



ISSUE 61

# CAMPUS

MICA (P) 091/04/2019

.SG

Free copy!

**THE**

**DESIGN**

**ISSUE**

MEMPHIS GROUP

COLOUR IN FILM

FOOD PACKAGING

SMART CITIES

HERO COSTUMES

PASTA DESIGN

# CAMPUS

f campus.singapore @ campusSG

## METHOD 1

Stand a chance to get your original artwork featured on our cover AND win Juice Paint markers from Pilot Pen! Post your original cover art via Instagram\* with the hashtags **#CampusCover2019** and **#CampusPilotPen**

\* Remember to set your profile to 'Public'

10 PRIZES

WIN up to \$5,000 worth of prizes

For more info, visit [campus.sg/cover2019](http://campus.sg/cover2019)

# CALL FOR ENTRIES Design our next COVER

#CampusCover2019

## METHOD 2

GRAND PRIZE

Participate in the  
**GIF Challenge 2019**  
at Lasalle College of the Arts!

Date: 24th & 25th August 2019  
Time: 10am to 8pm  
Location: LASALLE McNally campus

You have 24 hours to create an animated GIF based on a list of short texts provided by the Asian Festival of Children's Content (AFCC) 2019. It could be based on a character, a plot, an emotion – all up to your imagination! The best GIF will be featured on our upcoming cover, plus there's a **grand prize** worth over \$800 courtesy of Pilot Pen.

Register by 23 Aug 2019:  
<https://tiny.cc/gifchallenge2019>

10 WINNERS

**SKETCH BONUS!**

WIN Pilot pens worth up to \$100 simply by sketching your art on the official sketchbook at the GIF Challenge 2019!

# not part of cover contest

## LARGE AND IN CHARGE

### Contributors

Cheryl Tan  
Ho Wei Jian  
Isabelle Chua  
Lindsay Wong  
Lydia Tan  
Nina Gan  
Quek Yoke Ling  
Terence Lim  
Yin Loon  
Yuki Koh  
Zhiqi Wang

### Editor-in-Chief

Aaron Stewart  
[aaron@campus.com.sg](mailto:aaron@campus.com.sg)

### Creative Director

Lynn Ooi

### Designer

Yun Ng

### Sales Enquiry:

[ad\\_query@campus.com.sg](mailto:ad_query@campus.com.sg)

### Lennox & Ooi Media Pte Ltd

11 Paya Lebar Road #02-12 S409050  
Tel (65) 6732 0325

Campus is a publication of Lennox & Ooi Media Pte Ltd (Singapore). All articles published are in good faith and based on bona fide information available to The Publisher at the time of press. The Publisher accepts no responsibility other than that stipulated by law. The Publisher also accepts no responsibility for unsolicited manuscripts, transparencies or other materials. All rights are reserved and no part of this publication may be reproduced in part or full without the previous written permission of The Publisher. Neither can any part be stored or recorded, by any means. The opinions expressed in The Publication are those of the contributors and not necessarily endorsed by The Publisher. This publication and the name are owned solely by Lennox & Ooi Media Pte Ltd, 11 Paya Lebar Road #02-12 Singapore 409050. Email: [info@campus.com.sg](mailto:info@campus.com.sg). Campus is published bimonthly and distributed throughout Singapore. Trademarks and copyrights for all other products, logos and depictions contained herein are the properties of their respective trademark and copyright owners. All colour separation and printing by Stamford Press Pte Ltd, Singapore.



Want to see your name somewhere in this mag?

Want to get into the crazy fast-paced world of publishing, or do you just want to just have a thirst for writing? If you're passionate about the art of word and love your research, then we'd love to hear from you.

### Join us as an Intern!

Our doors are always open to those who want to learn the ropes about publishing from all aspects. If you love to write, you'll not only get your articles published both in print and online, you'll also get first dibs at any events (ie. concerts) we're invited to. We've also got space for designers and marketing peeps – you'll get to dabble in all our social media and handle our website.

### Be one of our Contributors!

If you want to write but you don't have time for a full-time gig at the office, fret not. You can be one of Contributors – this means you'll get to write for both the website and the magazine, and still get to attend events we get invited to. While you won't have to be in the office at all, you're always free to drop by.

If you're interested in any of these positions, do drop us an email with your CV. We'd love to have you down for a quick interview to get to know you! Email us at [interns@campus.com.sg](mailto:interns@campus.com.sg)

## ISSUE 61 | AUG '19 CONTENTS

### 02 Explore Ratchaburi

From mountains to caves and rivers

### 04 Bold, Bright & Bemusing

The Memphis Design influence

### 07 An Engineered Food

Million shapes of pasta

### 08 Being Fashion Forward

Fashion design for sustainability

### 09 Level Up

What it takes to be a game designer

### 10 Storytelling Through Colour

How colour sets the tone in film

### 11 More Than Skyscrapers

Smart Cities

### 12 Anime vs Manga

Mediums with(out) a middle ground

### 13 Superhero Costumes

Battle of the sexes

### 15 History in a Package

Evolution of food packaging in Singapore

### 17 Good to Be Bad

Films so bad they're good

### 18 Designing the Internet Home

Has IoT gone too far?

### 20 Design That Surrounds Us

UI/UX in everyday life

### REGULAR STUFF

06: Cheat Sheet:  
Singapore Shophouses  
14: Out & About  
16: The List:  
Evolution of PCs

Check our website  
[www.campus.sg](http://www.campus.sg)

f campus.singapore

@ campusSG

More details:



GIF Challenge 2019 Co-organised by



Sponsored by



## FROM MOUNTAINS TO CAVES AND RIVERS

# EXPLORE RATCHABURI

Located 80km west of Bangkok, Ratchaburi is a scenic provincial town that combines the best of suburban attractions – from the famous Damnoen Saduak Floating Market to its traditional ceramic industry – and natural wonders that include the mountain scenery of Suan Phueng district and a number of scenic cave temples. In recent years, Ratchaburi has transformed itself into an artistic hub with an array of contemporary art you can enjoy.

## RATCHABURI TOWN

Ratchaburi may be a busy city, but take some time to stroll along the Mae Klong River for some surprises.

## TRADITIONAL MARKETS

### DAMNOEN SADUAK FLOATING MARKET

This market is probably the city's biggest attraction. Easily accessible from Bangkok, the market is situated near coconut groves, so you can hire a private boat ride to explore the entire river. The boat rides are about one hour and on your way to the market, you'll pass through the khlongs and see some stilted houses.

From the boat, you can shop for fresh produce and souvenirs, or have delicious Thai food peddled by women on boats at the market. Unlike many floating markets in the region, Damnoen Saduak is open all week from morning till early evening.

Damnoen Saduak Floating Market

Shadow Puppet (Nang Yai)

Chet Samian Market

### NIGHT MARKETS

The promenade along the Mae Klong River comes alive on weekend nights with Walking Street and the Koyky Old Market, with its rustic and down-to-earth atmosphere. At the base of the famous Clock Tower is the Ratchapatsadu (Sanam Yai) night market, where you can find plenty of traditional food options.

## ART SCENE

Stroll along the river, and you'll find Ratchaburi's pleasant riverside promenade which is punctuated by contemporary art installations and a number of cafes.

### TAO HONG TAI CERAMICS FACTORY

It's home to exquisite ceramic products ranging from classical Thai-style water jars to modern art pieces: it's like walking through a scene from Alice in Wonderland! You can watch pots being made, walk into their huge kiln, or have a drink at the coffee shop. Don't forget to take a selfie with the iconic giant sculpture of alien-like "Dollar."



Tao Hong Tai Ceramics Factory



Ratchaburi National Museum



Wat Khanon

### WAT KHANON:

Lovers of traditional Thai art can catch a UNESCO-recognised shadow puppet performance (Nang Yai) at this temple during the weekends. It features characters from the Indian epic, Ramayana. Learn more about the leather shadow puppets next door at the Nang Yai Museum.

During the last Friday, Saturday and Sunday of the month, Ratchaburi hosts the ALL ABOUT ARTS FESTIVAL at the Chet Samian Old Market, where you can enjoy art activities and various performances while shopping for food and local products from the area.

Another popular destination is the RATCHABURI NATIONAL MUSEUM, housed in a former town hall built in the 1920s, featuring comprehensive exhibits ranging from geology and archaeology to the arts.

## MOUNTAIN SCENERY WITH EUROPEAN FARMS

At just an hour out of town is the mountainous Suan Phueng district, where you can get close to nature with plenty of European-style resorts and working animal farms. Many of these places also offer cottage-style accommodation.

### ALPACA HILL

This popular attraction is Thailand's only alpaca breeding farm where you can play with baby alpacas! There's also an exotic animal petting zoo, featuring wallabies, prairie dogs, and capybaras.



Alpaca Hill



Scenery Vintage Farm



Swiss Valley Hip Resort

### THE SCENERY VINTAGE FARM

This is an English-style sheep farm where you can feed the sheep, watch a sheep-shearing demonstration, and go horse-riding.

### SWISS VALLEY HIP RESORT

You can find charming cottages to stay in, surrounded by roaming sheep and ponies in its large, rolling compound. The colourful, mosaic swimming pool is also worth a mention.

### BELLISSIMO CAFE & RESORT

Another sheep farm resort, it's dotted with colourful Insta-worthy cottages.

Panalee Resort

## OTHER THEMED HOTELS



Baan Hom Tien

### BUA WATTANA RESORT

A former tin mine which has been transformed into a resort dotted with quaint wooden houses – including cute treehouses – and a thatched-roof retro cafe.

### LA TOSCANA

This resort makes you feel as if you've been transported to the hills of Tuscany; each house, with its individual design, is built with handmade bricks and roof tiles.

### PANALEE RESORT

For a more African mud village vibe, it provides accommodation in earthen villas or high-end tents for a bit of glamping.

Another place worth checking is the BAAN HOM TIEN, which is a candle factory (make your own candles), shop, and cafe, all set in a vintage building complete with vintage soda signs and candy containers.

## CAVES GALORE

Ratchaburi's mountainous landscape also hides plenty of otherworldly attractions: caves. You can find caves with gorgeous terrestrial formations, cave temples, as well as caves that house colonies of bats.

### KHAO BIN CAVE

Noted as one of the most beautiful caves in Ratchaburi, the cave is situated in a national forest and sits at a depth of about 300m. The cave interior is separated into 8 sections, each named after the characteristics of its stalactite and stalagmite formations; these are colourfully lit to create a stunning interior. The cave is also easily accessible, with well-designed paths and staircases.

