to become more critical of our technology.

Critical design has always commented on the tech industry. It has become clear that the fast paced nature of this industry is a dangerous one. Mark Zuckerberg's now famous motto "Move fast and break things, if you're not breaking things then you're not moving fast enough.", ultimately led to 'Cambridge Analytica' taking advantage of Facebook's user data and almost breaking democracy. Few people had considered the consequences of large scale data harvesting and the power that those who wielded that data would have on the direction of whole countries. And many of us assumed we could trust such a large and public facing company to be held accountable. Critical design is the antithesis of "Move fast and break things." It encourages us to critique what we are doing and look forward to possible problems and attempt to solve them before they arise. It is a form of design that is not reactionary but inherently progressive.

Critical design doesn't get as much play in the design world as I believe it should. When visiting Design Weeks in other countries much of the design there tends to have a focus on the present or near future; there is very little critical design that really explores our possible futures. I was lucky enough to bring a critical design piece to Dutch Design Week 2019. 'Arboretum Digitalus' was a critical design project I helped fellow students Josh Kelly and Nicholas Wijnstekers bring to Holland. We created a fake company called Arboretum Digitalus and announced the launch of what we called "The Device".



This was a piece of technology would be implanted in to trees, being charged by the tree itself, recording the amount of work they did, i.e removing CO2 and releasing Oxygen. This data would then be sent as an invoice to the government who would pay the tree for the work it did. Once the tree has earned enough it would buy the land it was on and would be legally unable to be cut down. The Device was a critique on our obsession with fixing every problem, ever natural ones, with technology and also a thought experiment on how we could protect trees in the future. At a time where Co2 levels are at their highest and the Amazon Rainforest is being burned to produce more valuable farmland, the world must ask how valuable trees are to us on a global scale. We also pushed this project a little further than just an artefact in a critical design piece, we wanted to see if being in Dutch Design Week would give us a level of credibility, so instead of outright telling people that The Device was a speculative piece we instead explained it as if it was real. Some people saw through the ruse but many people didn't question the plausibility of The Device due to our position at the Design Week. This way the project was not only critical of our over reliance of tech and our inability to protect forests but the level of trust we put in to people and companies we see in powerful positions. We used to believe that the systems put in place would keep people in positions of power would keep them in check but we have since discovered we can no longer assume trustworthiness, especially when we are giving control of a commodity as powerful as data or our planet's source of oxygen.



In bringing this project to Dutch Design Week I learned that critical design should become a much more accepted form of design. It grabs people's attention, makes them think deeply about the future, and, if applied correctly, can help mitigate future disasters.

Typography is Everywhere

Samantha Baland

It exists in our physical man-made environments. For most people typography will go unnoticed no matter if it's on the streets, their phones, or books.

Since I started to study graphic design, the typographic environment can't go unnoticed. I was one of those people who wouldn't think twice about it. Just walking through the streets of Dublin, you can't miss the excessive amount of fonts everywhere; shop windows, advertisement, street signs, etc. Typography is everywhere. These images show some of the fonts found on South George's Street. I like this quote by Stephen Coles "everyday design is type". Typography goes unnoticed most of the time by the general public but we are surrounded by it. We can't go a day without seeing type.



