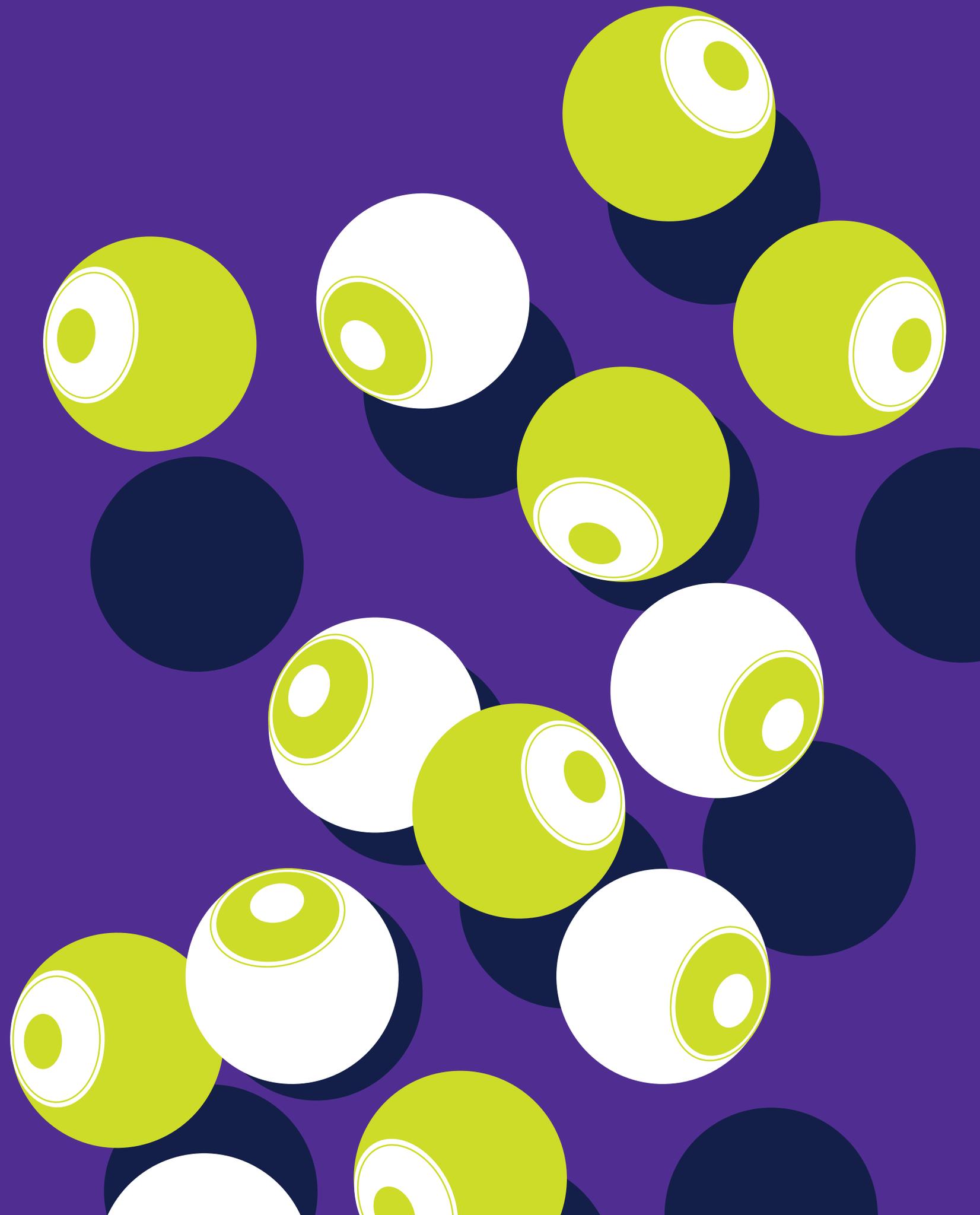
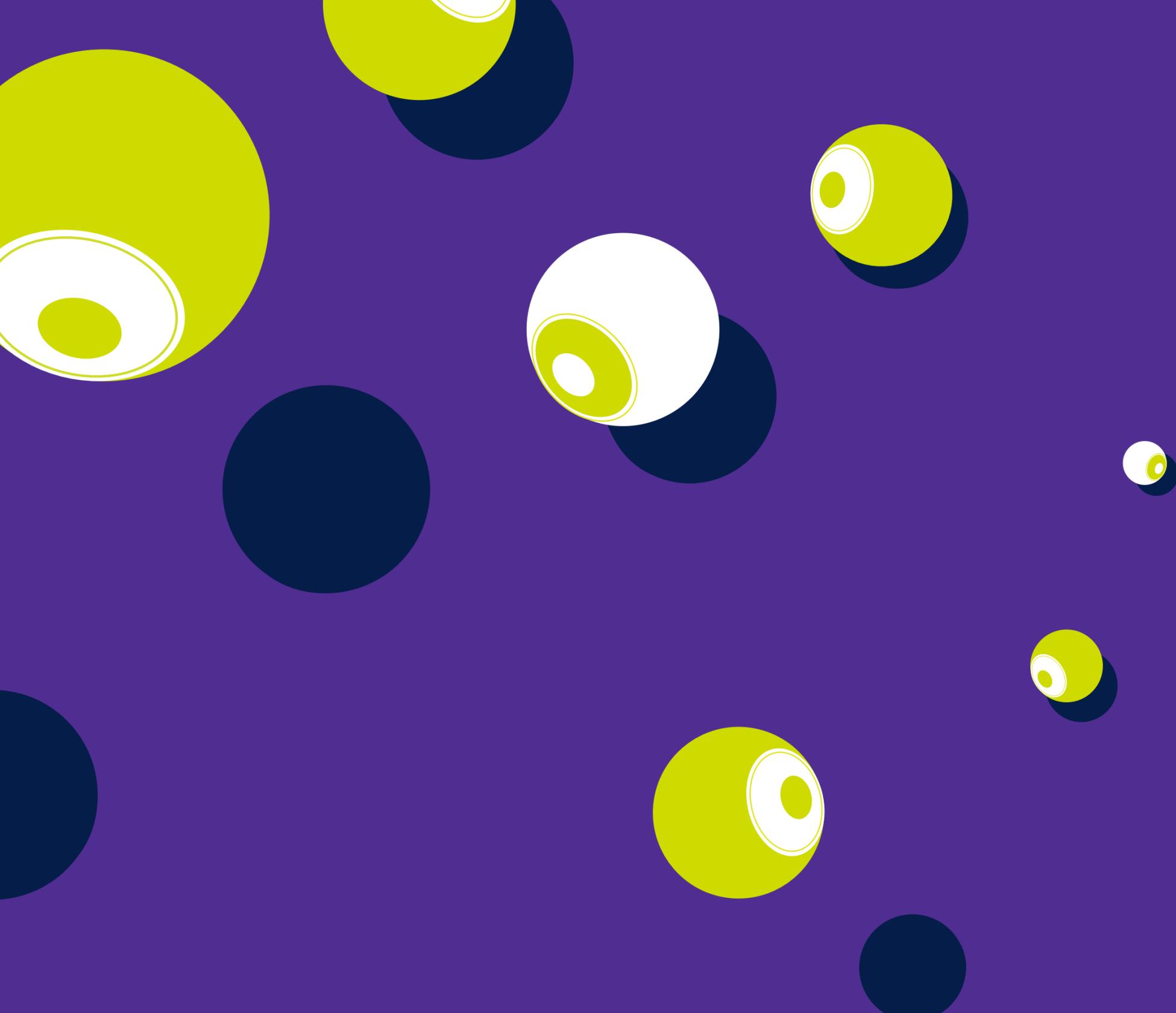


SIGNED

THE MAGAZINE OF THE HONG KONG DESIGN INSTITUTE ISSUE FIFTEEN 2017





The relationship between technology and its users can appear to be a strained one; Silicon Valley entrepreneurs and tech startups are forever seeking to ‘disrupt’ our comfortable routines. In this issue of SIGNED, and over the upcoming few issues, we turn our attention to the vital role that design plays in allowing us to benefit from technological advances. Without design, technology alone can seem cold and distant. Design empowers technology by providing a connecting point between the tech and the user, and we should never ignore its significance.

Our Tesign manifesto will lay out the terms of this exploration, which will continue to unfold further over the next few issues of SIGNED. In our other feature story, *Game Changers* we will look at cases where designers have created new Tesign that have come to dominate their fields and woven their way into our everyday lives.

Of course, the road that new technologies must take on the way to becoming part of our lives is not always a smooth one. Electric cars are an ever more familiar sight on Hong Kong’s streets. But in *Battery Power*, we will look at the many challenges that stand before the nascent electric car industry.

On the homefront, we catch up with the latest news from our alumni and look at an exciting exhibition that combines art and fashion, two vibrant subjects HKDI is passionate about.

And lastly, our eyes must travel. We will take a close look at Helsinki, where designers are harnessing the power of big data and citizen participation to make the city’s transport infrastructure, as well as its amenities and public buildings ever more user friendly. And we ask whether the emerging field of Social Robotics has the power to revolutionise the way we interact with technology.

At the end, technology is there to serve humanity, and the design link is more significant than ever before. Let us embrace the future while holding on to our human values.

Desiree Au
Publisher



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Presenting a legacy

We preview two museums opening later this year in Paris and Marrakech celebrating the life and work of iconic designer Yves Saint Laurent



The Hong Kong Design Institute is a member institution of the Vocational Training Council.
For more information about HKDI, please check our website on www.hkdi.edu.hk,
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HINTS OF COLOUR

On show until March 15, "Hints of Colour" was held in collaboration with K11 art mall where two HKDI lecturers, Douglas Ning and Dominic Lee led eight students to create works focused on the theme of colour. Colours are everywhere, stimulating the eyes, enriching and magnifying our experiences, colour is a medium of communication in its own right. For Hints of Colour, they served as an inspiration for the young photographers Chan Chun Kit Danny, Cheung Cheuk Man, Lam Chin Ngai, Lee Sau Han Hannah, Leung Wa Kwan, Liu Yun Sum, Sharon Tung Hoi Ying and Yip Pui Tung.

CEREMONY AND CELEBRATION – THE GRAND WEDDINGS OF THE QING EMPERORS

Held at the Hong Kong Heritage Museum from November 2016 to February 2017, a stunning installation designed by HKDI students was on show for the enjoyment of visitors to the spectacular exhibition, Ceremony and Celebration – The Grand Weddings of the Qing Emperors. The students' installation allowed visitors to interact and learn more about the traditional wedding ceremonies of the Qing Dynasty, re-living the ceremony in all its majesty. The grand weddings of the Qing emperors were known to be magnificent state celebrations within the Forbidden City. An interactive video wall was used to introduce part of the ceremony with short clips of animated paintings created by HKDI students along with corresponding items used in the ceremonies. A stunning silk installation using projection mapping technology was also used to showcase the particular cloth materials and details used in these ancient weddings. Through this showcase, visitors were able to experience 153 unique and rare exhibits from the Palace Museum, which best represented these grand weddings.



CENTRE OF INNOVATIVE MATERIAL AND TECHNOLOGY (CIMT)

On 7 April the new Centre of Innovative Material and Technology opened its doors for its grand opening. Conceived as one of the most dynamic showcases for diverse material collections in the fields of academia and industry, the role of the centre is to educate students and the public, spreading knowledge of new products, the latest innovative, sustainable materials and their uses. Offering the chance to connect first-hand with an array of cutting-edge materials and new experimental techniques, the centre is a great resource for insights on the latest innovations in the industry, providing opportunities for interdisciplinary research and collaboration while strengthening the links between various industry partners. Located at DM11a of Hong Kong Design Institute, CIMT features an extensive material archive with unconventional samples sourced worldwide, and exhibits a broad collection of design materials and inspired end-products from different design industries. The centre is also home to an 'Upcycling Corner' showcasing usage of environmentally sustainable materials as creative solutions. Theme-based workshops, seminars and exhibitions will be held regularly at the centre.