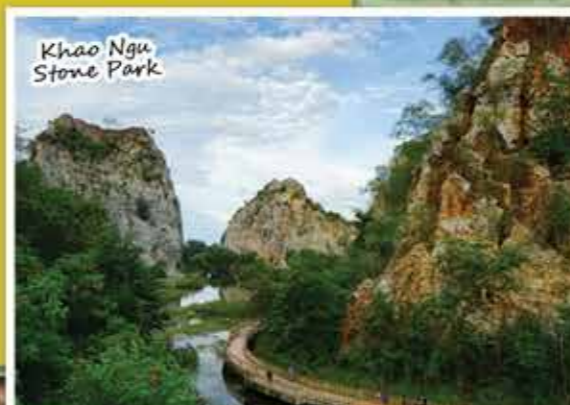


Khao Bin Cave

### KHAO NGU STONE PARK

The most famous feature here is the 2.5m-high bas-relief Buddha image that dates back over 700 years, carved on the exterior of one of the cave of which contains Buddha sculptures and artworks. In addition, there are three main caves in the area, all dating back to the 7th century.

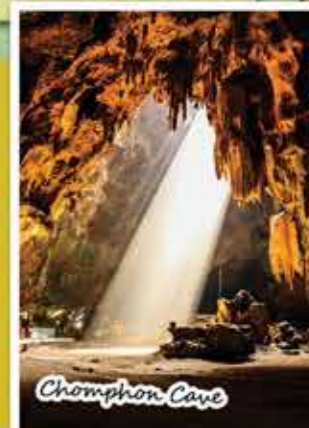
Climb to the top of the hill to enjoy spectacular views. Nearby is a former mining site that has been converted into the stunning Khao Ngu Stone Park, featuring plenty of rocky outcrops punctuated by lakes, and lined with boardwalks and bridges.



Khao Ngu Stone Park

### CHOMPHON CAVE

The beautiful cave – with stalactites that resemble thrones – houses a medium-sized reclining Buddha, and in the deepest part of the cave where light streams in from a hole in the ceiling lie a further two Buddha images. A nearby arboretum provides a shady resting spot.



Chomphon Cave

### KHAO CHONG PHRAN

There are actually 2 caves here – the most famous is Tham Khang Khao (Bat Cave), which is famous for its giant flock of more than 3 million bats that fly out of the cave at dusk (from 5:30pm), forming a large, black line across the sky in search of food. The other cave, Tham Phra Non, houses more than 100 Buddha images, including a 9m-long reclining version.



Khao Chong Phran

amazing  
THAILAND

sg.tourismthailand.org

f TAT.SG

# BOLD, BRIGHT, AND BEMUSING

## THE MEMPHIS DESIGN INFLUENCE

BY YIN LOON

Design trends often define the look of an era, and some of you may be familiar with certain design movements like 'mid-century modern', which includes famous names like Frank Lloyd Wright, and Charles and Ray Eames.

A lesser-known design movement happened about 40 years ago, but its resurgence is shaping many modern designs we see today. This movement was pioneered in 1981 by a design collective called the Memphis Group.

The Ashoka lamp (€2,690), designed in lacquered metal, has the 'totem' design that many of his pieces – like the Carlton and Casablanca – follow. The Tahiti table lamp (€1,160) resembles a tropical bird with a long yellow neck, a pink head, and a square red beak. The bulb in the 'beak' can be adjusted by rotating the 'head'. Like the Carlton, its base covered with the Bacterio pattern.

Unsurprisingly, their products were often chided by critics at the time for being gaudy and impractical.

While the Memphis Group was highly influential in the 80s, the actual collective was short-lived.

When Sottsass left in 1987, the collective briefly formed a new group called Meta Memphis to keep the company alive, but by the early 90s, interest in the over-the-top decor had fizzled out.

the ashoka lamp

### MODERN INTERPRETATIONS

While the group may not exist today, their cultural impact has led to the revival of the aesthetic three decades on. Interest in the Memphis design was reawakened after the death of Sottsass himself in 2007.

High fashion houses Missoni, Karl Lagerfeld, and Christian Dior kick-started the modern movement. Dior's 2011 fall collection featured bold, black-and-white graphics and vibrant contrastive palettes, with chunky geometric shapes as headgear. Remember when Katy Perry

donned the iconic cube headgear at the MTV Video Music Awards that year?

Before there was Apple Watch, there was its Memphis-inspired predecessor 20 years earlier. The quartz-faced, analogue timepiece was actually a freebie offered to those who upgraded to Mac System 7.5.

In 2016, original Memphis member Alessandro Mendini was commissioned by Supreme to design a set of skateboards in the Memphis style; it featured overlaid abstract shapes, squiggles, and lines in a pink, teal, and orange colour combo.

### MEMPHIS FOREVER

The Memphis Group only lasted six years, but their influence lives on in today's designs. Some of Memphis' biggest fans include the likes of Karl Lagerfeld and the late David Bowie, who collected about 400 pieces. Numerous designers have noted the Memphis influence in their career, from Philippe Starck to Ian Schrager.

Their weird, repulsive yet rule-breaking designs helped seal the Memphis Group's position as an eminent force in the design world.

### WHO ARE THE MEMPHIS GROUP?

The name was simply influenced by a Bob Dylan song, and the group – made up of architects and designers – was actually founded in Milan, Italy, headed by architect and designer Ettore Sottsass.

Like many creative movements, Memphis was a reaction against the status quo. In this case, it was the opposite of the rigidity and straight lines of mid-century modern design and 1970s minimalism. It was founded along the idea of "radical, funny, and outrageous," inspired by Art Deco geometrics, Pop Art colours, and 1950s kitsch – sort of like a marriage of Bauhaus and Toys "R" Us.

the carlton



### THE MEMPHIS LOOK

While you may not have heard of Memphis Design, you can easily identify its design principles – namely its simple geometric shapes, flat colours (in bold, contrasting palettes), and stylised graphic patterns defined by stripes and squiggles.

Materials like laminate and terrazzo, usually found on floors, were incorporated into tables and lamps. Tables and chairs would have legs that are either circles or triangles, often with bright colours. The squiggles pattern (aka the Bacterio print) was extensively used. In today's context, the Memphis aesthetic can be seen as garish and tacky, childlike even.

Memphis Group products were never intended to be timeless, or appeal to the mainstream with their high price point. They were a passionate movement driven by form instead of function to provoke an emotional response, bad or good.

### ICONIC MEMPHIS PIECES

Many of the whimsical pieces were made using colourful laminated wood and metal, and although they're considered 'cheap' materials, the pieces are priced beyond the average consumer's budget.

The most iconic piece is the gigantic Carlton (€13,800) – which can be a



the casablanca

bookcase, room divider or dresser – featuring a bold colour palette, stark lines, and a geometric structure with voids and shelves based around a system of equilateral triangles. The Casablanca sideboard (€13,800) is a wood- and plastic laminate structure with a series of horizontal shelves and diagonal arms to hold wine bottles.

While the base of the Beverly sideboard (€11,400) looks 'normal', the top portion looks like a mess of a structure that fuses laminated wood and metal at weird angles, with an inexplicable red bulb on one corner.

the beverly



Change Your Smile 改变您的笑容  
Change Your Life 改变您的生活

STRAIGHTEN YOUR TEETH WITH  
**BRACES 牙齿矫正**  
\* Includes of consultation, 3-days and retainer  
**\$3500**



REPLACE YOUR MISSING TEETH WITH  
**IMPLANTS 口腔植牙**  
\* Multiple available, same & excellent quality  
**\$1400**  
After necessary deduction of \$1200



**TEETH WHITENING**  
With our patented take-home whitening kit  
\* Depending on individual condition  
**牙齿美白**  
**\$380**



**invisalign\***  
The Clear Alternative to Braces  
**隐适美**  
\* Includes of consultation, X-rays and retainer  
**\$6500**



CALL US TO FIND OUT MORE  
要了解更多, 请联络我们。

**CHAS 社区援助计划**  
CHAS 健保援助计划



建国一代/社区援助计划  
服务津贴项目  
Services subsidised for PG/CHAS

Consultation 咨询 Selling & Fitting 选择及安装 Examination 检查 Filling 补牙 Tooth Plaster 局部麻醉	Fully Subsidised 完全补贴	Fully Subsidised 完全补贴
- Dentures 假牙 - Crowns 牙冠 - Root Canal Treatments 根管治疗	Up to \$268.50 Up to \$3750 Up to \$250.00	Up to \$250.00 Up to \$2150 Up to \$250.00

**MEDISAVE CLAIMABLE SURGICAL PROCEDURES**  
保健储蓄支付手术

TREATMENT 治疗	AFTER MEDISAVE CLAIMS 保健储蓄支付
WISDOM TOOTH SURGERY 智慧牙手术 SURGICAL REMOVAL OF TEETH 牙齿手术	<b>CALL US TO FIND OUT MORE</b> 要了解更多, 请联络我们。
DENTAL IMPLANT 口腔植牙	<b>\$1400 onwards 起</b>

**Greenlife DENTAL CLINIC**  
We make you smile better.

[www.greenlifedental.com.sg](http://www.greenlifedental.com.sg)

**6241 0123**  
**Bedok Central Branch**  
Blk 210, New Upper Chang Road, #01-733,  
Singapore 460210  
(7 mins walk from Bedok MRT station)

**6749 3400**  
**Eunos - Willing Hearts**  
Kembangan - Chai Chee Community Hub  
17 Jalan Lita, Blk 2, #01-17 Singapore 430079  
(5 mins walk from Eunos MRT station)

**6299 3556**  
**Beach Road**  
Blk 14 Beach Road #01-0001 Singapore 190014  
(7 mins walk from Labrador and Nicoll Highway MRT station)  
(Beside Golden Mile Food Centre)

**6452 4222**  
**Ang Mo Kio Central**  
Blk 227 Ang Mo Kio Avenue 6 #01-4210 Singapore 560727  
(5 mins walk from AMK MRT station)

**6250 0630**  
**Tua Payoh Central**  
Blk 180 Tua Payoh Central #01-416 Singapore 310180  
(7 mins walk from Tua Payoh MRT station)  
(Beside Tua Payoh Library)

**6777 1712**  
**Clementi Central**  
Blk 448 Clementi Ave 3 #01-190 Singapore 123440  
(5 mins walk from Clementi MRT station)

**6765 5759**  
**Yew Tee**  
Yew Tee Square, Blk 604 Choa Chu Kang St 62  
#02-025 Singapore 680024  
(5 mins walk from Yew Tee MRT station)

Shophouses are an intrinsic part of Singapore's history, and have been around for over a century. These can be found in conservation areas like Boat Quay, Chinatown, Little India, Joo Chiat, Blair Plain, Tiong Bahru, Emerald Hill, Jalan Besar, Beach Road, and River Valley. Over time, the structure and decor of the shophouse evolved over the decades, resulting in the different styles we see today.