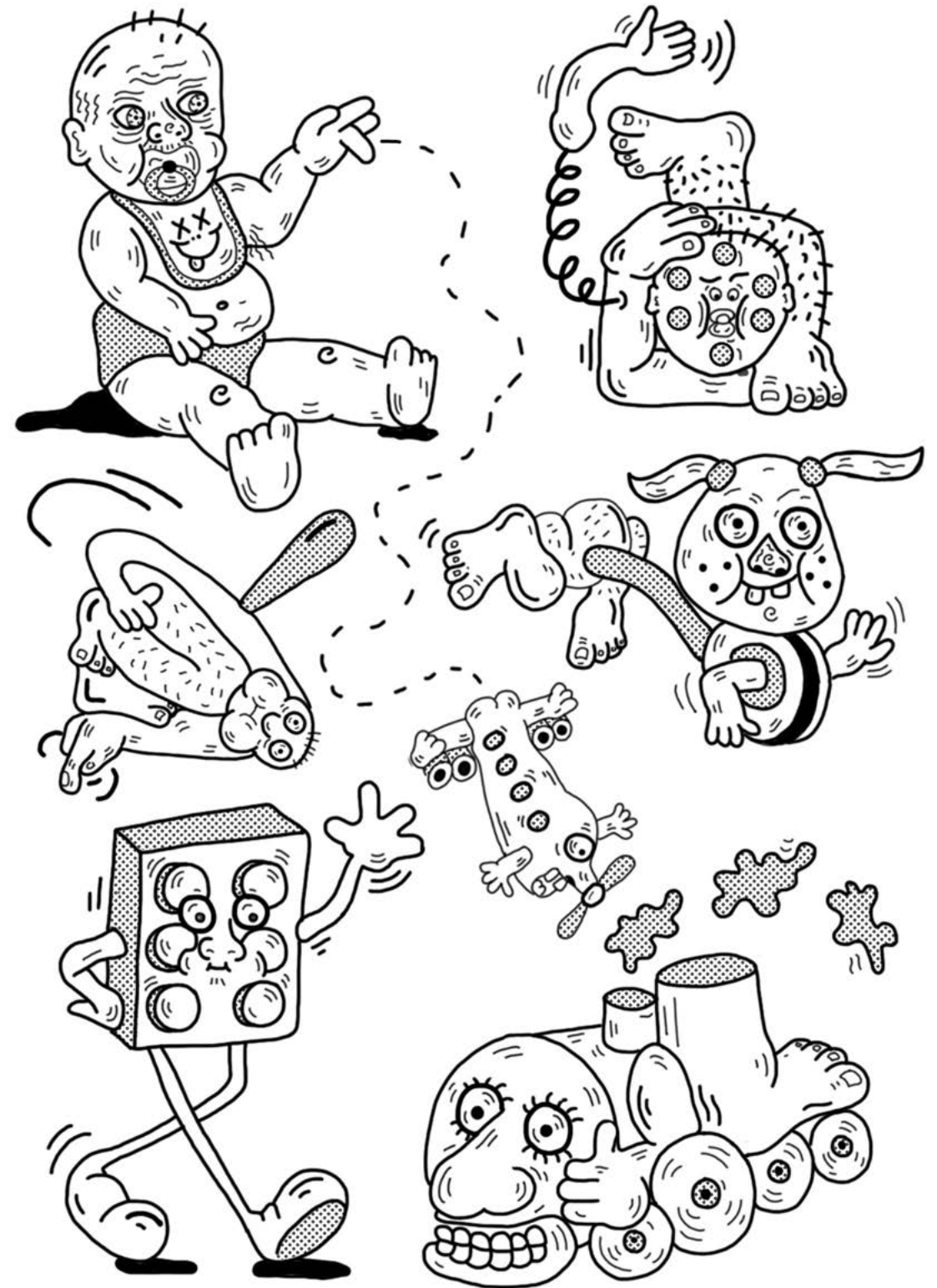
Anthropomorphism

Kelly O'Dowd

Anthropomorphism is the attribution of human characteristics or behaviour to a god, animal or object. In anthropomorphising objects we attempt to relate and understand the world around us. Human brains are tuned to try and understand other humans intentions, thoughts and feelings. We do this through communication and reading body language. Therefore, the ability to read faces is so important in communication that we find faces everywhere – for example cars can have headlights that look like eyes.

We also assign gender to certain objects. vehicles such as boats, cars and trains often take the feminine gender – similar to the role of the mother to her child. These vehicles provide warmth and protection in a hostile environment. People also assign gender to things that are special to them, such as people naming their cars. Most animals are referred to as 'he' at first glance. Is this because animals are traditionally aggressive and display "manly" characteristics?

In a survey I asked the question, what do you assign gender or names to in your everyday life? The majority of the answers I received all related back to the participants childhood. For example: naming teddies and drawing faces on objects in the home. As children we grow up talking to inanimate objects. Children use their toys and the objects around them as tools to become more independent from their parents. Children get to take charge of their own amusement and fuel their creativity.





Habit/at of Consumption

Georgi D. Dan

Two months ago I made a pact: One year of no clothing purchases. I spent most of my time trying to figure out what to wear, and even more time wondering if I had made the right choice. *No more clothing purchases.*

Then, one cold frosty morning, I awoke from a dream that truly put my willpower to the test. I dreamt of luxurious velvet and wool, of long flowy draped silk and beaded flapper dresses. I recalled glamour and exoticism. The dream was wild, the colours vivid and the couture enchanting.