MASTER TALK SERIES

To coincide with the opening of HKDI's Centre of Innovative Material and Technology industry partners were invited to give a series of Master Talks. At these talks, representatives from Fuji Xerox, trend-forecasters WGSN and manufacturers Green & Associates shared their expertise for the benefit of HKDI students and visiting students from Hong Kong secondary schools. The Master Talk series continued on April 10 with a visit from Ching Siu Wai, Creative Director of City Magazine.

AT HKDI

MATERIAL EXHIBITION

Mar 15-Apr 30 (open to public)
CIMT's programme of exhibitions will launch with an exhibition showcasing the latest innovative and sustainable materials. For many, this will be the first opportunity to take advantage of the new facility and to learn more about the production and use of innovative new materials.

EMERGING DESIGN TALENTS 2017

Jun 15 - 25 (10am - 8pm)
Held at HKDI, Emerging Design Talents provides a platform for creative students to showcase the best of their work to the public and to industry players. The featured work comes from across a range of disciplines from fashion design to architecture, film and television to creative media.

AROUND THE WORLD

D&AD FESTIVAL 2017, LONDON

25-27 April
D&AD's history goes back to 1962 when legendary photographers David Bailey and Terence Donovan teamed up with graphic designer Alan Fletcher to found British Design & Art Direction with the aim of raising standards in design and advertising. In its second year, the D&AD Festival featured 26,000 pieces of design, plus fringe events and workshops, culminating in the D&AD Design Awards.
dandad.org

RGD DESIGN THINKERS 2017, VANCOUVER

May 30-31
Organised by the Canadian registered graphic designers association, the RGD Design Thinkers conference spotlights design personalities including the likes of AirBnB's VP of Design Alex Schleifer and book design expert Chip Kidd along with many more.
Designthinkers.com

FLORENCE DESIGN WEEK

14-18 June
The eighth edition of Florence Design Week takes place this June with the theme of Creative Cities. Florence, the home of Renaissance art, will invite representatives of cities from around the world to show off the latest ideas in sustainability, smart urban design and eco-tourism.
florencedesignweek.com

ROBOT

Society

Can the emerging field of social robotics deliver on its promise to revolutionise the way we use tech?

It's not uncommon for us to find ourselves shouting at an inanimate, uncomprehending machine. A jammed printer or a Wi-Fi router that obstinately refuses to respond to our pleas. This proves that it is not so hard for the user to fool themselves into acting as though their poorly-performing machine is capable of participating in meaningful emotional exchanges. By extension it is not too difficult to design a machine with which the user can begin to empathise. Designers have always sought to exploit this phenomenon. Car manufacturers have long understood how to make a simple radiator grille look aggressive or friendly, compare the front end of a Ford Mustang to that of a Ford Ka. And Apple's explosion from minority market share to tech behemoth was, in part, fuelled by a focus on design aesthetics beautiful enough to persuade the user into forgiving any machine's technical shortcomings.

But the emerging trend of social robotics represents a fresh, scientific approach to tech design that encourages a feeling of personal identification between users and their machines. While Amazon's Alexa, Apple's Siri and Google's Assistant aim to use advanced AI to converse and eventually build a relationship with the user, social robotics adopts a radically different approach. A key goal of social robotics is to improve the user experience by exploiting the physical and aesthetic design of robot assistants, generating the illusion of empathetic reactions from machines.

By optimising the way social robots look, how they move and the sounds they make, designers are setting out to produce machines that will become our everyday companions. These robots are designed to be accepted as fully-fledged, trusted members of the household.

”

There's an emotional aspect that artificial intelligence technology alone can't offer

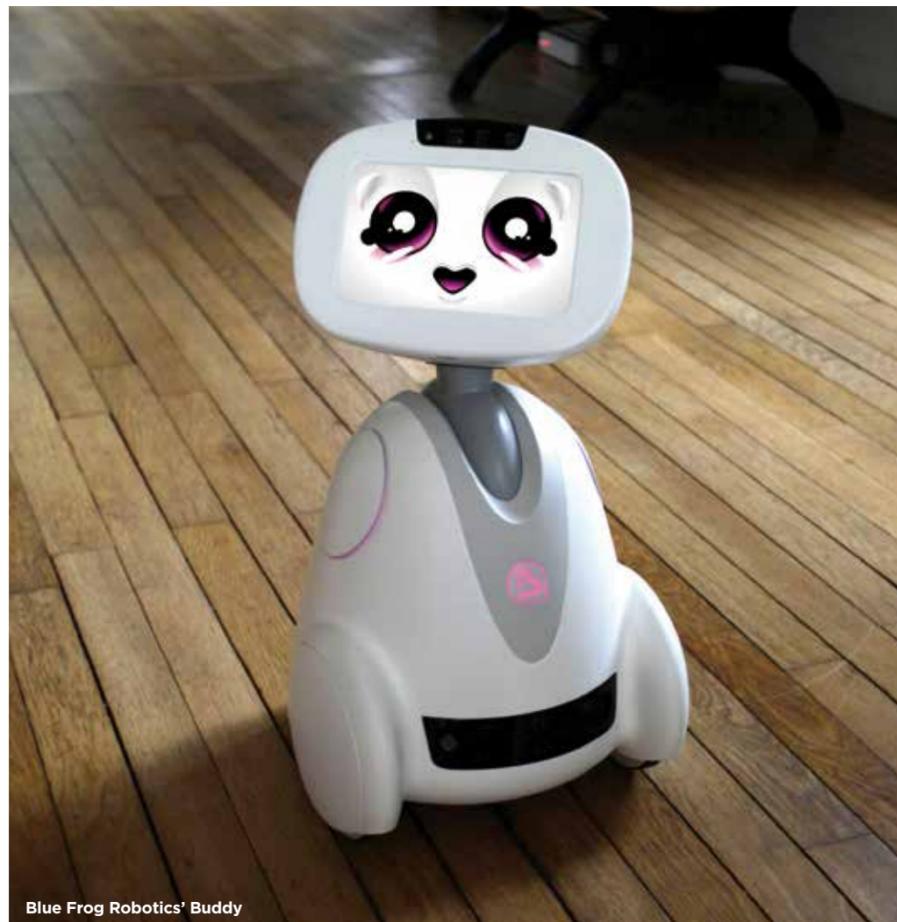
One such machine is BUDDY, developed by French outfit Blue Frog Robotics. BUDDY patrols the house when you're away, dashing off to investigate suspicious noises and reporting back to you remotely. When you get home he cues up a playlist of your favourite songs, helps out in the kitchen with recipe tips or projects a movie onto the wall. All before ending the day by reading the kids a bedtime story. As Maud Verraes of Blue Frog tells us, "The functions of a domestic robot can be carried out on a smartphone or other IoT (Internet of Things) devices, but there's an emotional aspect to BUDDY that [IoT and artificial intelligence] technology alone can't offer." One of the primary design goals of BUDDY was to make it cute. A social robot must be non-intimidating to be accepted as a member of the family. A primary application of these machines could be to care for the elderly or infirm. A robotic carer can provide round-the-clock monitoring that would normally be unaffordable to the vast majority of people. Such devices have the potential to keep housebound people connected to the outside world

when they would otherwise be vulnerable to becoming isolated. But if a robot will be the constant companion of a housebound person, it is vital that the user has a positive emotional response to that machine. WALL-E's Buster-Keaton-esque ability to silently convey emotion was one of the BUDDY design team's first points of reference.

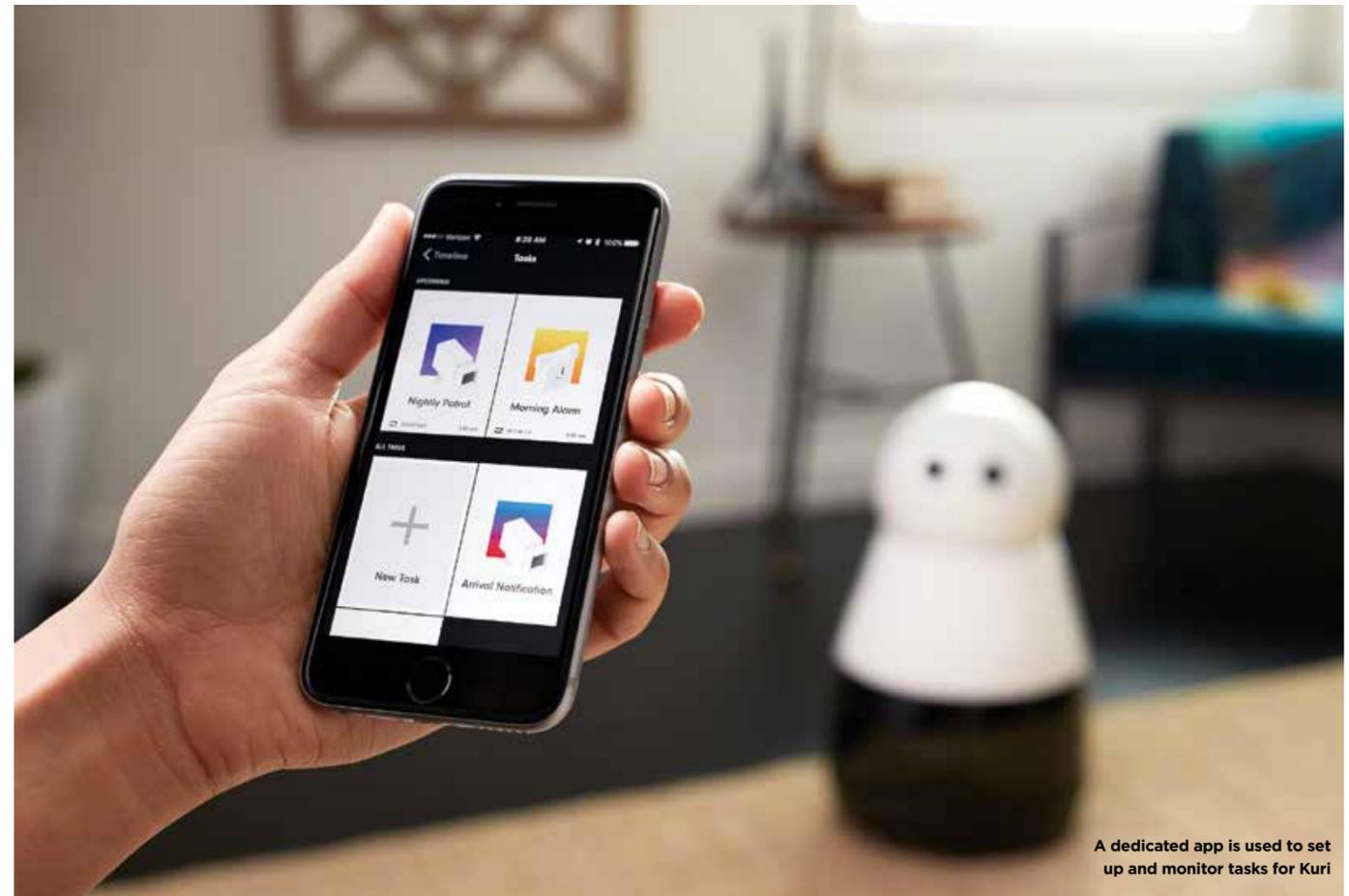
Looking at the array of social robots coming to market, a certain design aesthetic is beginning to emerge. LG's Hub, Bosch's Mykie (short for My Kitchen Elf) and the Kuri robot tend to have short curved bodies and oversized heads, lending each the air of an inquisitive infant. A theme that has emerged throughout the statements given by designers of these machines is the careful avoidance of producing a robot that is too anthropomorphic. The reasons for this are twofold. Firstly, the more human a robot appears, the more danger there is of it falling into the uncanny valley, generating precisely the wrong emotional response. For example, Kuri's designers have opted to build a robot that, instead of providing verbal responses, communicates with a variety of R2D2-style beeps – enough to convey meaning but, it is hoped, not enough to start an argument. More importantly, the closer a robot comes to resembling a human, the

more unrealistic the user's expectations of its abilities become. On seeing a robot equipped with five-fingered, nimble-looking hands, a user might reasonably expect the machine to have a human level of dexterity and versatility, and they may find themselves disappointed. These robots are not all-purpose machines, they are not even particularly intelligent. They are designed to be part of an Internet of Things connected home working in synchrony with other connected devices to improve their owner's user-experience. So, a social robot must be easy to anthropomorphise, but not too easy. These are domestic appliances not Blade Runner replicants.