# Cheat Sheet

## #61 Singapore Shophouse Guide

### ARCHITECTURAL STYLES

There are broadly six different types of shophouses in Singapore.



#### EARLY SHOPHOUSE STYLE (1840-1900)

The earliest shophouses dating from the late 1840s were bare bones. The two-storey buildings featured 1-2 wooden jalousie (shuttered) windows upstairs and clay-tiled roofs.

#### FIRST TRANSITIONAL STYLE (EARLY 1900S)

By the early 1900s, shophouses became taller, colourful, with decorative panels and carvings on the facade. They featured *jian nian* mosaic, which were ceramic or porcelain animals and flowers cut and pasted onto a plaster base.



#### LATE SHOPHOUSE STYLE (1900-1940)

This most spectacular style features extensive use of plaster, tile, and cast iron ornamentation. The upper storey has three windows for maximum ventilation, with window vents and carvings featuring elaborate ornaments like garlands, animals, and floral motifs. Cultural influences - like roof eaves (Malay) and decorative tiles (Peranakan) - can be seen.

#### SECOND TRANSITIONAL STYLE (LATE 1930S)

Reflective of the economic situation at the time, shophouses were simpler and more streamlined, with less use of ornamentation. Motifs like ornately-carved transoms and colourful ceramic tiles were combined with Art Deco elements like cross-braced glass window panels and geometric balustrade designs.



#### ART DECO STYLE (1930-1960)

With the minimalist look of the Machine Age, shophouses ditched organically-inspired ornamentation of earlier periods in favour of more streamlined designs with their curved corners, columns, arches, and geometric shapes - they also often feature zigzag roofs, flagpoles, and plaques with the date of the building's construction.

#### MODERN STYLE (1950-1960)

Shophouses took on a more functional design, featuring innovative use of thin concrete fins and air vents that were functional and decorative. Modern materials were used: concrete for walls, steel for windows. Flat roofs became the norm.



### DECORATIVE STYLES

Elements that defined the aesthetic of a shophouse are further defined into many sub-categories according to artistic influences at the time, including:

**CHINESE STYLE (1880-1900):** Stucco reliefs and painted decorative panels depicted elements from Chinese literature and opera. The roof was typically surmounted by a decorative frieze mosaic of coloured ceramic shards (*jian nian*).

**CHINESE BAROQUE STYLE (1875-1910):** European Classical elements began appearing on shophouses in the form of colonial architecture, as well as decorative Doric, Ionic, and Corinthian columns.

**ROCOCO STYLE (1916-1921):** Highly elaborate facades resembled 'wedding cakes', featuring Corinthian columns and elaborate window frames, decorated with friezes of botanicals, medallions, etc.

**CHINOISERIE (1920S):** A revival of enthusiasm for traditional Chinese imagery saw shophouse facades being almost overwhelmed by a profusion of animal and plant motifs.

Blair Plain - Spottiswoode Park, Everton Road and Blair Road - showcases examples of the more refined Rococo style. The area around East Coast (Koon Seng Road, Everitt Road) is home to the East Coast Peranakan Style with its Neo-Classical, Peranakan, Rococo influence and a dash of Chinoiserie.

Shophouses in Koon Seng Road



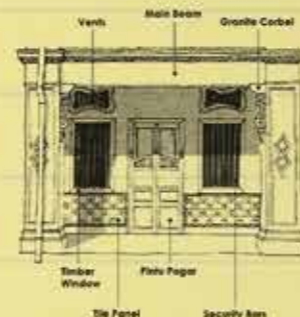
### ELEMENTS OF A SHOPHOUSE

In addition to airwells and five-foot-ways, there are many other decorative elements that make up a shophouse.

**PINTU PAGAR:** Reserved for residential shophouses, these offered privacy and ventilation on the ground floor as they're installed in front of the main door.

**JIAN NIAN:** Situated under eaves of roofs, these decorative ornaments are made of broken ceramic, often depicting nature (i.e. pheasants and botanicals).

**VENTILATION TILES OR GRILLES:** Located at the upper parts of the walls to provide ventilation. Decorative ventilation tiles or grilles are usually found on the facades above the windows, either as grilles, plaster or ceramic with elaborate carvings. Bathrooms have simpler, prefabricated ventilation tiles.



# Million Shapes Of Pasta

## AN ENGINEERED FOOD

BY ZHIQI WANG



Pasta is one of the most important staple foods around the world. The shapes of pasta have always fascinated me because there are simply so many of them - there are more than 300 varieties of pasta whose shapes were designed to give them an affinity with particular sauces and cooking methods. Here are just some examples of basic pasta shapes you can easily find.

### SPAGHETTI

Spaghetti is the first type of pasta that many of us have come across. Like many other types of pastas, spaghetti is made with semolina flour and water. Semolina is similar to wheat but has a tougher texture compared to wheat. Spaghetti can have slight variations, with thinner ones called *spaghettini* while thicker ones are called *spaghettoni*. The shape of spaghetti holds cream- or oil-based sauces best.

### BUCATINI

Shaped like a straw, the *bucatini* - a specialty from Venice - allows sauces to quickly permeate through the pasta and takes less time to cook as well, compared to an equally thick spaghetti strand. This is a really well-designed pasta that is perfect when cooked *al dente* and combined with a buttery cream sauce. Who knows, we might also potentially see restaurants using *bucatini* as straws, which is really environmentally-friendly.

### TORTELLI

Tortelli begins to stretch our perception of pasta. This type of pasta looks like little hats, or some say belly buttons, and can be filled with meat, cheese or vegetables. In fact, they look like wonton dumplings and are really tasty. As the filling contains lots of flavour, these are traditionally served with a light butter or oil sauce that are caught in its folds.

### MACARONI

Macaroni - also known as gomiti or elbow pasta - is perhaps the most versatile type of pasta you can find. Its acts as both a cup and a tube, designed to be best served with chunky, oily or heavy sauces. The most famous dish is definitely Mac 'n Cheese, probably followed by Chicken Macaroni Soup which you can find in Hong Kong and Singapore.

### ORZO

Orzo is shaped exactly like large grains of rice. Not surprisingly, orzo is used as a substitute for rice because rice does not grow well in certain parts of Italy. Orzo is a versatile pasta, and is usually added to soups (to make something like porridges) or salads (it can be served cold with a light sauce). Some of us might have tasted Orzo but not realise that it is actually a type of pasta, made from either white or whole-grain flour.

### CANNELLONI

Shaped like giant empty rods, this type of pasta is often filled with stuffing (like minced meat, cheese, or spinach) then baked with cheese and covered in hearty sauces - much like a cylindrical lasagna. A cannelloni's shape allows the pasta to hold fillings well and the thin walls allows the sauce - like ragu or Bolognese - to suffuse into the pasta.

### CONCHIGLIE

Conchiglie, or shell pasta, has the perfect shape that captures the flavours of the sauce, whether it's a chunky meat sauce or a creamy bechamel sauce. It's also sometimes stuffed, and is great as a tuna salad because the folds of the shell can hold the bits of tuna well.

### FARFALLE

The most gentlemanly pasta there is: it is amazing how similar this pasta is to a bow tie, and can be made into many colours from orange (carrot) to green (spinach). Some people say they look more like butterflies (its name means 'butterflies' after all). Its ribbon-like pleats support any type of sauce, from pesto to tomato sauce and creamy cheese.



ZARA FOREVER 21

BY YUKI KOH

# Being Fashion Forward

## FASHION DESIGN FOR SUSTAINABILITY

Cotton On, H&M, Forever 21, Zara. These are just a few of the many fast fashion brands, a culture that we have unknowingly indulged ourselves in.

The clothing of fast fashion is a reflection of the constant change in fashion trends. Fast fashion companies choose to manufacture clothes in big quantities, and change their

clothing line-up every few weeks or so to satiate the capricious tastes of their consumers.

Although fast fashion goes easy on our wallets and remains to be one of the more convenient and viable options for the average consumer, it comes at a devastating cost, and causes huge problems on both ends of the pipeline.

### THE TRUE COST OF THE FAST FASHION DIET

On the manufacturing end, a lot of resources are wasted in the process of not only producing the goods, but also in sourcing the necessary materials for it. For instance, textile dyeing, an essential process in producing quality denim, is the second largest polluter of water globally. According to the United Nations Environment Programme (UNEP), in 2018, the fashion industry produced 20% of global wastewater and 10% of global carbon emissions.

Things do not fare well on the consumer's end either. These brands constantly change the clothing they sell within weeks, if not days. In turn, this promotes the idea that these clothes are disposable in terms of their worth, prompting people to buy and throw away easily – just like the little thought we give to plastic lids and cups. The central problem is economics – resources are scarce but demands are unlimited. In this case, the producer and consumer are equally guilty in perpetuating this cycle of fast fashion. With each consumption and production of a piece of clothing, our environment slowly withers away.

### A NEW LIFE

Thankfully, with the emergence of new fashion brands that incorporate a sustainable vision for our future, we appear to be heading in the right direction. For starters, several brands have revolutionised recycling, turning almost everything into anything.

Companies like Ecoalf break down plastic bottles into raw polymers and nylons to create long-lasting clothing: parkas, jumpsuits, sweaters, flip-flops, etc. In a similar fashion, Finisterre recycles fishing nets into textile yarns used in premium swimsuits and jackets.

NuCycl is an engineered fibre that not only reduce the usage of water in their production methods, but also cut down on landfill waste by recycling discarded textiles and creating stronger fibres that result in longer-lasting clothing.

Their first garment is a limited edition hoodie designed by Stella McCartney and Adidas. With these famous brands endorsing an eco-friendly view of fashion, this may hopefully compel other brands to do the same.

### OFFERING A CREATIVE PERSPECTIVE

People Tree is a company that fashions an eco-friendly outlook, they are one of the pioneers that sparked the eco-trend of sourcing premium materials to create quality clothing. In particular, they rely on traditional artisan skills to create clothes, such as hand weaving, hand knitting, hand embroidery and hand block printing, creating clothing that does little damage to the environment.