It was just an embellished illusion, I knew as much, but sooner in the day than I'd like to admit, I found myself transformed into Gollum as I stood peering in shop windows with my bank card clutched in hand. I wanted, No, I NEEDED new and exciting things. 'What the fuck is happening?' I thought to myself. I had created a vision board in my head of this new minimalist me yet here I am, consumer I, peering my ugly head at every shopfront window ready to consume and regurgitate. It was at this moment that I looked around and realised that it was not just me. People everywhere, shopping bags in hand were simultaneously purchasing and expressing their never-ending pursuit of social recognition. I was – and am – an exceptionally small cog in this immense consumer machine.

Our wardrobes and behaviour towards clothes reveal a very complex generation. We have empowered mass production to the point where we find 'authenticity' in what everyone else is wearing. This still makes no sense to me, even as I continuously integrate myself into this aesthetic environment.

Our culture has somehow attached some of the deepest emotional dependencies on the acquisition of goods. The word attachment itself has immense layers of significance when speaking about aesthetic cultures and environments. I'll use myself as an example.

I'd like you to imagine a man in a formal white vintage tuxedo playing a comically small violin, or similar string instrument, behind you as you read the following paragraph. As a child, up until my early teens, I never owned anything new. We simply didn't have the money. We accepted donations from friends or charities. We didn't want to, we HAD to, and we were very grateful. When I started earning my own money I made a promise to myself that I would never be that little girl in hand-me-downs ever again. And, for many years to come, I would work hard to make sure I was kitted in every label you could imagine. Those labels became a mask. My family has come a long way since those days, but somewhere down in the deep dark well of physiological response, I still feel this attachment to how I want others to perceive me.

The violin man stops playing and vanishes into thin air, leaving behind a small grey cloud that will slowly dissipate as you read on. Attachment is an important aspect of our nature as we grow. Aside from my own personal conditioning and emotional perceptions of dress and identity, there is a deep-rooted dialogue that seals us, the consumer, to the goods we acquire. Of all the species on this planet, it is humans that have the longest attachment and dependency for their mother. We rely on this attachment for survival. As we grow, we require attachment in different forms. We grow and our physical environments

become blueprints to our cognitive and socioemotional development.

More than ever, our environments are continuously exhibiting us images of desirability through Instagram, Facebook and even our simple daily interactions. I like to call these 'synthetic environments', the 'must-haves' environments. These synthetic conditions become a sense of attachment for most; a sense of worth and feeling of inclusion or belonging. These are never-ending artificial forms that prey on the sociology of consumption and the feeling of individualism.

The superficial aura that surrounds these environments condition us to believe that how we dress is a type of looking glass into the essence of who we are. With this continuous fantasy at play, it evolves us into multiple identities. Strip the garments and goods away from the person, what that leaves them with is mostly emotions and beliefs; it leaves them with a sense of vulnerability and/or confidence. Our wardrobes really do reveal a very complex generation. We trade ecological concerns for social acceptance, human treatment for status, ethics for profit. Our generation has become less about fair trade and more about self-admiration. We understand how capitalism works and we know that when we purchase on a bargain, someone or something else has paid for it two-fold. Yet the consumer machine continues in perpetual flux.

This doesn't apply to everyone. There are a lot of businesses and people who strive for transparency and fairness. There are ways of living that won't damage our planet and its people. There are slow beautiful habits we can learn that keep us in harmony with ourselves and our awareness. Unfortunately, these can be quickly muted by large companies and designers who insist on branding and rebranding to exploit, but we must learn from our complexities. We must reshape the narrative we put on consumption and extend the life of our purchases. We must invest in circular economies that leave little to nothing for landfill.

We must take responsibility for our consumption. Having less is truly having more. Parting with most of my wardrobe clutter granted me the space to look at myself for who I really am, how I want to treat people and how I want to perceive myself. Every garment in my wardrobe holds a narrative, whether I want to acknowledge it or not. Every garment holds a value and even as a small cog in the unstoppable force that is consumerism, I have the power to slow it down. In a market-driven generation, empowered by feedback and insecurity, it is important to remain aware.