Significant challenges remain to be overcome in the field of social robotics. While the physical design of a social robot can promote positive interactions with the user, there is only so far that a cute face can compensate for deficiencies in the machine's underlying AI and UI. A prime example is one of the first social robots to be announced, the Boston-designed robot Jibo. Far in advance of Jibo's actual abilities or applications being clarified, his design was shown off in a slick video demonstrating how the robot would move around and interact with the family at home. But after an immensely



Blue Frog Robotics' Buddy



A dedicated app is used to set up and monitor tasks for Kuri



Buddy's touchscreen user interface

not compensate for the “Many times users didn't know what to say or do [in order to elicit a response from Jibo] and Jibo didn't know how to help them break the cycle, creating confusion and frustration.”

So, the future for social robotics is uncertain and the dream of owning a robot butler remains a long way off. Bosch's Mykie device, while endowed with all the kawaii attributes of its social robot cousins, is really just a go-between that communicates with users and their smart appliances; fridges, stoves and washing machines connected to the nascent Internet of Things. LG's Hub runs on top of Amazon's Alexa digital assistant platform, arguably making it no more than an aesthetically pleasing skin grafted onto a more practically-useful technology.

On the other hand, through clever design social robotics promises to optimise the way that we interact with technology. In time social robots may become vital in mediating our relationship with the AI technology that will define the way we live, work and communicate. a relationship that we will explore further in forthcoming editions of SIGNED.

successful crowdfunding campaign Jibo's launch has been repeatedly delayed leaving many of its initial investors wondering if the product will ever go into production. Reporting on in-home tests of the machine in a recent letter to investors, Jibo CEO Steve Chambers wrote that while “Testers reported enjoying the way Jibo looks, talks and interacts with people” making Jibo appear approachable is by far the easiest part of making the device pleasant to interact with. In order to perform social interactions with its owner, a machine such as Jibo has to be able to respond to the unpredictable turns of a natural conversation. Jibo's innate likeability could

We need to talk about 'Tesign'

Design starting with TECH

Emerging technologies always have the potential to change the way we live for the better. But such technologies cannot succeed without the help of great Tesign

Good design is obvious, well designed products need no manual. This ethos is apparent in trends in personal computing; thirty years ago a desktop computer arrived with a phonebook-sized manual to lead you through a day of hardware setup and OS installation. Now we expect to unbox a device and, in under a minute, book a flight online, get automatic updates on the weather at our destination while being served targeted ads for weather appropriate clothing... The ease and obviousness of the experience explains why exponential growth in the ubiquity of computing hasn't seen an explosion in tech support call centre jobs.

As far back as 1988, technologist Mark Weiser and colleagues at Xerox used the term 'ubiquitous computing' to refer to the potential for applications previously confined to desktop computers to be implemented anywhere via distributed computing, wearables, smart appliances... Of the concept, Weiser claimed: "The most profound technologies disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it." Three decades later, we're surrounded by the tech Weiser predicted, and his claim seems like a statement of the obvious.

Technologies don't 'disappear' spontaneously, making them disappear is the job of Tesign. But here's the rub; Weiser's team had the tech to

implement 'ubiquitous computing' by the early 90s. Yet at that time, to the public Weiser's vision sounded like a cyberpunk fever dream. It seemed like improbable sci-fi right up to the point when the future has arrived and we are unboxing that smartphone, booking that flight, being served that advert... and it's all perfectly obvious.

What accounts for the decades that elapse between a technology being developed and that tech becoming commonplace, or 'disappearing'? How can design speed up the process?

One answer is that new tech must overcome significant inertia. Take the li-ion battery as an example that unfolded on a similar timescale to 'ubiquitous computing'. The tech required for rechargeable li-ion batteries was demonstrated by M. Stanley Whittingham in Exxon's laboratories in the 70s. But, it was impractical due to the costly materials required. By the 90s the tech was refined enough for commercial application. Then began the slow process of production capacity rising, pushing costs down, leading to rising consumer demand. And now, Elon Musk's "Gigafactory" promises to exponentially accelerate the efficient production of li-ion batteries.

Apart from technical and commercial hurdles new tech must overcome, there's the question of utility. According to Charles Eames "Recognising need is the primary condition for

"It should be working"

"But why isn't it selling?"

”

The most profound technologies disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it

design." Or to quote Jeff Goldblum's sceptical chaos theorist from 1993's Jurassic Park: "Your scientists were so preoccupied with whether or not they could, they didn't stop to think if they should." When the term 'ubiquitous computing' was coined, it wasn't something people considered an everyday necessity. As long as people didn't see laptops and smartphones as necessities, they had limited need of li-ion batteries. This vicious circle wouldn't have been broken without people like Weiser and Whittingham doing research for its own sake into tech that was yet have an application. While the two technologies came from different fields of research if one had been developed without the other it may never have become commercially viable. In developing new tech at least, there's an argument for doing it just because you can.

This example also demonstrates that cross-disciplinary communication is invaluable.

Finally, there is another pervasive force slowing the acceptance of new tech. Weiser's vision of 'ubiquitous computing' was regarded as a pipe dream for decades, not because it was yet to find a use, but due to the tendency for such tech to be presented as weird and wonderful, to be received with distrust and suspicion.

New tech requires open-ended research and a willingness to challenge established social or commercial norms. In contrast, design requires communication of such clarity that the medium of communication is unseen. The crux of Tesign then, is to mediate technology's ability to open up new possibilities and in doing so, to make that technology 'disappear'. It is up to us, professionals invested in the future of Tesign to be communicators.

Arthur C. Clarke's Third Law sums-up this task: "Any sufficiently advanced technology is indistinguishable from magic." just as a magician's sleight of hand makes objects disappear, Tesign makes the internal workings of technology invisible to the user.

In upcoming issues of Signed we will see designers changing society, culture and industry through Tesign. Take inspiration, and remember the second of Clarke's three laws; "The only way of discovering the limits of the possible is to venture a little past them into the impossible."

Game changers

What does it take for an innovative design to become an influential one? We take a look at how and why some designs have the power to shape culture and reality and, in so doing, become defining points of our time.

Designs powerful enough to make a difference need to be perfectly attuned to our constantly evolving world. Computer advancements, virtual and augmented realities and increasingly sophisticated digital environments mean that the kind of technology that once sat firmly in the realm of wildly speculative sci-fi (self-driving cars, temporary tattoos that can control external devices by touch, headsets that whisk us to the front row in global fashion shows) either already exist, or are close to becoming part of our everyday lives.

Asia in particular is a marketplace that embraces innovation and adopts new technologies early. An openness to new ideas and a desire to push boundaries means consumers are increasingly receptive to design and quick to embrace them. Yet, innovations in technology are not guaranteed to achieve mainstream acceptance. Culture and design both play a part in any new technology's journey to becoming integral to everyday experience; brands that do this well will have the edge in a crowded marketplace.

To make the transition from an innovative design to an influential design, a product must tap into our desires, giving us what we need when we need it (or preferably even before we know we need it). One of the most well known companies to do this in recent years is, of course, Apple. When Steve Jobs launched the first iPhone 10 years ago with its sleek metallic slab, touchscreen and discreet side buttons, he seemed to know instinctively what we wanted. Back then, the iPhone was hailed as a "breakthrough internet communications device" and subsequently spawned so many imitators that it defined the direction of its industry.

Every smartphone since has followed a similar design outline and it took until 2016 for Apple's iPhone sales to decline for the first time amid worries over about global smartphone market saturation and claims that the latest iPhone is remarkably similar to the previous two models. This may, in part, be due to tech-led design thinking

which is increasingly focused on interior content rather than exterior aesthetics. Not surprising as every part of our lives - personal, professional, social - is now connected to our smartphones, and our other devices like our cars and even domestic appliances, all seem to want to talk to our phones as well.

Have designers become so inspired by the possibilities of the digital age that the real world has ceased to develop? The latest iPhone 7 plus retro edition may be a



case in point, with its beige outer shell and rainbow apple logo, it is designed like an 80s Apple Macintosh, cashing in on tech's renewed appetite for nostalgia. Rumours are that a major iPhone overhaul is on the cards for a September 2017 that may - or may not - put Apple back in the limelight creating an exclusive language of design once again.

Prolific Canadian-American industrial designer Karim Rashid (known for his futuristic vision and prolific

output, (he currently has over 3000 designs in production) is vocal about the subject of design innovation and is a firm proponent of looking forward, not back. Rashid spoke recently at Shanghai's Design Shanghai Forum, telling a tech-savvy design-loving audience that design innovation is not borrowed from history but instead modern materials should be used to shape the future, one inspired by the digital age. Design, according to Rashid, is a cultural shaper of our world.

"Design is about the betterment of our lives poetically, aesthetically, experientially, sensorially and emotionally. My real desire is to see people live in the modus of our time, to participate in the contemporary world and to release themselves from nostalgia, antiquated traditions, old rituals, the kitsch and the meaningless." Rashid believes that design-led change is sorely needed, evidenced by the 35,000 new designs at Milan Furniture Fair last year which, in his eyes, lacked fresh ideas. "I believe that we could be living in an entirely different world - one that is full of real contemporary inspiring objects, spaces, places, worlds, spirits and experiences."

So what does it take to come up with a design that changes lives? If we look back to design icons that have made a positive difference, they share certain similarities. Among them, they are functional, enjoyable, uplifting and sustainable. Tech-design classics like Leo Fender's 1950s Stratocaster, or the 'Strat' - a quintessential electric guitar with a sleek contoured body shape and double cutaways - changed the way music sounds and has been widely imitated and copied. The Strat is embedded deep in musical culture, played on stage by greats from Buddy Holly to Jimi Hendrix. Consider too Piaggio's Vespa Scooter with its painted, pressed steel unibody - an icon of Italian style since 1946. The Vespa's genius unisex design met real needs, allowing men in suits and women in skirts to travel elegantly. Used in Fellini's *La Dolce Vita*, and loved by the Beatles, the Vespa has had a profound impact on culture, productivity and society.

In the field of emerging technologies, there are always going to be some who win (becoming integral to our lives) and some who lose (falling into oblivion). The iPod knocked out Minidisc players by using new technology and simplicity of design and operation; Matsushita's VHS ran roughshod over Sony's Betamax videocassette recorder by providing cheaper, longer tapes than its competitor. The ability to produce tech-led, market winning designs comes down to companies being able to embrace risk, carving out the time and resources for much-needed research and development - often not an easy task in these days of rapid mass production and limited capital investment.

One company busy forging its own path is market-leader Dyson, a British company that invested heavily in laboratories in the rural Cotswolds with a mandate to experiment, pioneer, fail and document. From constant trial and tribulation has come revolutionary design - the



Design is about the betterment of our lives poetically, aesthetically, experientially, sensorially and emotionally

famous Dual Cyclone bagless vacuum cleaner, the 360 Eye robot, the Supersonic blow dryer, all the results of thousands of prototypes, millions of dollars of investment – and ultimately, market-leading success stories.

The company's Founder, Sir James Dyson, a British inventor and industrial designer, believes enthusiasm and lack of fear are vital to design's future, to the extent that he encourages designers to plow on regardless of established thinking. He launched the James Dyson Foundation in this spirit, dedicated to encouraging young people to think differently, make mistakes and discover their engineering potential.