The local scene isn't losing out in terms of their efforts either. The Green Collective features local eco-friendly brands that design thoughtful and unique pieces through responsible practices. This not only shifts the focus away from fast fashion, but also promotes sustainable fashion and supports local handicraft artists, an underrated aspect of Singapore. In terms of upcycling, organisations like Greensquare Textile Recycling offers free collection services for discarded clothing and accessories, which they then recycle into clothing to sell to developing countries.

All things considered, these brands have definitely sparked discourse regarding fast fashion. While consumers have certainly become more environmentally-conscious after popular campaigns such as "One Less Straw" or "One Less Plastic", more might need to be done to heat up the debate on fast fashion. By narrating the significant impact that even one consumer can have on the environment can shed light on the severity of the fast fashion diet. With greater investment into an eco-friendly approach by more companies, it could potentially open pathways to more viable options for sustainable fashion, and actually mobilise a significant and positive impact on our environment.

THE GREEN COLLECTIVE

made of recycled clothes

BY QUEK YOKE LING

# LEVEL UP:

## WHAT IT TAKES TO BECOME A GAME DESIGNER

Mobile Legends, Fortnite, PUBG – these are just a few games that are adored by many worldwide. Globally, the gaming industry generated nearly US\$135 billion in 2018. With new games being rolled out every single day, never has it been a better time to be a consumer – or game designer, for that matter. According to Payscale, Video Game Designers in Singapore get paid an average of S\$75,000 annually – that amounts to S\$6,250 per month!

A long and tedious process, game designing requires attention to even the most minute of details. Game designers are responsible for developing multiple variables such as the setting, characters, as well as the different ways of playing a certain game.

Ready to kickstart your career as a game designer? Here are 6 attributes someone in the field should possess:

### You like playing games

This one is a no-brainer, really – just like how writers usually like reading, a game designer is ideally someone who enjoys playing games in his/her free time. While it doesn't necessarily produce results, passion is a prerequisite for all careers.

### You're familiar with game mechanics/graphics

A solid foundation of how games work, particularly those of that particular genre, is essential for coming up with a new game. With that being said, game designers are expected to be versatile and have experience playing all sorts of games – it's a stepping stone towards becoming a designer to first become a game tester.

Game testing serves as a form of quality assurance, with testers reporting any errors and/or bugs found in either verbal or written form to their supervisor(s).

Familiarity with gaming terminology, naturally, is a must. Common terms include KDA (Kills, Deaths, Assists), AoE (Area of Effect) and scrub (a harsher, more derogatory version of the term "noob").

### Brainstorming is something you're naturally good at

This could mean drawing from the works of existing game designers for inspiration, possibly notable figures the likes of Hironobu Sakaguchi (Final Fantasy and Final Fantasy VII) and Gabe Newell (Dota 2).

Brainstorming could take the form of a mind-map, list, etc. Whether or not they're plausible in the long run, more ideas mean more material to work with and choose from. The final product, however, should offer a fresh take/perspective on current market offerings.

### Meticulous is your middle name

The little details are what make games shine: MOBAs (Multiplayer Online Battle Arenas) like Mobile Legends, for example, rely heavily on graphics.

Game designers need to pay attention to elements such as texture, size (scaling), and space, because these have the ability to either make or break a game.

### Communicating is your forte

Game designing is a complex process, and designers work with many other individuals – programmers, artists, animators, etc. – to create the final product. Any ideas, of course, are first and foremost subject to approval from a supervisor. Not only should you be good at creating visuals, you should be good at expressing ideas verbally too. Being able to communicate well is imperative for a smoother collaborative experience. So, the question is: how well can you sell your idea?

### Multiple projects at a time? No biggie

The gaming industry is a fast-paced one: marketing drives deadlines, and good timing (eg. Steam sales events) is optimal for reaching a wider audience. Often, this means designers are required to juggle more than one project at a time.

It's important that game designers know how to handle stress in a healthy way – to be able to prioritise tasks, and ultimately, meet deadlines.

### You have bonus programming skills

Sometimes, you may be required to do a bit of programming, and knowledge of programming languages, namely C++ and Java will be useful.

# Story Telling Through Colour

by Lindsay Wong

## HOW COLOUR SETS THE TONE IN FILM

We may not think about it often, but colour is one of the most important factors in film especially because it sets the tone and atmosphere of a movie, even before a character utters a word.

As a part of the setting, colour is vital as it can influence how viewers think and feel about the movie and help to shape initial impressions without us being conscious about it. There are three components to colour: hue (the actual colour), saturation (its intensity) and value (its darkness or lightness). Each colour has different connotations and associations attached to it. One colour may portray completely different feelings that could even contrast each other.

## Colour Based on Film Genre



There is already a set expectation for the use of colour depending on the specific genre of the film.

Horror movies generally use darker colours and even the absence of colour due to the pessimistic nature of the genre. Darker colours and filters make the setting more eerie, ominous and tense, which adds to the suspense and horror effect of the film. The absence of light and colour can be considered a basis of fear, as it is an indication of "the unknown".

For example, 'Annabelle Comes Home' has a lack of colour, which adds suspense to the film. In contrast, fantasy movies use bright colours like pink and yellow to play on imagery that people expect, like in Willie Wonka's 'Charlie and the Chocolate Factory'.



The Sixth Sense

Red can signify love, passion, violence, danger, anger and power. It is generally seen as having more negative connotations as it is also linked to rage, aggression, fire, blood, and war.

On the other hand, red is also associated with some of the most powerful human emotions like desire, excitement, energy, speed, strength, and heat. In 'The Sixth Sense', red is used to represent fear, dread and foreshadowing. However, in 'Pleasantville', red was instead used to represent hope, love and sensuality.

## The Indications of Red, Pink and Blue

Pink, which is traditionally seen as a more feminine colour, is associated with more positive feelings. It signifies innocence, sweetness, femininity, playfulness, empathy and beauty.

Professor Umbridge in 'Harry Potter and the Order of the Phoenix' was portrayed as prim and proper; hence, pink was the prominent colour of her scenes. The abundance of pink used in the pastry shop in 'The Grand Budapest Hotel' signifies the sweet, innocent romance between Zero and Agatha.



The Grand Budapest Hotel



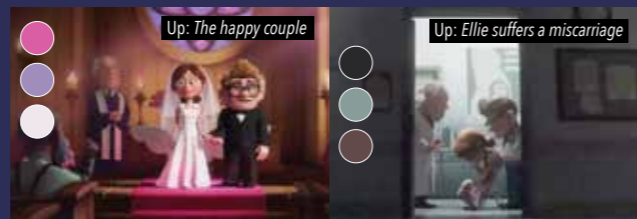
The Truman Show

Blue is used to depict solemn and negative feelings, making the atmosphere darker and grimmer. It symbolises cold, isolation, melancholy, passivity, and depression. On the other hand, it could also provide closure – it has a calming effect, signifying stability, harmony, security, and trust.

The famous closing scene of 'The Truman Show' uses a light blue backdrop when Truman goes up the stairs, signifying the moment he realises that his whole life is staged. The colour gives the audience a sense of closure.

## Mood Setting

The mood in films can easily be manipulated by the use of light and colour. In the Disney-Pixar film 'Up', the colours used were bright and happy when the couple got together, but it completely changed when Ellie suffers a miscarriage. Because of this depressing scene, the filmmakers added in darker hues and shadows to make the room look dimmer and portray the sorrowful feeling onto the audience.



If vivid colours had continued to be in use, the audience would not have felt the sad emotions that they were supposed to feel. Hence, colour is important in setting the appropriate tone and mood in film.

Without us even thinking about it, colour significantly influences how we interpret a scene in a movie. In addition, colour can be used to emphasise certain details, represent character traits and show changes in plotlines. Different colours convey different feelings to the audience and thus set the tone of an entire film.

# MORE THAN SKYSCRAPERS SMART CITIES

By Cheryl Tan Kay Yin



Last month, delegates from over 140 countries gathered at the 2019 Asia Pacific Cities Summit (APCS) in Brisbane, Australia to engage in thought-provoking conversations with young professionals (18 – 30 years old) from around the world to collaborate and propose solutions to urban challenges relating four themes: innovation, mobility, liveability, and sustainability. Over the course of this 3-day summit, our little red dot has certainly made an impressionable mark on the world stage in being an example of a smart city.

## INNOVATION OF CITIES

Think of the plethora of apps all of us have on our smartphones. Then think of tech giants like Google, Apple, and Amazon. These companies are shining examples where Google maps, the iPhone, and Amazon have revolutionised the way we make decisions on our travel routes, where we eat, what we buy, where we shop, and so on.

That driverless bus on NTU's campus was featured at the summit as a sample of innovation, and Singapore should continue to encourage AI hubs for innovation of similar products and services that will enhance our economy and workforce.

## MOBILITY OF CITIES

The MRT gives Singaporeans mobility. Speakers at the conference who have visited Singapore raved about the incredible frequency of our trains – we don't have to look at a timetable, as one will turn up in 3-5 minutes. It certainly is something we take for granted, but time is vital for a country that needs to move a huge mass of people from one area to another in the most time-efficient way, and we have certainly ticked this box.

## LIVEABILITY OF CITIES

With a global trend of migration to ever-growing cities, how can cities continue to remain liveable into the future? The iconic design of our HDBs – where more than 80% of Singapore's population live – merges both the structural aspect (residential areas with accessible amenities within walking distance) with the spiritual aspect (encouraging community engagement and social interaction within neighbourhoods) through the establishment of community centres, public playgrounds, and public open spaces.

We as millennials overlook many of these units as "part of Singapore", but we are indeed fortunate to have access to these social spaces because many other cities do not have that luxury.

## SUSTAINABILITY OF CITIES

Electric vehicles. Renewable energy. Reduce/Reuse/Recycle. These are all the keywords at the tip of our minds when we think of the environment. It certainly is the biggest challenge all cities face. No winners here.

Every city is constantly faced with a rapid influx of migrants and the ever increasing burden on waste disposal – this is a crucial

time to have solutions for zero-carbon transport and buildings. However, we all need more bright minds in this space. Elon Musk is doing amazing things with Tesla's electric vehicles. Grab is doing great with encouraging the use of shared public transport and the introduction of electric scooters and bikes. There's a lot of space to grow for innovations in this arena.