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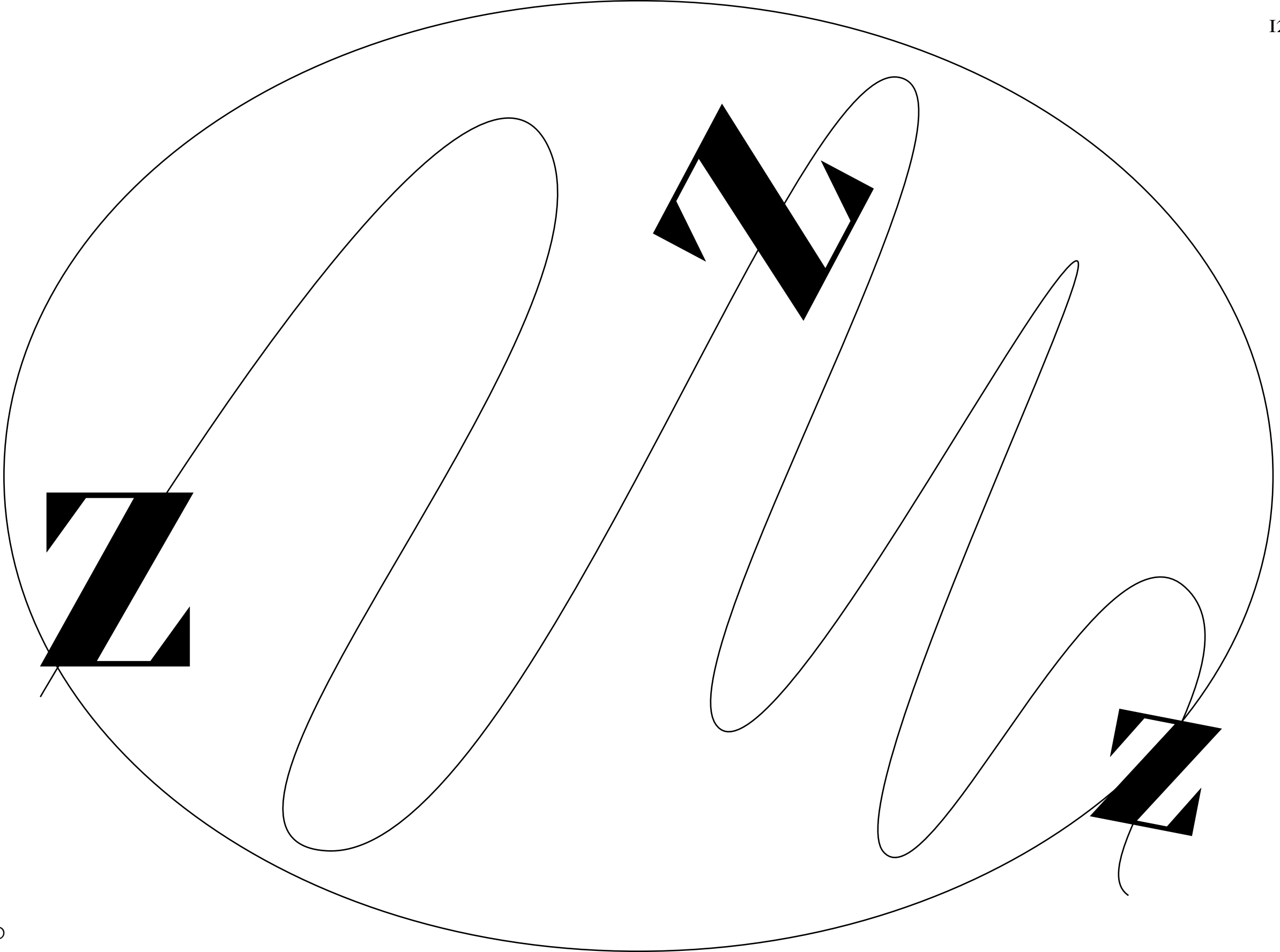
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Volume II

Environment:

1. a. *The totality of the natural world*, often excluding humans: "Technology, of course, lies at the heart of man's relationship with the environment" (Mark Hertsgaard).
 - b. A subset of the natural world; an ecosystem: the coastal environment.
 - c. The combination of external physical conditions that affect and influence the growth, development, behaviour, and survival of organisms: "Conditions in a lion's environment ... can drive it to hunt people" (Philip Caputo).
 - d. The complex of social and cultural conditions affecting the nature of an individual person or community.
2. *The general set of conditions or circumstances*: a terrible environment for doing business.
3. *Computers*
 - a. The entire set of conditions under which one operates a computer, as it relates to the hardware, operating platform, or operating system.
 - b. An area of a computer's memory used by the operating system and some programs to store certain variables to which they need frequent access.