As Dyson shows, innovation is about creating a future, not emulating a vision of what it might look like. Commitment to innovation, radical thinking and



good timing can create designs to change the world. A recent simple yet effective lifestyle game-changer has been the boom in bike-sharing companies, operated via smartphone apps which unlock the bikes and tell riders where to find them at a glance. China has been fast on the uptake, with the country's traffic congestion and pollution problems it's a cost-efficient, carbon-footprint reducing game-changer. Mobike and Ofo have filled the streets of the country's major cities with colourful two-wheelers. Bike-sharing is not a new concept (it dates back to 1960s Amsterdam) but is one that new technologies enable to work efficiently. Problems that hamstrung previous bike sharing schemes; complex coin-operated machinery, theft and vandalism, have been negated by App capabilities. Spinning off is the EcoHelmet, a foldable, recyclable helmet for bike share users and the US National Winner of the 2016 James Dyson Award. Its flat, folded state is ideal for vending machines and requires no assembly as users just place an EcoHelmet on their head, pull down the straps, clip it on and go. The



Leo Fender's 1950s Stratocaster



UrbanX electric wheel is also hot news for bike lovers - a smart wheel with a 350W battery that simply clicks onto your bicycle in place of the front wheel and converts it into a fully functional electric bike capable of speeds of 20MPH. A smartphone app allows you to measure speed and distance and change pedal assistance according to your needs.

But what of the future? Innovative design always develops in tandem with innovative technology – it can never be an end in itself. Tech-savvy transportation options are firmly in the news: this summer Paris will see the debut of 'Seabubbles', a futuristic-looking electric hydrofoil water taxi powered by wave and solar energy. Made of high-density foam and fiberglass, the water taxis will recharge at their docking stations, where solar and wave energy will be converted to electricity. On land, driverless technology options are close to launch: Tesla's self driving vehicles are due in 2018; Chinese brand Nio's autonomous electric car is due in 2020 and Google spin-off Waymo has revealed its first self-driving car, a Chrysler minivan that it expects to launch this year.

Wearable technology too appeals on both practical and feel good levels. Waverly Labs is developing a Pilot

earpiece which is able to translate foreign languages in real time to the wearer whilst Dutch fashion designer Pauline van Dongen's smart Issho denim jacket strokes the wearer's back in response to touch thanks to its conductive fibres woven into the fabric. Interestingly, Issho works without a smartphone in a bid to move away from using gadgets as an interface but instead has its own microcontroller which turns on when the jacket is worn. Challenging smartphone dominance further are Duoskin temporary tattoos from the researchers at MIT's Media Lab. The fashion-forward designs are made from conductive gold metal leaf and a thin layer of silicone, which interacts with an electronic circuit that responds to touch. The tattoos are customisable, so users can use different designs to indicate commands to external devices, measure body temperature and transmit personal data.

Only time will tell whether any of these upcoming Tesign will become so influential to the extent that we are unable to imagine life without them, but the possibilities for change are energising. The future looks bright indeed.

Sharon Leece

hyper reality

Advancements in camera technology have the potential to break down the barriers between actors and their audience, if not breaking the fourth wall, at least peering over the top of it. But does such new technology really benefit storytelling, or is it just spectacle for its own sake?

CH1 

CH2 

Could the current trend for ever more immersive filmmaking technologies signal the end of the era of the cinematic auteur? Ultra high-definition, 3D stereoscopy and increasing frame rates are all being adopted in the quest for spectacle and the drive to make the cinematic experience increasingly interactive. But this drive seems to be at odds with the idea that the director should be in sole control of the audience's perception and emotional responses. Christopher Nolan, director of Inception and The Dark Knight, has summed up the problem before, saying "The thing with stereoscopic imaging is it gives each audience member an individual perspective. It's well suited to video games and other immersive tech, but if you're looking for an audience experience, stereo is hard to embrace."

So, can filmmakers of the future harness emerging filmmaking technologies while maintaining their grip on the audience's attention? While many have dismissed 3D filmmaking as a gimmick, others are far more enthusiastic about its potential. None more than blockbuster director James Cameron, who has claimed that "It's absolutely inevitable that eventually, all or most of our entertainment will be in 3D", pointing out "We're not a race of Cyclopes. We see the world in 3D. It's the way we perceive reality. Why wouldn't our entertainment be in 3D? It's not a gimmick. It's a calibration of our entertainment industry to the way in which we actually perceive the world."

Multiple Oscar-winning director Ang Lee has repeatedly experimented with new filmmaking technologies. His pioneering use of 3D on 2012's The Life of Pi proved that the technology had potential beyond simply being used to spice up underwritten effects-laden action movies. Lee broke new ground again recently with his latest movie - Billy Lynn's Long Halftime Walk - by shooting it in ultra high-definition at 120 frames per second, five times the frame rate of standard film. This ultra hi-def, ultra high frame rate results in images of unprecedented clarity. New lighting techniques were required to provide enough illumination for the cameras. Sets had to be made with incredible attention to detail as every imperfection is made immediately obvious to the viewer.



**Technology helps...
but face to face is still
the most influential
and in-depth form of
communication that
cannot be reproduced.**

8K

4K

HD

The film received a lukewarm critical reception while reigniting the perennial debate over whether hyperreal verisimilitude actually enhances the filmgoing experience. Very few cinemas have projectors capable of displaying Billy Lynn as the director intended, so it is hard for most viewers to judge it fairly. Many who saw Billy Lynn in its original form complained of being distracted by the actors' makeup, the construction of the set, the details of the locations - all of which are made immediately apparent thanks to crystal clear image reproduction.

Filmmaking technology develops so quickly that today's cutting edge will inevitably look primitive within just a few years. Rian Johnson, director of The Last Jedi, the forthcoming 8th film in the Star Wars series has compared the development of 3D filmmaking to that of the development of colour film saying that "On the developmental timeline, stereoscopic photography is at the equivalent of hand-painting color onto black and white frames." Inevitably, the technology will mature, the enhanced detail allowed by 3D, high-definition and high frame rates will, rather than being a distraction, make the filmgoing experience all the more immersive.

Lo-Fi Revolutionaries, high fidelity futures

However, it is possible that the mega-budget movie industry is the wrong place to look for the future direction of filmmaking. Whereas tech advances

are generally expected to trickle down from the high-end to the consumer market, advances in filmmaking techniques have a tendency to trickle upwards, from fine art filmmaking, via arthouse cinema to Hollywood blockbusters. Many of the current crop of big-name directors started their careers making lo-fi arthouse and fine art films, a career trajectory made possible by the emergence in the 1980s of affordable domestic video recording equipment. Likewise, today, while Hollywood struggles to deal with online piracy, ballooning budgets and an increasingly unadventurous commissioning process, the most cutting-edge films are being made by zero-budget moviemakers. Unlike the avant-garde filmmaking of the 80s, the work emerging today is by no means lo-fi; GoPro and drone photography allow individuals to capture footage to rival mega-budget big-screen offerings, 360° virtual reality movies can be made using readily available equipment. This equipment is so effective that even organisations with access to huge resources and budget are adopting them - some of the most stunning images from the BBC's recent highly acclaimed Planet Earth 2 documentary series were captured using relatively

cheap drone technology. DJ Clark, producer and presenter of the popular Hong Kong based Drone and Phone video series told SIGNED; "I started with low end equipment not out of a need (I have use of full professional film making kit) but purely because I did not want to lug it around" adding that "The consumer devices these days are remarkably good if you work within their limitations."

Besides, films made this way are ready-optimised for independent, instant sharing on social media - Clark explained to SIGNED that "Content that is tailored to social platforms, as Drone and Phone is, is orientated around the audience. We see it as a community of people with the filmmaker acting as an organiser." Clark suggests that this attitude towards filmmaking can have as great an impact on the immersiveness of the viewing experience as the technology used to capture the footage; "The content I produce is only part of the community activities and is a reaction to the discussion that is had in our online forums. It's a very different process to creating films conceived, produced and presented by a filmmaker or producer."

Of his films, shot using compact, affordable equipment, Clark told us "The reaction has been very positive... these devices are small, cheap and easily carried around it has inspired a lot of the viewers to go out and create their own films of their adventures."

However, there is a downside to this mode of filmmaking. Online film producer Ron Chiu told SIGNED that "while technology enables new forms of storytelling it also has the potential to

kill the patience of the audience." Documentary filmmaker and curator of Hong Kong Independent Film Festival Cheung Tit Leung went further, telling us that "Technology helps... but face to face is still the most influential and in-depth form of communication that cannot be reproduced."

However, one apparently unlikely application of immersive filmmaking technology has emerged which seems to indicate that such technologies are perfectly capable of maintaining, even enhancing what Nolan referred to as the "audience experience". This application is the live broadcast of theatre productions to audiences in cinemas. Theatre is not reliant on special effects. Plays staged in a black box theatre are no less compelling than those staged with elaborate sets, lighting and sound design. Broadcasting theatre into cinemas, apart from democratising the artform, could well enhance the experience - allowing the audiences to clearly see and hear the performances in high-definition.

Theatre, in contrast to cinema, is a live artform. Far more than cinema, the theatre works because it constructs a social relation between those on stage and those in the audience. Does the technology of hyperreality allow audiences to enjoy a live artform as if they were really there? Or as Guy Debord suggests, does the spectacle merely "eliminate geographical distance only to produce a new internal separation"?



REC

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William W.Y. Chan on National Theatre Live - stage performances as movies

Theatre performance is a form of live art which only exists in present, the moment you witness an action on stage, it is completed and gone. It can never be repeated exactly as it was. Nevertheless, since the invention of film and video, live performances have been able to be captured and reviewed in other places, in a later time. Since the technology of audiovisual recording and satellite transmission have advanced, we can even enjoy a live performance overseas in real time from the other side of the globe. National Theatre Live (NT Live), which was introduced to Hong Kong in 2014, is one of the leading projects.

Presented by the National Theatre of Great Britain, NT Live was initially broadcast in UK cinemas back in June 2009, bringing the NT production *Phèdre* to areas outside London and so reaching a wider audience. It received such a good reception that NT Live has since expanded

their distribution network. The NT Live team has been working with others as well, and has brought more than 40 productions from London's leading theatres to the rest of the world in the past seven years. By May 2016, more than 5.5 million people have watched an NT Live broadcast in over 2,000 venues globally. Benedict Cumberbatch's *Hamlet* was the largest single broadcast so far, seen by more than 550,000 people worldwide.

Broadcasting stage productions to overseas cinemas is not a new concept, *The MET: Live in HD (MET Live)* by The Metropolitan Opera in New York is indeed the pioneer. But NT Live has raised the bar. Unlike others, every NT Live show is shot at a single special performance in front of an audience at the house, no editing and adjustment can be made to the footage afterwards, even for encore screenings after the live broadcast.

As the philosopher and cultural theorist Walter Benjamin suggests in his seminal 1935 essay "The Work of Art in the Age of Mechanical

Reproduction", mediated works of art might lose the aura of the original and there is inevitably a loss of authenticity in the aesthetic experience. Even though we can shoot a stage performance in ultra-high-definition, and even with 3D technology, the experience of sharing the same space with the performers under same roof can never be replicated, no intimacy between performers and audiences could be re-created through another media. So, in this sense, is NT Live actually an act of anti-live?

Arguably not. What is fascinating about NT Live, is that the broadcasts are more than just filmed stage productions. Instead, NT Live presents a live theatre performance faithfully with cinematic treatments for audiences in cinemas. This unique form of presentation sits somewhere between cinema and theatre. It could be called a theatre movie rather than a theatre performance recording.

With close-ups and camera movement, NT Live is a cinematic take on the theatre experience. Each broadcast has a camera director — a live-broadcast specialist — to capture the nuances of theatre on camera in a way that is dynamic while honouring the integrity of the stage production. The biggest challenge for the camera director is to combine the immediacy of live theatre with the language of film.

In order to achieve this, each production has a unique and sophisticated camera set-up. Five to eight cameras provide tracking, wide-shots, close-ups, even aerial shots. NT Live cinema audiences thus enjoy the stage production from the best seats in the auditorium, as well as getting a closer perspective. Unlike the audience at the theatre who can only watch the performance from a single direction.