## THE FUTURE OF CITIES

When it comes to designing future smart cities, it's not enough to rely on corporations. Individuals like you and I need to push for more aggressive commitment to cleaner, greener cities. At the summit, Marc Randolph (co-founder of Netflix) shared the journey of how Netflix evolved from a rental CD store to the giant online movie streaming website we know today. The take-home message was that there really is no secret to being creative or innovative; we just need to come up with lots of ideas, silly or not, realistic or not, complex or not.

The challenge we face is in constantly coming up with hundreds of ideas, bookmarking those that are valuable, and more importantly, seeking to understand a problem before coming up with solutions. What ideas do you have to make our future cities more efficient, liveable, and sustainable?

# MEDIUMS

## WITH (OUT) A MIDDLE GROUND

### IS THERE A DIFFERENCE?

Anime combines sight and sound to create a more comprehensive and coherent story, guiding the audience through moving images and (usually) well-applied musical scores. Manga, on the other hand, allows readers to track the flow of events at their own leisure, to better afford the use of their imagination.

A good adaptation of a manga is not one that simply replicates the experience on the screen – it plays to the strengths of the medium it is in. Here are three examples of manga-to-anime adaptations to illustrate the differences.

### MUSIC AS CATHARSIS:

#### YOUR LIE IN APRIL

Those who have watched and read both versions of *Your Lie in April* will agree that the anime did so much that the manga could not. The story traces the transient relationship a pianist has with his soon-to-die violinist friend/lover, and depends on the emotional quality of music to carry its message.

In the anime, any given song will have multiple renditions to reflect the musician's feeling during the moment – an aggressive staccato punctuates an inner monologue of resolve, a few keys played out of tune or time highlights nervousness. The messages that accompanied the melodies were subtle, yet glaringly obvious.

*Your Lie in April*, a story that was created as manga, reached its fullest potential through anime because it was heavily reliant on music and sound.

ANIME

MANGA

### SAME SAME BUT DIFFERENT:

#### FLOWERS OF EVIL

*Flowers of Evil* is a psychological manga, themed around a rather obscure book of poetry – *Fleurs du Mal*, or *Flowers of Evil* – which deals mainly with themes of decadence and eroticism – how they flourish, corrupt, and drive people mad with desire. The story focuses on a core cast of three classmates, drawn to look pure and aesthetically pleasing, but side characters look disgusting and displeasing to the eye.

The successful anime adaptation did something completely different to the usual anime art style and used rotoscoping instead: they filmed the show in live-action first, then traced over it, creating the

feeling of the uncanny valley. This is especially evident in the faces of the characters which were tweaked to make some facial expressions uncomfortable to watch. The ending song was also a large factor in immersion, playing a dissonant, staccato electronic melody over a discombobulated rhythm.

What they lost in their move from manga to anime, they managed to successfully capture by using an entirely different art style that emphasised realism, but not quite. It is the same story, told completely differently, to achieve the same effects.

ROSCOPING

### STATIC DYNAMISM:

#### OYASUMI PUNPUN

*Oyasumi Punpun* has been described as a story that cannot be translated into anime without losing a lot of what makes it special. It begins from the standpoint of a child coming of age in a very dark place, represented by a small bird that never speaks, a metaphor for how he is passively brought through the significant moments of his life. The manga uses many surreal, vertigo-inducing scenes to illustrate this. It also portrays people and humanity extremely harshly; there is a grotesqueness on many faces, one that can only be represented sensuously through still, black-and-white panels. The story itself is intrinsically reliant upon manga as a medium, because its psychological narrative delves far deeper into human darkness than *Flowers of Evil* does. The form must fit the narrative, and the narrative must fit the form.

### FORM FITS FUNCTION

When it comes to anime, manga, and the interplay between them, the medium should always be fit for the story that you want to tell. Stories relating to or heavily reliant on music and action may work better with an animated medium. Stories that are deeply psychological and rely on great amounts of imagination are better represented through manga than anime.

# SUPERHERO COSTUMES

## BATTLE OF THE SEXES

WHAT DO WHITE QUEEN, STARFIRE, AND WITCHBLADE HAVE IN COMMON? APART FROM BEING FEMALE SUPERHEROES, ALL THREE OF THEM WEAR WHAT MOST WOULD CONSIDER TO BE EXTREMELY REVEALING CLOTHING. IT'S SAFE TO SAY THAT WE ALL LOVE OUR DC AND MARVEL SUPERHEROES; THEY ARE, AFTER ALL, STRONG AND BOLD UPHOLDERS OF JUSTICE, HERE TO SAVE PLANET EARTH FROM DESTRUCTION. OF ALL THE ELEMENTS IN A GOOD SUPERHERO STORY, COSTUMES ARE ONE OF THE MOST IMPORTANT.

### IMPORTANCE OF SUPERHERO COSTUME DESIGN

Superhero costumes are important for many reasons. For starters, they establish an icon in the industry and contribute towards the creation of a brand – and the identity of a particular superhero.

Then there's the aspect of instantaneous recognition – these also serve as a disguise, or an alter ego, for the hero's everyday persona. No one can recognise Peter Parker when he is in his Spider-man suit, can they?

SPIDERMAN

### MALE VS. FEMALE SUPERHERO COSTUMES – WHY SO DIFFERENT?

Regardless of gender, spandex is apparently a favourite (and over-used) material for superhero outfits. Spider-man, for instance, wears the same tight-fitting spandex suits as his fellow female counterparts. The similarities, however, end here.

While male costumes (see: Batman and Superman) typically cover the entire body, female costumes are deliberately designed to be sexually appealing. The male costume would emphasise the hero's bulkiness – notably his pecs, abs, and arms. The female one focuses on the bulkiness of her bra size and sometimes hips, invariably with a tiny waist. This tells us that male heroes were strong, while women were eye candy. It's not uncommon for female outfits – like that of Witchblade or Starfire's – to reveal the chest and torso. In fact, you'd be hard-pressed to find an outfit that is fully PG-friendly.

SUPERMAN

BATMAN

WITCHBLADE

STARFIRE

A lot of this can be attributed to the fact that comics have – for decades – been marketed with a male audience in mind: think young teenage boys with raging hormones. The sex appeal of female superheroes, therefore, ranks at the top of priorities, and skimpy costumes are the quickest way to achieve this. Female characters not only had to be powerful, they also had to be sexy.

### THE MALE GAZE

A term coined by Laura Mulvey in her 1973 essay titled "Visual Pleasure and Narrative Cinema", the "male gaze" essentially refers to men being dominant over women. As opposed to being the possessors of gaze, women are typically the object of it.

This emphasis on physical appearance and sexual appeal leaves female consumers unable to relate to the character. With the rise of movements such as #metoo, the general sentiment in recent years is to see more well-rounded characters – both in terms of personality and outfit – on screen. This is especially important as females increasingly make up more of the fanbase; according to 2014 Facebook statistics, nearly half of comic fans in the United States were female.

YOU MAY BE A POWERFUL HEROINE, BUT I'M MORE ATTRACTED TO... YOUR COSTUME.

### COMICS REDESIGNED: A MORE EQUAL FUTURE?

Simply flip through the pages of comic books, and you'll find that most female costumes aren't exactly fit for war. However, there have been some amendments to female costumes, notably in TV and movie adaptations.

In *Wonder Woman* (2017), the Greek warrior influence is evident in the character's outfit, which featured real greaves (leg armour), pteruges (defensive skirting), and cuirasses (torso armour). In the TV series *Supergirl*, the Girl of Steel herself will return in the fifth season with a costume change: she's ditched the skirt-and-tights combo for more combat-worthy slacks.

More effort has been made in recent times to tone down outfits in order to portray female superheroes as strong, rather than sexy. We may not have noticed it, but the live-action versions of Scarlet Witch and Elektra have very toned-down costume versions of their comic counterparts.

Moving forward, the ideal design of female superhero costumes has to take into account their personality and fighting styles, and not just their sex appeal. This ensures that the costume does not derail from the true intention of comic or movie: celebrating the (s)hero.

SUPergirl

WONDER WOMAN

SCARLET WITCH

# OUT AND ABOUT

FOR YOUR CHANCE TO WIN TICKETS AND PREMIUMS, CHECK OUR SOCIALS!

f CAMPUS.SINGAPORE

📷 CAMPUSG

## PRODUCTIONS

4-22 Sep | 2.30pm, 7.30pm  
Ngee Ann Kongsi Theatre Funan  
Tickets: \$20-\$80

### Emily of Emerald Hill

Evoking the golden age of Straits-Chinese culture from the 1930s, Wild Rice's Emily of Emerald Hill promises to be the most immersive version of Stella Kon's enduring classic yet. In this decadent world, fulfilment for a woman can only be found in her roles as a daughter-in-law, wife, mother and home-maker. Emily Gan is an abandoned girl who overcomes all odds to emerge as the matriarch of a distinguished Peranakan household.



## GIGS



1 Sep | 8pm  
University Culture Centre Hall, NUS  
Tickets: \$98-158

### Snow Patrol

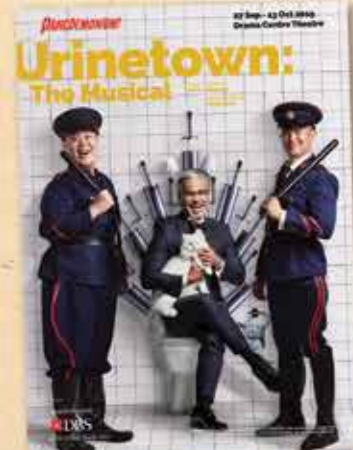
From the all-time favourite and popular song 'Chasing Cars' to numerous chart-topping records, award-winning Northern Irish rock band, Snow Patrol returns from a hiatus to break some new ground with an intimate acoustic showcase. The show is part of a series of unplugged gigs in Australia, Japan, Thailand, Malaysia and Indonesia.



15 Sep | 7.30pm  
Esplanade Concert Hall  
Tickets: \$58-\$138

### Dick Lee: The Mad Chinaman

This special pop-classical crossover celebrates the 1989 release of Lee's The Mad Chinaman, an album that has often been regarded as a musical portrait of Lee, in his quest to discover his own cultural identity and what it means to be Singaporean. The show features Dick Lee, the Braddell Heights Symphony Orchestra, and choir group The Joy Chorus.



27 Sep - 13 Oct | 3pm, 8pm  
Drama Centre Theatre  
Tickets: \$30-\$100

### Urinetown

Pangemonium's satirical musical comedy Urinetown (winner of three Tony Awards), takes the piss out of politicians, populism, "people power", capitalism, corporate corruption, and musicals themselves, set in the fictional "most expensive city in the world". A "cross-border water crisis" has led to a government ban on private lavatories, with offenders being exiled in the dreaded and mysterious "Urinetown", never to be seen again.

## MOVIES

**Weathering With You (Japanese)**  
(September 12)  
Cast: Kotaro Daigo and Nana Mori

Three years after *Your Name*, Makoto Shinkai returns with *Weathering With You*. When small town high schooler Hodaka Morishima makes a go at living on his own in Tokyo for the first time, it isn't long before he finds steady work writing for a local magazine focused on all things strange and supernatural - but the most interesting thing happening in the boy's life is the unusual weather. Rain's common enough in the city that at first, no one makes much of the recent torrential showers that never seem to end, but unbeknownst to nearly everyone, a young girl named Hina Amano who has the ability to control the weather walks among them.



## HISTORY IN A PACKAGE

### EVOLUTION OF FOOD PACKAGING IN SINGAPORE

BY LYDIA TAN



Food packaging is often overlooked as we simply see it as something to hold or wrap our food. But if you think about it, food packaging has been around for ages and has thus developed a lot over those years. You can trace the evolution of food and drink packaging in Singapore from the 20th century until today at the **Packaging Matters: Singapore's Food Packaging Story from the Early 20th Century** exhibition (until 15 September) at the National Museum.

### THE F&B INDUSTRIALISATION

From the early 20th century, food businesses in Singapore were mainly family-run, producing goods like sauces, vinegar, and noodles. As the age of industrialisation began, it brought about a shift from small unit production to automated factories, which created a strong food industry in the 60s and 70s. The rise of canning and preservation techniques saw pineapples become a lucrative crop, and Singapore's canned pineapples became heavily sought-after exports. With more food being mass produced, the manufacturing of metal, bottles, paper boxes and other packaging materials also increased.

Mass-produced cans became lighter and cheaper by using tin-free steel and less metal. The invention of the recyclable pull-tab aluminium can turned out to be a more convenient and environmentally-friendly way to package beverages. The Tetra Pak packaging was also a new form of packaging that consisted of paper board reinforced with plastics and aluminium. The contamination-free technology allowed for easy and sterile distribution and storage.

### PACKAGING AS A BRAND

As supermarkets emerged into our cosmopolitan society, selling food became a competition to attract casual shoppers browsing the aisles. Manufacturers soon started getting creative with their product packaging to distinguish themselves in the market.

By using distinct logos, graphics, and colours in their designs, local brands such as Khong Guan, Ayam Brand and Tiger Beer created iconic brand images for themselves that made them instantly recognisable on the shelves. Khong Guan's bright red biscuit tins adorned with photos of the products, Ayam Brand's rooster (representing France) logo, as well as Tiger Beer's tiger and palm tree logo are still familiar features that still represent the brands today.

Throughout the 60s and 70s, packaging also started to include more detailed labels with more graphics and information, like nutritional benefits, ingredient allergen warnings and use-by dates. This reflects the evolution of what people started looking out for in what they consume.

### PRACTISING THE 3RS

If you thought sustainability is a current topic, think again; the awareness of the need for sustainability was around since the 20th century. Public agencies like the National Environment Agency (NEA), citizen advocates, and initiatives like the Singapore Packaging Agreement encouraged producers to reduce waste and use more sustainable materials in their packaging. For example, McDonald's used disposable polystyrene foam "clam-shell" boxes to hold their Big Mac burgers in the 1960s and 70s, but switched over to paper packaging in the 1990s due to public pressure.

People also got creative with how to reuse their food packaging after all the contents have been consumed. For example, biscuit tins were used for sewing kits or to hold small ornaments and other objects, even to this day. Oil tins were sometimes repurposed as steamers by punching holes in the lid and adding wooden handles to the sides.

As overlooked as it may be, our food and drink packaging can tell us a lot about Singapore's history and culture. It also reflects how the societal changes affect the materials and production methods of packaging. In an era where people are starting to be more aware of the negative environmental effects of disposables, we are making use of modern technology to create biodegradable or reusable packaging. Who knows what the future of food and drink packaging will bring?

# THE LIST

BY ZHIQI WANG

## EVOLUTION OF PERSONAL COMPUTERS



### FIRST PERSONAL COMPUTER: ALTAIR 8800 (1975)

This was the very first personal computer that was introduced to the market in 1975. Even though this machine looks nowhere near what we have today, it has no doubt kickstarted the movement of personal computing.

**INTERESTING FACT:** Paul Allen and Bill Gates founded Microsoft while they were writing a compiler for this machine, which uses the Intel 8080 chip - one of the foundations of the computing revolution.

### STANDARDISATION OF PCS: IBM MODEL 5150 (1981)

IBM is no doubt one of the most important companies in PC history. The introduction of IBM 5150 brought in the era of standardisation. The PC came together widely using the Microsoft Operating System, based on open architecture which allows third party suppliers to introduce peripheral

devices, expansion cards, and software. It was introduced at a price of US\$1,565, equivalent to US\$4,000 in today's terms. IBM influenced many computer manufacturers to adopt their platform and these computers were known as IBM Compatibles. The popularity of this platform remains till today, with its only competitor being Apple.



### FRESH LOOKS: IMAC G3 (1998)

Apple introduced bolder and brighter colours in their computers. The aesthetic design was matched with a hugely successful marketing campaign that delivered exactly what consumers

wanted: a change from the boring, work-only design of previous machines. This computer attracted more people to try out computing and no doubt made computers more accessible and cooler.



### RISE OF THE TOUCHSCREEN: MICROSOFT SURFACE (2012)

Microsoft Surface is among the first personal computers which doubled up as both a PC and a tablet, with the advances in touchscreen technology, many manufacturers made their computers touchscreen-sensitive.

allowing users to use their equipment more naturally and comfortably. The Surface is beautifully designed in its simplicity, with many colours for consumers to choose from and offers users a smooth User Interface (UI).



### BREAKING DOWN THE PC: RASPBERRY PI 4 (2019)

Raspberry Pi introduced a new possibility for computing. Created to increase accessibility to computers, founders of Raspberry Pi stripped the PC down to the essentials - a credit card-sized "computer" that is able to perform more than just basic tasks. The latest model even allows users to plug in their peripherals and

perform all kinds of tasks they usually do on their PCs. The latest model has a chip powerful enough to watch 4k movies on them. What is more amazing is that both hardware and software are open-sourced, which offer consumers flexibility in terms of how they choose to use their devices.



### FUTURE OF PERSONAL COMPUTERS

There are a million possibilities as to how personal computers may look like in the future. One particular area of fast growth is in the Virtual Reality and Augmented Reality scene. Currently available technology allows users to play immersive games, but looking into

the future, this form of interaction might be the main way we use computers. Interestingly, science fiction books and films have long predicted this form of technology. Who knows, looking back into the past can actually tell us how the future will be like.



Computers have come a long way in terms of design since their inception; in fact, many users of personal computers will not even recognise the original - the Altair 8800 - as a "computer". Computers now play an important role in our lives; it is used to facilitate many parts of our modern, convenient life, performing billions of calculations in the background to help us lead better lives. There are literally thousands of makes and models that have marked the history of personal computers, but here are the quintessential ones that are representative of their era.

# GOOD TO BE BAD

BY HO WEI JIAN

## FILMS SO BAD THEY'RE GOOD

Films have the ability to make us cry, laugh and most importantly, give us a sense of escapism. From the heartbreaking anguish we feel when Jack dies in *Titanic*, to the encroaching suspense of *The Thing*, we all have our revered films. But what about films that are considered 'good' because they're really, really bad? Here are four examples:



### 1 THE ROOM (2003)

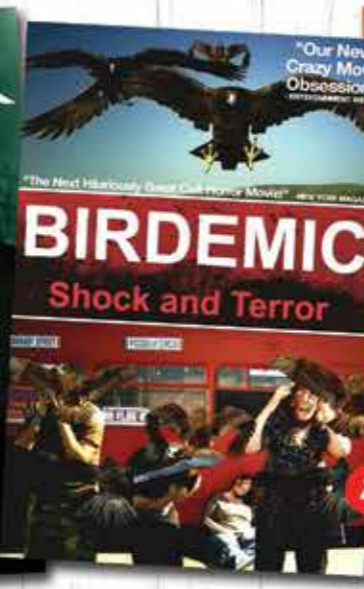
"You're just like a little chicken, cheep cheep cheep cheep," says Johnny, taunting his best friend Mark as they confer over adultery in this emotionally heavy film. Just kidding; this isn't a masterpiece, it's *The Room*.

From its bizarre dialogue, like "You're tearing me apart, Lisa!" to its debauched sex scenes, Tommy Wiseau's *The Room* is a subversive masterpiece. Since its debut, it has gained a huge cult following in Europe and the US.

*The Disaster Artist*, a book written by Greg Sestero, who plays Mark in *The Room*, details the entire filmmaking process, and is a comedy about how a group of outcasts managed to succeed against the odds. The book has since spawned a 2017 film starring James Franco and Seth Rogen.

What is most distinctive about *The Room* is that you can distinguish it from its mistakes. A lot of the audio recorded on set in *The Room* was unusable, which resulted in the need for ADR (Automated Dialogue Replacement). One such scene was in a shop where protagonist Johnny, played by Wiseau, goes to buy flowers for his fiancé Lisa. The ADR was so horribly misplaced, it suffered from lack of realism.

We can't help but question why the film was not redubbed for better sound design. However, *The Room* wears such mistakes on its sleeve. Wiseau remained confident that *The Room* was a masterpiece, even submitting it for Oscar consideration. Ironically, a film titled *Room* (2015), won Best Picture in the 2016 Oscars.



### 2 BIRDEMIC SHOCK AND TERROR (2010)

Have you ever marvelled at movie special effects, such as the ones in *Avengers: Endgame*? Then meet *Birdemic Shock and Terror*, produced by James Nguyen, which takes special effects to a whole new level.

Around 40 minutes into the film, a flock of cheap bird pictures will viciously attack nearby towns and gas stations by becoming tiny CG (computer-generated) explosions - as revenge for mankind's destruction of the environment.

From its horribly recorded sound design to its inexplicably hilarious bird special effects, to the incredibly stoic performance from protagonist Rod, *Birdemic* is a recipe for a hilarious disaster.