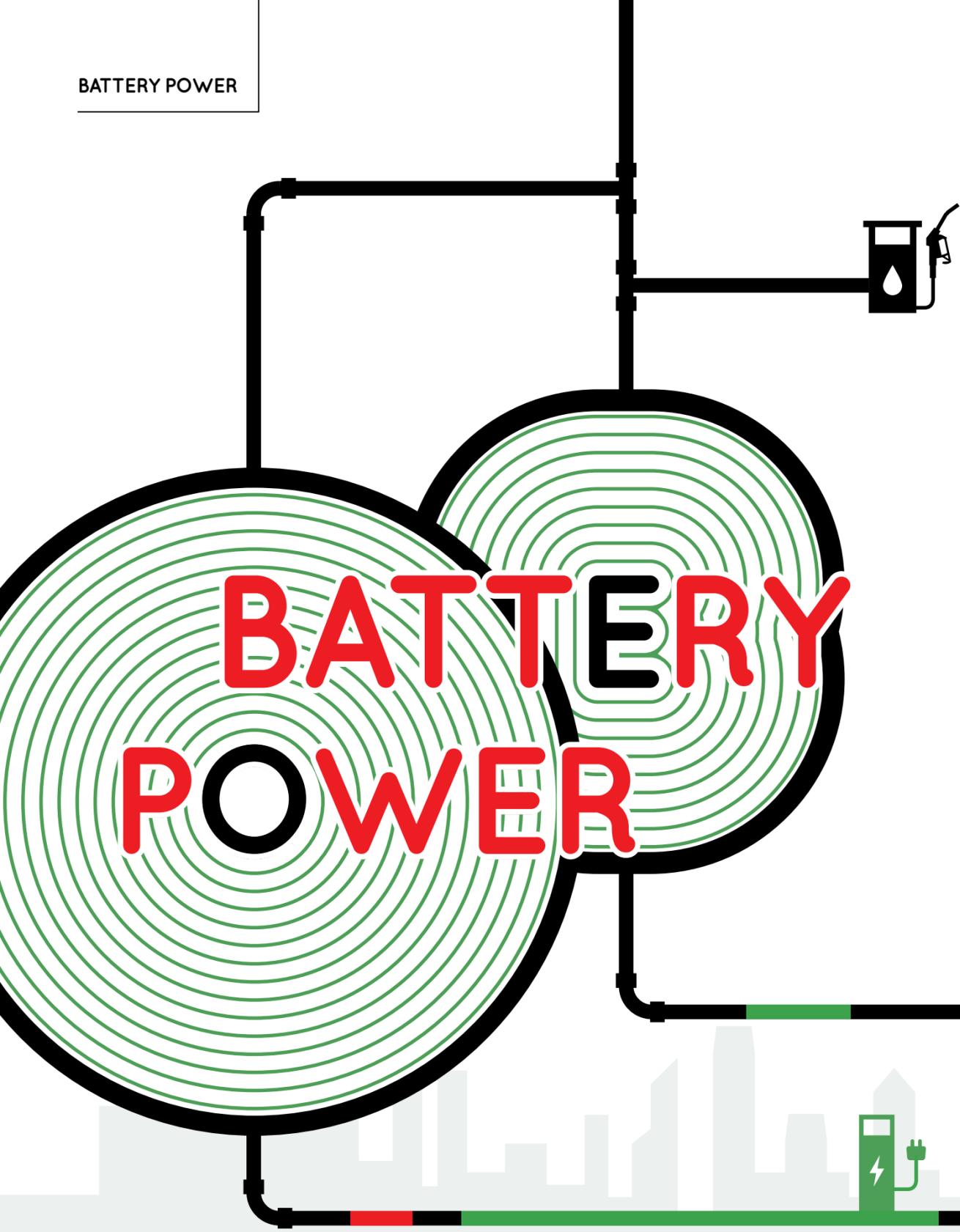
”
NT Live is not released on an official DVD or via any other form of media. This has the important effect of preserving the social nature of theatregoing.

Although some auditorium seats are blocked by camera setup, there is a live audience on the broadcast night. The presence of a live audience is always important for performers on stage, providing instant reaction and applause. This also makes the night of the broadcast less different from other shows in the run.

Apart from shooting live on a specially arranged public performance, NT Live has another unique feature; it appears only in cinemas. The performance is not released on an official DVD or via any other form of media. This has the important effect of preserving the social nature of theatregoing. It encourages audiences to gather at a cinema rather than staying at home in their living room.

While NT Live screenings can be viewed as theatre movies, in essence the work is still a stage play. As camera director Tim van Someren, who has directed 12 NT Live events, mentioned in an interview, "The challenge for the team is capturing the right person at the right time delivering the right line." The cinema audience should feel that they have been drawn in by the story, not by the broadcast production.

Capitalising on the dramatic enhancement that comes with camera movements while reducing the visibility of the cameras as they shift and move during the broadcast is a tricky feat that not every director can achieve. But when it is done well, thanks to the latest technology, theatre lovers can sit in comfort at a local cinema and enjoy world-class stage productions while they happen far, far away. It is a luxury that few would have dreamed of 10 years ago.



Electric cars have always looked like the future, but around the world they are becoming an everyday reality. Can Hong Kong avoid getting stuck in the past or will the city be able to join the electric car revolution?

Not long ago, electric vehicles (EVs) were derided for perceived performance deficiencies, considered unattractive by all but a tiny niche of eco-aware motorists. But even in the most conservative quarters, attitudes have shifted. Now, more than 60 models of electric car are available worldwide. Luxury marques and high-performance carmakers are not only getting in on the act, they're driving the industry forward.

Arguably, Hong Kong wasn't designed for EVs. There are many challenges standing in the way of their adoption in the city. On the other hand, no city ever was designed for EVs. When Hong Kong's narrow streets were laid out, the planners certainly didn't have mass car ownership in mind either. Every city that has successfully integrated EVs into its public and private transport infrastructure has had to overcome many of the same challenges that Hong Kong faces. Of these challenges, the only ones unique to this city are political, and pernicious. Around the world, city-scale and nationwide programmes are harnessing the benefits of EVs. Rotterdam has 80% of its public transport running on electricity from 100% renewable sources, while London is rushing to overtake it by building Europe's largest fleet of electric buses. Estonia has become the first country to deploy a network of EV charging stations with nationwide coverage, China has ambitious plans to

build a network of 10 million charging stations by 2020. But despite its well-publicised Formula E race, Hong Kong seems a little slow off the mark.

Any city hoping to make EVs a viable part of their transport mix must address the issue of power supply. A major attraction of owning an electric car is the potential to charge the battery at home, thus avoiding ever having to visit a petrol station again. There's more than one type of EV charger. Standard chargers require the car to be left plugged in overnight, whereas fast chargers can top a vehicle up in half an hour. Obviously, fast chargers are more convenient but need extremely robust power supply infrastructure due to the volume of current they pull.

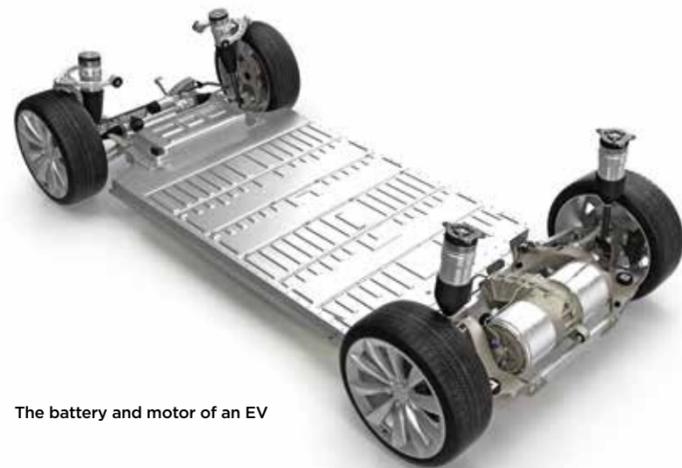
Both CLP and HK Electric have developed networks of public EV charging stations. In fact, it has been estimated that 90% of the city's electric car owners rely on public chargers, often with no facility to charge their car at home. Yet the Environmental Protection Department points out public chargers are only intended to supplement owners' private domestic chargers. So, why are car owners still reliant on public charging facilities?

Incentives are in place to encourage developers to include private charging stations in new buildings. But tenants who don't own EVs tend to be unenthusiastic about paying the extra cost such facilities incur and effectively subsidising

their electric car-owning neighbours. This, in turn, makes developers reluctant to install enough stations to meet demand. The same problem discourages operators of private car parks, another potential location for private charging stations.

When it comes to developing a network of private charging stations, there is a major question over whether Hong Kong's power infrastructure could cope with the strain mass adoption of EVs would bring. There is limited spare power capacity in any building, so few locations are suitable for fast chargers and there is a limit on how many cars can be charged simultaneously overnight. According to Ringo Ng, managing director of HKT's Consumer Group and Managing Director of HKT's Smart Charge, the best solution is to employ dynamic power management systems to spread the load. Ng is confident this will solve the issue, saying "we foresee a 1:1 ratio on private charger and occupants being the norm in the coming future".

However, most of these chargers will require the car to be left on charge overnight. So, for the foreseeable future, the biggest practical benefit of electric car ownership - fast charging - will remain unavailable to most users. But this needn't be the case forever; the efficiency of cars and batteries improves with every new EV that comes to market.



The battery and motor of an EV

Aside from privately owned cars, diesel-powered buses and light buses produce large quantities of particulates and nitrous oxides and are prone to spend a lot of time in slow traffic or idling at stops.

In response, the Environmental Protection Department (EPD) has launched a \$300 million Pilot Green Transport Fund. It has supported trials of commercial electric vehicles, hybrids and less-polluting vehicles. By the end of October 2016, the fund had put over 70 electric vehicles on the road.

This all represents a valiant effort. But trialling new technologies counts for little unless the trials lead to development and implementation of new technology. Unfortunately, Hong Kong's high profile electric bus trial ended after a series of relatively minor setbacks; a simple glitch with the stop bell causing the new buses to be shelved indefinitely last year. Similarly, a two-year scheme by BYD - the world's biggest electric carmaker - which aimed to introduce electric taxis to Hong Kong met resistance from drivers despite massive investment and huge potential benefits. The trial was branded 'a failure' by BYD's General Manager. The main reason for the drivers' concerns? Inadequate charging infrastructure.

Given the economic pressures on taxi drivers caused by Hong Kong's unique licensing system,

these concerns are understandable. The majority of Hong Kong's taxi drivers rent the vehicle on a shift basis from the owner of the taxi licence. Neither drivers nor licensees are likely to willingly accept the loss of revenue that would result from leaving their car charging for long periods when the current LPG models can potentially run round-the-clock. Furthermore, with the number of taxis in Hong Kong fixed at 18,138 for the past 13 years, and unlikely to be increased, the city can little afford to have vehicles spend a significant proportion of their time off the road, charging. As long as there remains little political will to overhaul the taxi licensing system, these obstacles to the adoption of electric taxis are unlikely to be overcome.

So now, even the Environmental Protection Department has little hope that electric vehicles are 'a good fit' for Hong Kong's public transport. And if the EPD isn't advocating to put clean vehicles on the city's streets, who will?

With so many challenges already facing the adoption of EVs in Hong Kong, an additional setback has come with the government's decision to raise the First Registration Tax (FRT) exemption for electric cars. Until the end of March 2017, electric cars were fully exempt from FRT, but the exemption now only covers part of the tax payable. The FRT exemption was, in part, intended to curb

the increase in polluting vehicles on Hong Kong's roads. However, exemptions are available not only on electric cars but other types of more efficient vehicles, including petrol and diesel-powered models. The upshot has been that the concession on FRT for less-polluting vehicles mitigated the measure's impact on the overall growth in vehicle numbers, while high taxes on other types of vehicle encouraged owners to keep their older, more polluting cars on the road for longer, rather than replacing them. In short, old, dirty vehicles remain stuck in the same slow-moving traffic.

For the past two decades, this was the status quo. As long as EVs remained uncool, their sales making up a small fraction of overall vehicle sales, the electric car FRT exemption had minimal impact on tax revenue so there was little incentive to raise the exemption. The raising of the FRT exemption targets buyers of electric cars seen as desirable luxury options - the models making EVs fashionable. The decision to end FRT exemptions on electric cars looks a lot like killing the goose that laid the golden egg.