In a documentary by Vice, Nguyen reveals that he takes heavy inspiration from legendary director Alfred Hitchcock. This is evident from the fact that *Birdemic* looked highly reminiscent of the 1963 Alfred Hitchcock film *The Birds*, where a romantic relationship goes bad when a flock of birds attack a small town.

*Birdemic* managed to gain incredible traction since Nguyen advertised his movie from a van after being rejected for the Sundance Film Festival. It would soon sell out on several midnight screenings and spawn a sequel in 2013, titled *Birdemic 2: The Resurrection*.



### 3 WHO KILLED CAPTAIN ALEX (2010)

Ugandan film *Who Killed Captain Alex* is the cheapest film on this list, made with a measly \$85. Its hilarious special effects, unintentionally witty dialogue, and overexposed shots bring new light to a culture in Uganda.

With voiceovers to replace real dialogue and a famous scene of two men jumping off an animated helicopter behind a greenscreen, *Who Killed Captain Alex* has become somewhat of an internet sensation, with its trailer racking over 3.3 million views on Youtube.

### 4 FATEFUL FINDINGS (2013)

Neil Breen wrote, directed, produced, edited, and starred in *Fateful Findings*, a divine jewel of overt liberal political views, convoluted plot threads, and surreal imagery. Breen, originally an architect, debuted in the filmmaking world with *Double Down*. *Fateful Findings* is his third film.

its political views are expressed through its characters, where a few senators and insurance agents kill themselves while admitting their lies in public. With its overbearing use of greenscreen and the surreal tone of a David Lynch movie, *Fateful Findings* is one bad movie you do not want to miss.



# DESIGNING THE INTERNET HOME

BY NINA GAN

## HAS IoT GONE TOO FAR?

In this modern age, we often rely so much on the internet that we sometimes can't function without access to it. Think about how often you look at your mobile phone, for instance. Nowadays, it seems like everything's being hooked onto the internet – coffee makers, cameras, fitness trackers – controlled via our mobile phones. The era of the Internet of Things (IoT) has been slowly infiltrating our daily lives.

### WHAT IS THE INTERNET OF THINGS (IoT)?

Simply put, it's connecting any device to the internet (and/or each other) – this includes anything that has an on/off switch, like drones, coffee makers, fridges, headphones, and pretty much everything else. Some analysts say that by 2020 there could be well over 26 or even 100 billion connected devices – this changes the relationship between people-things or things-things.

We are slowly getting used to the whole idea of automation, and IoT is doing it seamlessly for us. This is why some of the biggest fields of innovation lie in home appliances, which are basically designed to act as your virtual live-in helpers. There are fridges with TV screens for tracking and purchasing groceries online. There are smart ovens and crock pots that provide online recipes and automate your baking or cooking.

It's not difficult to imagine people getting creative with making IoT devices – there are so many over-engineered connected devices out there, with more in the pipeline.



### IoT IN THE BEDROOM

Just Google 'IoT sex tech', and you'll find a very healthy number of internet-connected sex toys. There's even a name for them: teledildonics. These wifi or bluetooth-connected sex toys for men and women – from makers like Lovense, LovePalz, and KIIROO – allow people to control their partners' devices via apps, taking mainly long-distance couple goals to a whole new level. Many of them vibrate to music, and can be connected with webcams, encoded videos, and VR content (what a time to be alive).

For more frivolity, there are gadgets like iCon for men that act like 'Fitbit for man bits' to track his thrust velocity and other useless stats during intercourse. Coming in a close second is something like a 'Gopro for 'lil bro'; it is a tiny camera that records whatever the dude is, er, doing.

Of course, both gadgets – which are basically over-engineered silicone rings you slide onto man bits – are connected to apps that let users share their details with others.

In a similar vein, there are also gadgets that not only vibrate, but have cameras attached to them so you can take extreme close-up photos or videos and of course, share them on the cloud for your mother or ex to accidentally see.

However, not all bedroom toys are 'naughty' but are equally weird. **Pillow Talk** transmits real-time heartbeats as you sleep to your partner's pillow wherever they are in the world, while **Kissenger** transmits realistic kissing sensations to your partner and vice versa in real time – through an attachment on your mobile phone.



### STRANGER THINGS

Every year, companies big and small produce IoT devices, and while some are admittedly handy to have around, some are not exactly the kinds of things we need (or want) to have connected to the internet.

The **Kérastase Hair Coach** is basically a hairbrush with a sensor that connects to your phone to monitor your hair quality, the effectiveness of your brushing, and... local weather factors that could affect your hair. If you want to annoy dinner guests, **Smalt** is a wifi-connected salt shaker with a speaker and ambient



lighting; to dispense salt, you use the app on your phone and literally pinch your screen. Meanwhile, the \$65 **HapiFork** vibrates when you eat too fast.

When gadgets get too frivolous, they die quickly. Take the **Juicero**, for instance. Debuted in 2017, it was basically a \$700 wifi-controlled machine whose primary function was to squeeze juice out of a plastic pouch. When people realised that they could simply squeeze those pouches by hand, it was game over for the Silicon Valley-backed device.



### CHILDREN OF IoT

If young children aren't allowed mobile phones, then their access to the internet is via IoT devices. 'Baby tech' is a booming industry, and people are coming up with devices that do a multitude of things to get parents as hands-off as possible. There are devices replicate a parent's 'shush', track a baby's diaper, and monitor their breathing.

Many devices are equipped with video cameras and audio recorders, with apps that track the children's movements, habits, and other intimate details under the guise of security. This is scary when you consider that IoT toys are designed to act like a child's weird friend that they carry around everywhere.

**My Friend Cayla** is a creepy doll designed

answer children's questions by accessing the internet. **Hello Barbie** 'communicates' with children and asks questions like 'Are there any babies in your family right now?'. The nightmare-inducing **Furby Connect** is constantly chatty, 'hungry', and has access to your phone. **Cloudpets** and **Toy-fi Teddy** lets kids exchange audio messages with parents – like a stuffed toy version of WhatsApp.

Ironically, all of these tend to act like surrogate nannies so that parents don't have to interact with their kids directly, much like the iPads or tablets that babies and toddlers use today. Don't be surprised that when they grow up, they lose face-to-face communication skills with other humans.

### INTERNET OF BAD SECURITY

Because IoT devices are designed to be connected via bluetooth or wifi – with data transmitted over the Internet, usually into a cloud database – they often come with default passwords or none at all, meaning that they're inherently insecure by design. Everything connected to the internet can be hacked.

Imagine IoT toys equipped with cameras and microphones that can record everything you say and do, and then pass that data through the internet. The hackers aren't just hacking into the devices themselves – they're hacking your phone (and its data) through the device's app.

Plenty of IoT devices have been hacked. At its most benign, data could be sold to third parties for targeted advertising purposes. One company had to pay US\$3.75 million after it was clear that their vibrator was hackable, and was sending data like temperature and vibration settings to the company's servers.

Children are particularly vulnerable because an exposed database can point to their precise location, with pictures or

recordings of them. A simple toy can be used to eavesdrop on conversations – **My Friend Cayla** was banned in Germany because it was deemed an espionage device. When **Cloudpets** got hacked, the messages were used for ransom.

The security systems on these IoT databases are flimsy – hackable even by novices. Updating these apps constantly to get rid of bugs is problematic and costly; because the cloud databases store so much data, it's tempting for companies to sell them to make profit (IoT isn't held to legal requirements).



What's more, when you buy an IoT product you don't get to really decide how the data will be used. Even famous brands like **Fitbit** and **Garmin** were found to violate the Norwegian Consumer Council's data protection framework because users are forced to surrender basic consumer- and privacy rights in order to use them.

Nike Adapt BB self-lacing shoes



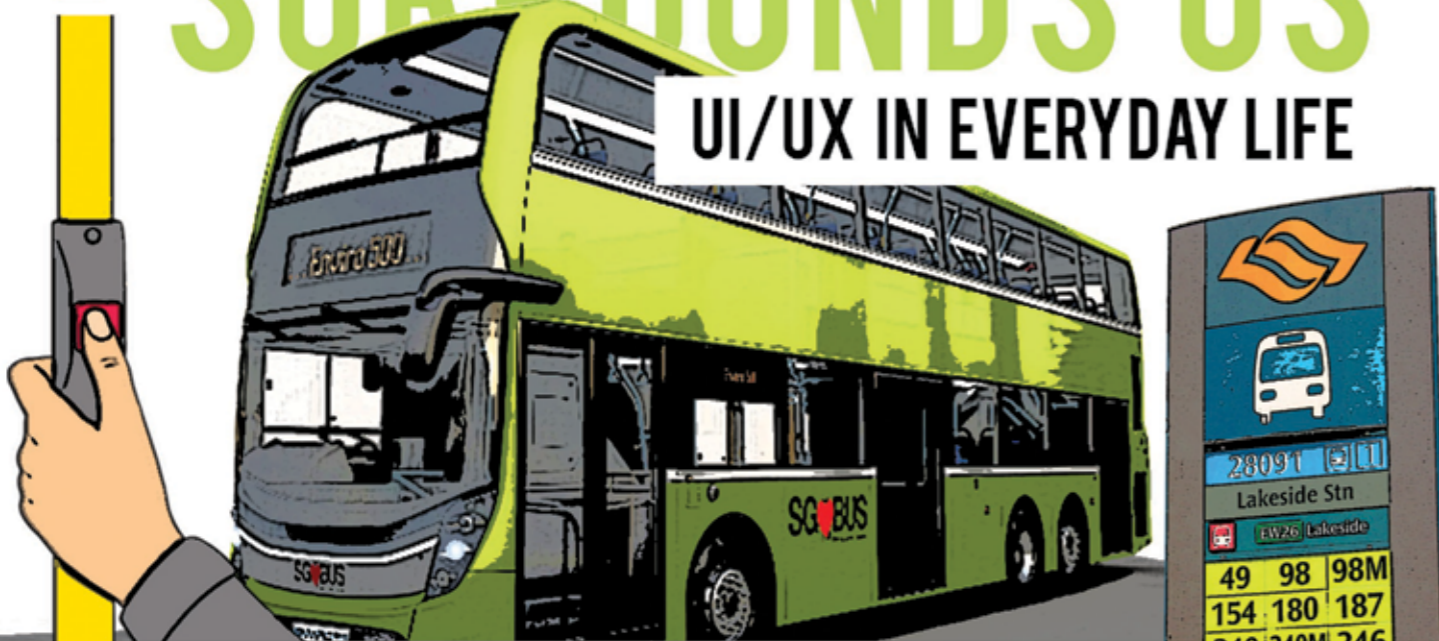
The final question is, if the company folds, does your IoT fridge or vibrator still work? Nike's US\$350 **Adapt BB self-lacing shoe**, for instance, stopped lacing because of a software update.