The bottom line is that both consumers and the city's authorities appear resistant to technology seen as new and unproven. But this is due to a misconception. Anyone who commutes by MTR is familiar with using a high speed, reliable EV every day. Furthermore, some of the earliest cars ran on electricity. The limited range of early EVs made



them uncompetitive against fossil-fuelled models; the development of long-distance motorways during the 20th century led to more people making longer journeys, and early electric vehicles just couldn't keep up. But battery technology is lightyears ahead of where it was then. Hong Kong's geography, its dense population centres

Trialling new technology counts for little unless the trials lead to development and implementation

and confined territory mean few drivers make journeys that would challenge the range of modern EVs. And the instantaneous torque offered by an electric motor makes Hong Kong's steep winding roads a breeze for electric vehicles.

If any city could benefit from zero tailpipe emission EVs, it is Hong Kong. Thousands of idling engines on narrow streets, hemmed in by tall buildings creating a toxic environment. In the 10 years from 2003 to 2013, the total number of vehicles on the city's roads grew from 524,000 to 681,000 while traffic speeds dropped 11 per cent. Some of the busiest roads recorded average speeds of 4-5 km/h, barely walking pace. In this atmosphere, the adoption of clean EVs would have an immediate positive impact on public health.

Resistance to new technology seems inevitable, regardless of the massive potential benefits of its adoption. But none of the barriers to the adoption of EVs in Hong Kong is insurmountable. Around the world, the tide is turning in favour of the electric car. And Hong Kong will need to find ways to keep up.

When ART, FASHION and MUSIC collide

Osage Art Foundation and Hong Kong Design Institute have joined forces to create an innovative platform for artists and designers to showcase their work while benefitting from unique opportunities for interdisciplinary collaboration

Lights. Sound. Fashion. HK|Runway, the first show of its kind in Hong Kong, allowed emerging local artists and designers working across all disciplines to experiment with alternative methodologies and showcase fashion in the most imaginative and creative ways. Audiences were dazzled by gorgeous ready-to-wear pieces and haute couture that crossed seamlessly from commercial to experimental, all presented in a theatrical style.

Co-organised by Osage Art Foundation and Hong Kong Design Institute, the multidisciplinary project held between January 17 and 22 at Osage Gallery in Kwun Tong, merged the realms of fashion, design, art, dance, architecture and technology.

Agnes Lin, Osage Gallery's founder and director, discussed how she hopes this six day event will be the first in a series encouraging artists to create, while connecting them with supportive businesses: "Part of the aim of HK|Runway was to blur lines between what is considered an art exhibition and fashion show and to avoid

categorisation both in the making and reception of the works."

A core purpose of HK|Runway was to encourage creative synthesis. Lin explains: "We also wanted to experiment with the curatorial methods for an exhibition or performance, and really let the interactions between each element be organic in their response to each other. So each dancer, designer and artist had autonomy to form their contribution, which would be part of the whole."

Lin argues that fashion has traditionally been seen as being divided between ready-to-wear and haute couture, adding that it is becoming increasingly common for designers and brands to successfully straddle both the commercial and experimental aspects of fashion design in a single collection.

While HK|Runway was a transdisciplinary event where both fashion and art met, the two disciplines already share a significant amount of common ground. Lin states: "Fashion always has to negotiate relationships with the body, which



art also deals with but often very differently. In this sense, we hoped that practitioners in each discipline would open up the possibilities for the other.”

HK|Runway was a highly experimental project, but it is not entirely unexplored territory for Osage Art Foundation. HK|Runway emerged from Osage’s ongoing threads of research and building on experience from earlier projects. These included Siren, Sigma Square and HK|ACT. 2007’s Siren incorporated music and dance with new media works and innovative display technologies. The project was an experimental platform, involving practitioners from different disciplines, creating new artworks and forging new collaborations.

Osage Art Foundation also has experience with developing alternative art market models, exploring the way artworks are valued and experimenting within the exchange systems surrounding art. Sigma Square, which took place throughout 2012 and 2013, was a pop-up market where young artists, designers and musicians presented and sold works in an informal setting. The works featured in the project ranged from toast that referenced Modern artworks, to transportable homegrown wheatgrass juice stands.

HK|Runway is also indebted to Osage Art Foundation’s HK|Act as a source of inspiration. HK|Act included elements of public art and live art that were incorporated into the event. With HK|Runway Osage Art Foundation turned its attention to fashion design while bringing

together the themes of cutting-edge technology, interdisciplinary contributions, experiential works and alternative commercial art market models. All themes explored on earlier projects; but now on a much larger scale.

The project was, to a great extent, inspired by the designs of HKDI’s graduating students as well as the work of artist-designer Tobias Gremmler, who developed the scenographic design of the event. Gremmler’s scenography captured, analysed and revisualised the movement of the HK|Runway models using a combination of technologies and methods from different disciplines. According to Lin, “The scenographic design took the form of a continuous sequence of spatial and visual fields of light.” These morphing projections transformed the fashion show so that it operated like a constantly changing pop-up boutique. Gremmler’s scenography was accompanied by music curated by Giorgio Biancorosso and composed by Chan Sze-Rok, adding another level of experience to the overall play of movement, light and fashion sequencing.

Prolific Hong Kong artist and designer Stanley Wong (AKA anothermountainman) played a part in the planning of HK|Runway, choosing the designs to be included in the show. While Wong had a very large pool of talent to choose from, Lin explains that Wong took a systematic approach to the selection process; “The designs displayed were chosen based on this idea of blurring high fashion and everyday fashion as well as on the consideration of how each of the designs would interact with other, with the dance and the music.”



While Hong Kong’s fashion industry is usually seen as responding to global trends rather than leading them, HK|Runway aims to promote innovation and originality. Lin explains that: “By providing a platform for new original designs that exist in the realms of art, fashion, dance and music, we hope to be able to create a space where artists and designers can afford to be experimental, where ideas can cross pollinate and where designers can be supported in their creative expression.” To this end, HK|Runway differs significantly from a traditional fashion show. While traditional fashion shows incorporate elements of visuals and music along with fashion design, they usually come in a standard format where you immediately know where and what to look at. Lin explains: “HK|Runway opened up those elements so that each would speak for itself,

while also being enhanced by the other elements. The result was somewhat theatrical with the narrative being dictated by the fashion design.”

According to Lin we can expect further similar projects to come from Osage Art Foundation: “We plan on taking the lessons learned and the ideas gained in the creation of this project to further develop other possibilities. The response we got from the designers was encouraging for us to continue to develop the platform in this direction.” Many of HK|Runway’s participants found that the interdisciplinary contributions enabled by the project helped them to see possibilities and interpretations that they hadn’t previously seen in their own designs. Even after the event has finished, it is hoped that these new collaborative relationships will continue to bear fruit.

DESIGNERS

making a difference

These five graduates from Hong Kong Design Institute made a splash at the DFA Hong Kong Young Design Talent Awards 2016, taking home top prizes and together winning a total of HKD 750,000 for their playfully innovative designs that exhibit social conscience and environmental awareness



Clockwise from top left:
Michelle Lin, Wilson Choi
Hung-shing, Violet Tai Sze-man,
Lam Kin-yan and Gim Wong
Lai-yu

Gim Wong Lai-yu



Gim Wong was awarded the CreateSmart Young Design Talent Special Award for her ingenious creation - the Backpacker. Her design caught the attention of the judges thanks to its ability to transform from a jacket into a backpack. Wong, who was also named HKDI outstanding student of 2016, says she was inspired by the philosophy and concept of a world traveller. "I incorporated aspects of the traveller into the design," says Wong. "when we travel, we try to pack as light as possible, or we prefer multi-purpose outfits and try to be practical. I combined these elements" An exemplar of zero waste fashion, Wong created her piece using only a single piece of fabric joined by zippers. Made of waterproof nylon and cold-resistant wool, the Backpacker takes the shape of a map when unfolded. "The map is a reflection of a world traveller," Wong explains. "When you fold it, you can never predict what shape it will form. It's very much like a backpack. When you're lost you never panic, your journey is filled with surprises and never know what will happen." The Backpacker is the epitome of comfort and practicality, Wong says that both are equally important. "It's part of daily life," she says. "We always judge if an outfit is stylish before wanting it try it on. But when we try it on we think about comfort." While Wong is in her final months of completing a top-up degree programme at HKDI, she hopes one day to travel the world like the people that inspired her collection. "I really, really want to travel, but not to the cities. I want to go into jungles and explore." Perhaps she'll be wearing one of her designs wherever she goes.

“
We always judge if an outfit is stylish before wanting it try it on. But when we try it on we think about comfort.”

Lam Kin-yan

Lam Kin-yan's outstandingly creative work "Into the Flame" earned him the prestigious HKDI Young Design Talent Award. Inspired by the phenomenon of a moth attracted towards light, Lam has employed natural dye methods, learned during overseas exchanges, and relied on natural materials to create his winning collection. Lam based his pastel-coloured designs on the natural world. "I'm often by nature and I look for ideas when I go hiking," says Lam. "That's why I use natural dye; it relates to nature, colours are an important element in the design" Incredibly fluid and unstructured, the shape of Lam's designs and his choice of materials were inspired by moths. "I use materials that are fuzzy to imitate the texture of a moth, mostly wool," he explains. "For patterns, I also take inspiration from the moth's wings. I hand-pick all the wool I use." In his final year of a top-up degree in fashion design at HKDI, Lam believes fashion is essential in our daily lives. "it's something we interact with everyday, fashion is a way to express ourselves. What I find interesting about is how differently every piece is made, how different people can look and feel wearing the same piece. I want my designs to encourage the wearer to reflect upon life. There are always new ways to look at fashion and that's what I enjoy most about it."

“

For patterns, I also take inspiration from the moth's wings. I hand-pick all the wool I use.”





“ I want this collection to bring joy and happiness to people

Michelle Lin

Winning the Young Design Talent Special Mention Award for the second consecutive time Michelle Lin is now a full-time designer for a local fashion company. Lin's collection "When I Was Young" is bursting with vibrant colours and recalls memories of youth. "I want this collection to bring joy and happiness to people," says Lin. "It's energetic and colourful. Hongkongers' lives are filled with stress. I wanted to design a collection that makes them think of childhood and what made them happy when they were young." Lin chose her palette from a children's playground. "The colours are based on things like a kid's slide or children's toys," Lin explains. "I tried numerous combinations and experimented to see which colours work best together. I developed many colour palettes and textures before arriving at the

final design." The collection is Lin's first foray into menswear. "I like oversized outfits," she says. "I don't really like designs that are slim-fitted. There's a belief that there's not much cutting edge design or originality in menswear. It's always shirts and suits for men. I wanted to break that mould and play around with something different." The main difference between designing menswear and womenswear? "Attention to detail," Lin claims. "There's greater need for detail on pockets and linings with menswear. I think there's more flexibility for womenswear." As a designer, Lin aims to bring happiness through her clothes. "I want people to feel joy when they wear my clothes. I've always worked with bright colours, I'm not one to work with black, white and grey. Hongkongers dress quite boringly. I want to change that."

Wilson Choi Hung-shing

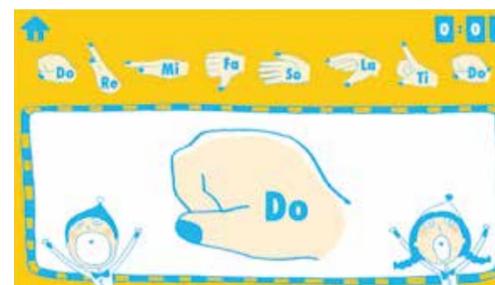


A Fashion Design graduate at HKDI, Wilson Choi won the CreateSmart Young Design Talent Special Award with unanimous commendation from the judges. His winning collection titled ¾ features seamless designs and fabric with a special coating. What's unique about the collection is that it is intended for wounded soldiers. The coat is tailored to support the body and helps the wearer to stand straight. Inspired by a series of photographs portraying veterans in a positive light, Choi found it commendable how, despite many veterans having lost limbs or sustained serious injuries, they continue live life to the fullest. "The way I saw it," say Choi, "imperfection can actually be perfection." A keen follower of the news, Choi believes that as a designer he can shed light on many social issues. "I want my designs to have a message. If I can make people think and reflect, then it would be a success". Other issues that have caught his eye include the global refugee crisis - he plans to create clothes specially designed for child refugees, and up next, a commentary on school violence. Choi's work was also well-received for his use of high-tech fabrics and innovative design features - sections of the coat can be inflated to secure and protect injuries. "It took a lot of trial and error," says Choi. "the material was completely new to me, and learning to work with gas and air pressure was a long process." His hard work certainly paid off. As Choi looks forward to a sponsored internship in London and New York this September, he hopes his future patrons will share his concern with social issues. "While the look of the designs are important, I hope people will understand what I'm trying to say and to understand the story I'm telling."



“ The way I see it, imperfection can actually be perfection

Violet Tai Sze-man



“ A great educational experience can help kids to grow happier and build a positive attitude

The only non-fashion design graduate on the list, Violet Tai is a graduate of the Higher Diploma in Visual Communications. Violet received the Young Design Talent Special Mention Award for her music app that combines drawing and technology. Filled with colourful illustrations and interactive elements, making learning music fun, Tai's app is not simply a game but is intended to enhance the learning experience for children. "I truly believe that a great educational experience can help kids to grow happier. I hope children can find happiness in their childhood. That is my inspiration." While computers can never replace great teaching, Tai believes that practice is "key to reaching a high level in any skill." Experimenting with putting technology, arts and fun together in one, the app-maker likes the 'sparks' the elements create. But what makes the app successful is the fun factor. "Learning is fun," Tai claims. "I think the challenging point is how to create interesting ideas to get a kid's attention. I'm inspired by people and their stories." Tai says there's still much for her to learn in game design. "I'm not 100% sure that I will work in computer game design, but I hope the area of user experience design and educational design for kids will grow bigger in Hong Kong, I truly feel that it is meaningful work."

Small city,

BIG DATA

Helsinki is using big data to empower citizens
and to design a better city

Finland is synonymous with great design; bold Marimekko prints and Alvar Aalto architecture. Finnish design has been exported to the world, gaining the country a reputation for cool modernity. Helsinki was named World Design Capital in 2012 and Unesco recognises it as a Creative City of Design. But the city's designers don't rest on their laurels; they're harnessing big data to enhance city planning and create a smart city.

Nesta, an independent innovation charity,

published its CITIE analysis in September 2016 identifying successful policies for spurring innovation and entrepreneurship. The analysis named Helsinki in the world's top five tech cities, alongside New York, London, Barcelona and Amsterdam. Helsinki stood out for its use of open data and focus on connecting planners to service users. According to Nesta "by adopting a highly collaborative approach to working with local entrepreneurs, Helsinki is developing high-quality digital solutions for citizens".

According to the Finnish design ethos, the goal of design is to serve and support the lives of ordinary citizens. Finnish architect and designer Alvar Aalto summed up his country's design culture when he declared good design should be centred around "the little man in the street". Helsinki's contemporary design culture recognises the importance of communication between designers and commissioning agencies, with the public located at the core of the process influencing the design of the environment they inhabit. Helsinki's planners have harnessed open data and citizen participation to revolutionise urban planning and systems design. Making data freely available enables entrepreneurs to create new products, lets designers optimise the systems and services they design and allows the public to see the whole process unfolding with transparency.

For example, with input from entrepreneurs and service users, Helsinki has designed a highly integrated transport infrastructure incorporating both private and public modes of transport. This initiative harnessed the large-scale resources that only a city government can provide, combined with the radical thinking that normally only comes from tech startups like Uber, the ride-sharing app,

or Ofo, the Chinese bike-sharing app. Although Uber and Ofo were created to attract investors and turn a profit for their developers, projects such as Helsinki's Kerro Kartalla online participation channel are intended simply to improve the experience of living in the city.

Helsinki's transport infrastructure, public buildings, outdoor spaces and leisure facilities all stand to benefit from this joined-up approach to urban design. Kerro Kartalla, which roughly translates as "tell me on the map" is an online map-based service which allows members of the public to submit queries and feedback to the city's public agencies and to directly influence matters from car parking to city parks, issues as problematic as traffic management or as mundane as garden slugs are all being addressed via Kerro Kartalla. It is just one of the ways in which hundreds of organisations and thousands of individuals are already participating in the the city's transformation.

One project executed using Kerro Kartalla is placing shipping containers around the city to act as a blank canvas for street artists. The containers will occupy sites in the suburbs to complement the programme of street art projects in the city centre. Citizens can use Kerro Kartalla



Alvar Aalto's Finlandia Hall, Helsinki

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The historical image of an artist who designs a product and signs it gives a very limited view of the designer's work

Kerro Kartalla

1 Kerro Kartalla allows residents to propose sites for the new street art project



2 Public Works Department and Youth Department provide data on logistical, budget, environmental impact and accessibility issues



3 Sites are chosen via an online questionnaire

4 The project is installed at sites evenly placed in the north, east, south and west of the city



to suggest sites for the containers, providing their input by posting directly onto the Kerro Kartalla map. Contributions to the map can be written, or users can post photographs. Decisions on the containers' locations are arrived at via an online questionnaire, open to the public on the Kerro Kartalla website. Local government departments help by providing information regarding how the containers can be lit, the cost of their relocation, environmental impact and accessibility issues.

The Finnish focus on incorporating the user into design processes is nothing new; it is an essential part of the county's culture. Throughout the rapid industrialisation of the 20th century, which saw Finnish companies such as Nokia achieving global reach and influence, Finland maintained its reputation as a progressive and egalitarian society. This is thanks in no small part to a design culture which privileges the needs of the ordinary citizen. In microcosm, Nokia epitomises the growth of Finland's economy and its shift from manufacturing to service industries and gives an indication of the future direction for the country's design industry.

From its origins as a pulp mill, then a supplier of wellington boots to the Red Army, Nokia grew to become one of the world's largest tech manufacturers, accounting for one-fifth of Finland's exports by 2007. The recently announced reissue of their notoriously sturdy 3310 handset caused an immense stir among tech enthusiasts. However, rather than choosing to

compete with the likes of Apple and Samsung in the smartphone market, the company has shifted its focus towards networking technologies, a move which has taken Nokia away from manufacturing towards service-based industries. That much anticipated 3310 reissue will not actually be made by Nokia. Rather, the design has been licensed to the manufacturer HMD. Finnish design has followed the same trajectory away from mass production towards services, systems design and intellectual property. Along the way, Helsinki has carved out a reputation for pioneering design in this new realm; Finnish designers are not concerned only with designing buildings, furniture and textiles, but also with creating better systems for living.

Helsinki is now home to an array of exciting high-tech design, architecture and infrastructure projects; among the standouts is a new Central Library which will be a hub for the public engagement that open data allows, such as opportunities for entrepreneurship and greater participation in democracy. The aim of the Central Library is to create a joined-up process where citizens' ideas can be implemented in developing new services. Not only is this new library intended to provide resources that will help citizens in their everyday lives, the entire process of developing and planning the library has been open to input from the general public. In Helsinki, access to open data and a focus on communication directly involves the public in urban design and infrastructure



Helsinki Design Week



development to an extent unimaginable in any other city.

With only 630,000 inhabitants, Helsinki is by far the smallest city to make Nesta's top five list. Far from a disadvantage, being a smaller city may well be Helsinki's trump card. Its excellence in communication is facilitated by having a smaller population than the other top-five cities. Furthermore, being a small city means ambitious - and potentially disruptive - overhauls of infrastructure and city-wide systems are more realistic than in larger cities. This is not to say larger cities cannot follow Helsinki's lead.

Providing an example that could easily catch-on elsewhere, Helsinki has underscored its progressive attitude to design by becoming one of the first cities in the world to appoint a chief design officer (CDO) Anne Stenros. The role of CDO is increasingly important in the corporate world, where companies are eager to harness the skills of designers to create better products and develop more efficient systems. While a city employing a chief design officer is still a novel idea, it is one that may well become influential around the world. As Stenros

has put it, the job of the CDO in a city government is to "Strengthen the role of design as part of the City's strategic planning" while networking with other cities "To share best practices and learn from each other. Listening to and understanding users in earnest and emphatic planning of services are in focus in this development". In Stenros' view, the city is a designed product, one that is not merely aesthetically pleasing but which can also be optimised to be beneficial to the user in new and original ways. Design, according to Stenros, is all about solving practical problems faced by ordinary citizens. "The task of the designer has always been to represent the voice of the users," she has said. "The historical image of an artist who designs a product and signs it gives a very limited view of a designer's work."

In Helsinki, service users, designers and governing bodies all collaborate on design processes. In an era dominated by big data, Helsinki is blazing a new trail, using design to leverage emerging technologies and to make city life smoother, more comfortable and more enjoyable.

making a mark



A series of illustrations by HKDI students will be featured on a new set of stamps issued by Hong Kong Post on October 17 this year.

The postage stamp was, of course, invented for entirely practical purposes. Its basic function, payment for postage, has been performed since the 1880s, if not earlier. The design of a stamp comes with its own unique set of challenges and opportunities that have provided a space for countless designers to experiment and explore. For example, designers have experimented with alternatives to printing stamps on paper; in 2004, the Swiss Post issued a stamp printed on 0.7mm thick pine wood. The stamp was created by a Swiss Post in-house designer, Thomas Rathgeb. Unusually for a postage stamp, the material meant every stamp was slightly different due to the visible grain of the wood.

Security

Modern stamps are often 'tagged' with fluorescent or phosphorescent dyes. This serves a dual purpose; firstly it allows text-reading and franking machinery in sorting offices to align correctly with the envelope. In addition, it adds another layer of complexity to the design of the stamp, making counterfeiting more difficult. In fact, many of the most notable design features of stamps stem from the need to provide security - to make stamps difficult to forge. Traditionally this has been done by using printing techniques that are difficult to replicate. Intaglio printing produces very high quality images that are almost impossible to replicate. But it is a costly, labour and skill intensive process, meaning that few countries; Sweden, Denmark, Slovakia and the Czech Republic among them, still use this technique for their stamps. Microprinting is used for similar reasons - minuscule lettering included in designs make for stamps that are hard to forge.

Currency

With ubiquitous home computing now a reality, there is an alternative to buying postage stamps at the post office that is both more secure and more convenient. The United States Postal Service allows customers to buy stamp paper imprinted with phosphorescent dye and print their own stamps at home, by paying online and generating a unique QR code. This system also has the advantage of allowing customers to print a single stamp of the precise value required for the weight of their package rather than having to buy several stamps and round-up the value. Better still, some posts, including Royal

To provide a yet higher level of security, there have been experiments with holographic stamps. The US Postal Service produced a holographic stamp for the World Stamp Expo 2000 and in 2015 Jersey Post issued a holographic £5 stamp. Of course, design features such as holograms and microprinting increase the cost and difficulty of producing sets of stamps. For this reason, stamp design tends to be a highly collaborative process; Jersey's holographic stamp design was a collaboration between the Manchester-based design agency True North, security printers Cartor International and the German hologram manufacture, Kurz.

Many designers have embraced design elements developed as security features and put them to use in imaginative ways. A 2016 Royal Mail issue designed by Studio Sutherland celebrated the work of crime writer Agatha Christie by featuring designs containing hidden 'clues' relating to the crimes featured in Christie's novels. Some clues were hidden by microprinting and could be revealed with use of a microscope, others were hidden with the use of fluorescent ink that is only visible under UV light, or even heat sensitive ink that only becomes visible when slightly heated.



Photo Credit: Studio Sutherland and Neil Webb @ Debut Art



Mail in the UK, allow customers to carry out the whole process at home without even buying specialised stamp paper. Thanks to the latest cryptography techniques, customers can pay for and generate a unique QR code that cannot be reused or counterfeited.

But if traditional stamp design has always been driven by security concerns, and QR code postage labels solve the problem of security while also being more convenient, is there a future for the postage stamp as we know it?

Collectability

Clearly, many customers prefer the old-fashioned way of sending a letter - and some privacy advocates have voiced concerns that putting a QR code on a letter means that it can be traced from the person who paid online for postage all the way to the recipient, opening up the possibility that governments could harvest surveillance data from letters sent and received.