### FUTURE OF IoT

As technology in IoT continues to advance, companies have to solve security as the biggest design issue. In the meantime, various interest groups hold hackathons where experts from different fields put together technology to solve these problems. If you're not code-savvy, the best way to not get hacked is to disable microphones or cameras on your IoT devices. Or better yet, hold off on purchasing it until manufacturers can ensure and enforce user privacy.

# DESIGN THAT SURROUNDS US

## UI/UX IN EVERYDAY LIFE



On most days, like everyone else, we wait at the bus stop for the usual bus to transport us to our destination. On occasion, we'd check the directory boards for information regarding where a particular bus might be able to take us. Navigating the vehicle's boarding etiquette, for instance, knowing where to wave our fare card or pushing the big red stop button on the handle bars, comes close to being instinctive. In some ways, it's almost natural that we'd notice the functions of these objects. Do you wonder if this is due to the efficiency and simplicity of it that we never really question this aspect of our morning routine?

### DESIGN IN USE

"UI/UX" – better known as "user interface" and "user experience" – is an aspect of design that shapes the way we view and experience the world. Everything from the way people move in a space, to using the smallest objects you hold. From the moment we open our eyes in the morning, every object that we touch has been designed by someone for a specific purpose, ranging from your bed, all the way to your toothbrush in the night.

### EXPERIENCING DESIGN: THE SYSTEM

Good design often goes unnoticed. Let's take our morning commute, for example, when we carefully consider the process leading up to arriving at our destination. Observe the way people fill up areas where they could take a seat, leaving ample space to accommodate more passengers. Everyone moves from shelter to bus in unison to allow other passengers to board systematically through the front door, while those alighting use the back door for a smooth flow. This bus aisle comes equipped with handrails for standing passengers, with

buttons added on to trigger its alighting bells, all within arm's reach.

### INTERACTING WITH DESIGN: THE VISUAL

Even the information that we consume on this journey has been planned, laid out. Take the information board, for example. Text is arranged in a way that allows it to be conveniently read and easy to understand. This can be seen in the hierarchy of information within the directory boards; we usually first notice the available buses' identification and then its operation details and routes.

On the bus exterior, we first notice its number before we board, as it's prominently displayed on the front and side, to ensure commuters don't board the wrong bus as it pulls in. Moving to the interior, we see subtle signs placed all around. There are icons for the fire extinguisher highlighting where it is kept, as well as instructions for its use if the need arises.

The application of graphic and industrial design, along with spatial research and

planning lead to a well-made space that positively affects the commuters, then get from point A to B safely and efficiently.

### IMPORTANCE OF DESIGN

Bad design always stands out. Consider a scenario where all of Alice's Wonderland was let loose and somehow morphed into a transport vehicle: all the signs on the bus are placed in the wrong areas with the wrong colour, and you could hardly identify where it was going, with no clear signs of safety procedures. The bus seats are ridiculously small and arranged in odd places, and its walkways narrow, with no handrails to hold onto.

As exciting as it sounds, it would be a very uncomfortable and hazardous experience for everyone.

Design plays a very important role of organising and shaping how we experience the world by giving a structure to the mess that is life. The world as we know it is moving at such a fast pace that we cannot ignore how much of a role design plays in our lives.

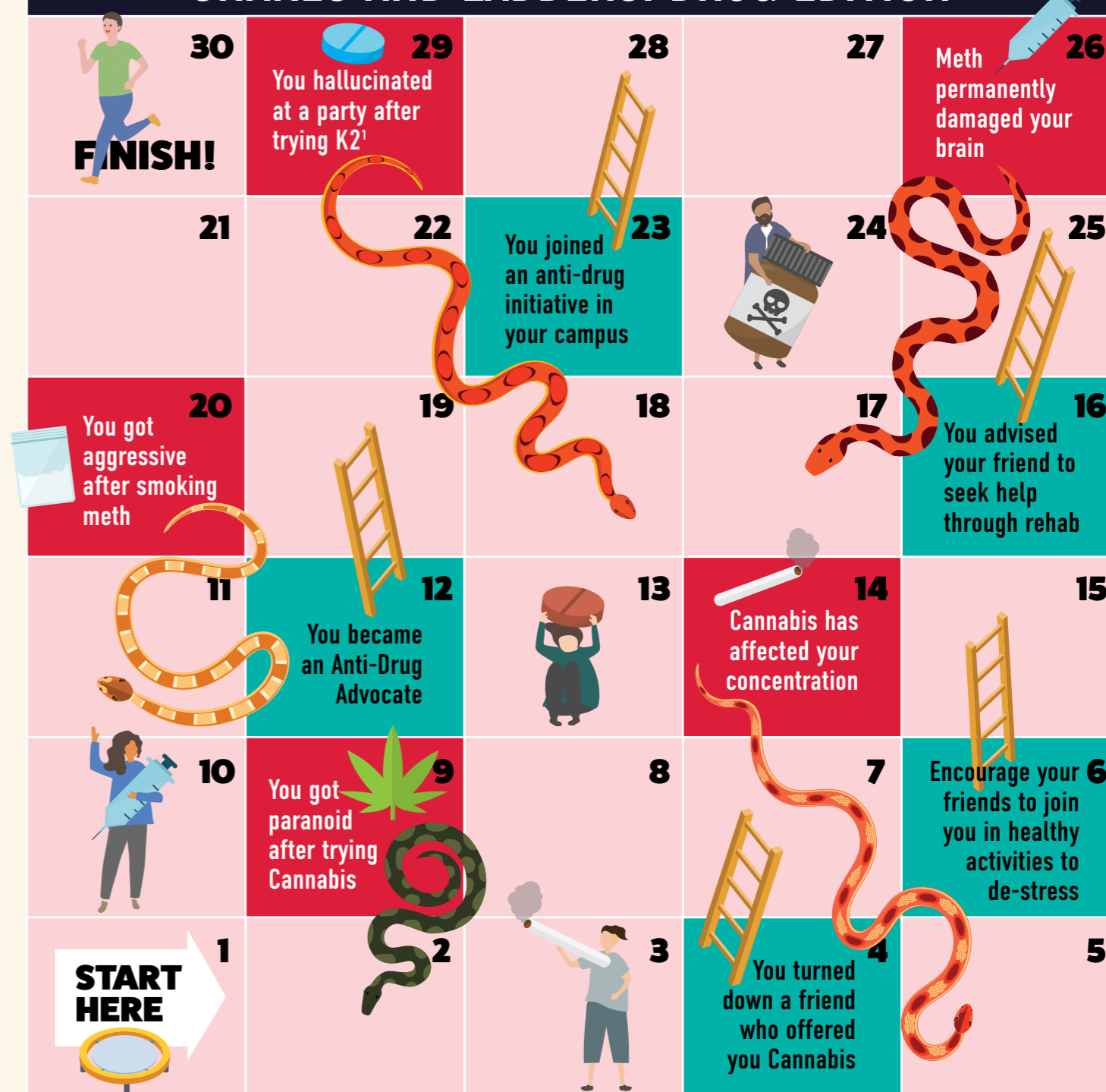
Slowing down to notice the small nuances of our daily routine really gives us an opportunity to reconsider how certain appliances make our lives better. The analogy of the morning bus ride highlights how design plays a very important part of every aspect of our lives – if done badly, it could have negative consequences on for users as well as the surrounding environment.

# STRESS RELIEF

Gather your friends for a little game together! This classic Snakes and Ladders game has a twist – race to the finish line, while avoiding the snares of drug abuse! It's a fun way to raise awareness and keep our community drug-free.

- How to play:**
1. You'll need tokens for each player and one dice (get creative!)
  2. Roll the dice and move forward on the board. If you hit a ladder, move up; if you hit a snake, move down.
  3. First one to finish wins!

## SNAKES AND LADDERS: DRUG EDITION



Show your support at  
**#DRUGFREE SG CARNIVAL**

A fun-filled carnival with games, music, rides, entertainment, and more!

31 Aug - 1 Sep 2019  
12pm - 8pm

Open Field next to  
Tampines MRT Exit C



**ESCAPE GAME**  
Go undercover  
as an officer and  
try to escape!



**VIRTUAL REALITY**  
Experience the  
different drugs in  
virtual reality!



**CNB.DrugFreeSG**



早稲田大学  
WASEDA University

# WASEDA University's English-based degree programs

## LEADING UNIVERSITY IN CENTRAL TOKYO

*Inheriting tradition, creating an era, nurturing knowledge.  
Located in the heart of Tokyo and founded in 1882, Waseda University  
is well known as one of the top universities in Japan and for keeping its  
long tradition alive while developing new ideas and cultural thought.  
With a student population of around 50,000 from Japan and 125  
countries/regions worldwide, Waseda University strives to become  
a truly global university.*

[www.waseda.jp/inst/whywaseda](http://www.waseda.jp/inst/whywaseda)



## Undergraduate Programs

School of Political Science and Economics  
School of Fundamental Science and Engineering  
School of Culture, Media and Society

School of Creative Science and Engineering  
School of Advanced Science and Engineering

School of Social Sciences  
School of International Liberal Studies

## Graduate Programs

Graduate School of Political Science  
Graduate School of Economics  
Graduate School of Law (Master's program only)  
Graduate School of Letters, Arts and Sciences (Doctoral program only)  
Graduate School of Commerce (Doctoral program only)  
Graduate School of Fundamental Science and Engineering  
Graduate School of Creative Science and Engineering

Graduate School of Advanced Science and Engineering  
Graduate School of Social Sciences  
Graduate School of International Culture and Communication Studies  
Graduate School of Asia-Pacific Studies  
Graduate School of Information, Production and Systems  
Graduate School of Business and Finance (Waseda Business School)  
Graduate School of Sport Sciences

## International Admissions Office

1-6-1 Nishi-Waseda, Shinjuku-ku Tokyo 169-8050, JAPAN  
TEL: +81-3-3204-9073  
E-mail: [admission@list.waseda.jp](mailto:admission@list.waseda.jp)

## Waseda University Singapore Office

C/O Waseda Shibuya Senior High School in Singapore  
57 West Coast Road, Singapore 127366  
TEL: +65-6771-8185  
E-mail: [waseda-singapore@list.waseda.jp](mailto:waseda-singapore@list.waseda.jp)