However, as demonstrated by the millions of customers who use of social media, convenience always wins out over privacy. And so, the replacement of traditional picture-stamps with uninteresting barcodes would seem inevitable were it not for the popularity of philately; collecting stamps has long been a popular pastime and may be one of the last things keeping them from becoming obsolete. With this in mind, posts around the world have sought to deliver ever more collectable designs to attract ever more collectors. With the vast number of stamps issued collecting the stamps issued within a single country can become an impossible task, prompting philatelists to collect according to themes; for example, stamps featuring birds, landscapes or buildings. This has led collectors to specialise in ever more esoteric subjects, such as bicycles, or even beards.

In the world of collecting, where the rarest are also the most sought-after, the most valuable are those with unusual printing errors that were not spotted before the stamp was issued. So it is unusual for stamps to become famous for their design alone. However, some designs such as the Penny Black or the Machin Series have become iconic in their own right.

Legacy

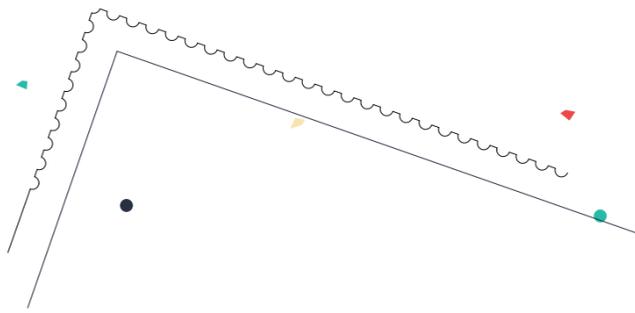
Collectable for its far-reaching historical impact, the Machin Series of stamps was first issued in 1967 after several years of development led by the Artist Arnold Machin. The series has been in continual use since its first issue, making it perhaps the longest-serving stamp design anywhere in the world. Stamps derived from Machin's portrait of Queen Elizabeth II have been used around the world, including in Hong Kong until their replacement in 1997, in anticipation of the handover of sovereignty.

Of perhaps even greater historical importance, the Penny Black is regarded as the world's first postage stamp. Issued in 1840 from an engraving by Charles and Frederick Heath based on a sketch by Henry Corbould, the design was used for all subsequent Victorian stamps. A total of 68,808,000 Penny Blacks were made. Nowadays, a used Penny Black can be bought for a little over HK\$150 but a mint-condition example can cost many thousands of dollars, depending on whether it still has the adhesive gum on the reverse or whether the margins of the stamp have been trimmed.



Politicking

David Gentleman's example demonstrates how the commissioning of a new stamp can be highly political. The Royal Mail Stamps Advisory Committee oversees the design of stamps in the UK. Until 1965, the committee was chaired by famed art historian Sir Kenneth Clarke. Clarke was dedicated to keeping the face of the queen on stamps, declaring that "the admission of pictorial stamps would lead to complete banality". However, the arrival of designer David Gentleman, supported by a new Postmaster General, the left-wing politician Tony Benn, led to Clarke resigning his post. Gentleman owed his reputation as an innovator to



his work for Penguin Books, creating covers featuring modernist woodcuts paired with striking Helvetica typography. Applying his modern sensibilities to stamps, Gentleman went on to design more than 100 stamps for Royal Mail.

Design

The design of stamps is highly specialised and presents the designer with a unique set of problems to solve. Students from HKDI are among the latest to take on this challenge; a new series of stamps to be issued later this year by Hong Kong Post will feature designs by HKDI students depicting the qipao, a figure-hugging style of dress which has come to epitomise Chinese femininity. The highlight of the series, which will be issued on October 17, will be the HK\$20 stamp which will be printed in the shape of the silhouette of a qipao on special cloth-textured paper. The students working on the project made use of many sources when researching the qipao.

"There was a long period of in-depth research. Aside from using books for reference, our team is thankful to several overseas collectors, the Hong Kong Society of Cheongsam Artistry, and the qipao master tailors who shared items from their collections as well as lots of very important information," said HKDI lecturer Ashley Ng, who was involved in the project.

According to Ng, hands-on research and input from experts were essential parts of the project. The students worked to produce hundreds of qipao illustrations. From those, Yolanda Law and Mel Chan were selected to contribute their artwork.

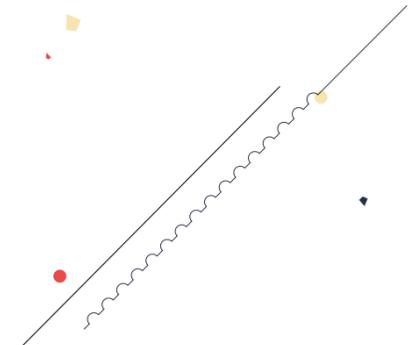
"Women's apparel has always been

an indicator of social status," Ng said. "In the old days they would purchase their favourite fabrics and tailor their own designs, trends were influenced by celebrities rather than by designers. So the qipao reflects changes in women's rights, ideals of beauty as well as Chinese culture."

Designing a stamp comes with a very particular set of challenges; not least because a stamp gives the designer such little room to utilise.

"Some artworks that we worked with were very detailed and had to be given up on due to the issue of resizing," Ng said. "Each artwork had to be prepared very carefully to fit the specific decade it represents, from changes in hairstyles to make-up, the length of the dress and the pattern. All this has to be shown clearly in a small space. A lot of time was spent communicating between the students and the experts to make sure that we got everything just right."

Thanks to such in-depth research, this collection of stamps is a collectable document of social and cultural history. And, as a Chinese cultural symbol with global appeal, it is only fitting the qipao should adorn letters sent around the world from Hong Kong.



Presenting a Legacy

Two new museums in Paris and Marrakech will present the life of iconic designer Yves Saint Laurent and preserve his work for the enjoyment of future generations

Fondation Pierre Bergé - Yves Saint Laurent has announced the opening of two museums dedicated to the work and life of Yves Saint Laurent. The foundation was created to conserve artefacts from the designer's multi-decade career. The foundation's collection, comprising an incredible five thousand pieces of haute couture and fifteen thousand accessories, has no equivalent anywhere in the world. Equally uniquely, Yves Saint Laurent was the only designer of his generation to systematically document and archive his work, leaving tens of thousands of original sketches, prototypes, even warehouse records and books.

Opening on October 3rd, the Parisian branch of the museum will be located in the historical house of 5 Avenue Marceau, where Saint Laurent created work from 1974 to 2002, and where Fondation Pierre Bergé - Yves Saint Laurent has been based since 2004. The huge volume of work in the foundation's collection will ensure that visitors can enjoy a constantly updated display while exploring the salons and studios of the haute couture house. A theatrical touch will be provided by stage designer Nathalie Crinière and interior designer Jacques Grange, who are designing the exhibition spaces.



The Yves Saint Laurent Museum in Marrakech



The second of the two museums will open in Marrakech. Saint Laurent first visited Marrakech in 1966 and returned regularly throughout the rest of his life, the city becoming an essential inspiration his work. The Marrakech museum will be located on the road that bears the designer's name, Rue Yves Saint Laurent, close to Jardin Majorelle. This garden was rescued from redevelopment by Saint Laurent and Pierre Bergé in 1980 and has since become a museum dedicated to Berber culture, attracting some 700,000 visitors a year. The designer's ashes were scattered in the garden after his death in 2008.

The Marrakech museum project is led by French architects Studio KO and will span over four thousand square meters. More than just a museum, the building will house temporary exhibitions, auditoria, a research library, a café & restaurant alongside a permanent display of Yves Saint Laurent's work.

Over the past decade Fondation Pierre Bergé - Yves Saint Laurent has developed state-of-the-art conservation methods for textiles in order to make sure the designer's work is preserved for posterity. The Marrakech museum will be equipped with high-tech climate control systems that will keep the exhibits in archival conditions. The exterior design of the building comprises a series of cubic forms with brickwork evoking the threads of a fabric, conceived to resemble the lining of a luxurious jacket. It will be clad in a textured terrazzo containing stone fragments, and smooth terracotta produced locally from Moroccan earth, which will allow the strikingly modern building to blend into its surroundings. The museum will open its doors for the first time on October 16th.



360° winners

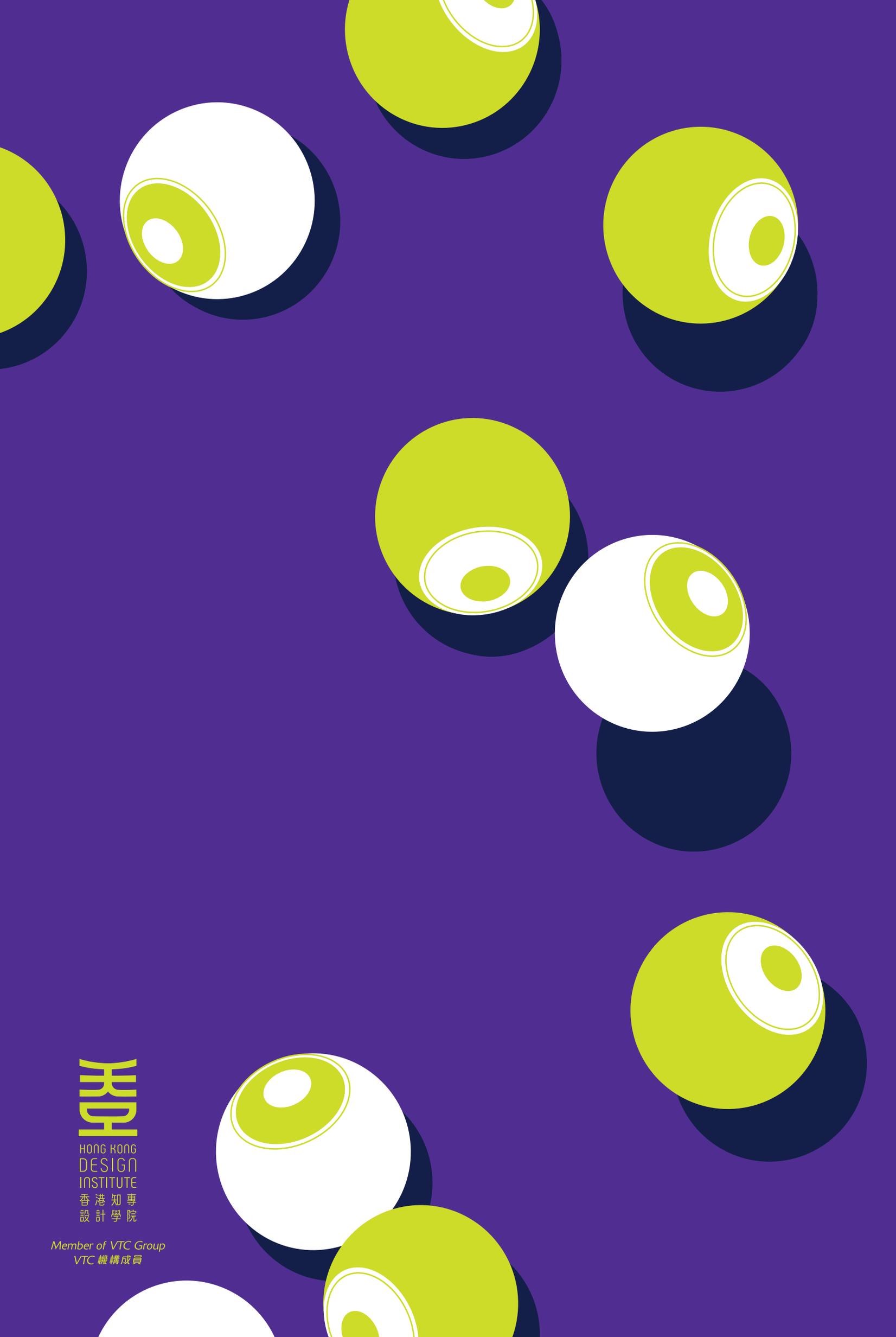
A group of HKDI students has picked up multiple awards for their 360-degree virtual-reality music video made for veteran Hong Kong band The Wynners. The video, in which a photo on a bored office-worker's desk inspires a series of vivid memories of his wild schooldays, merges live action and CGI to create a zero-g classroom, a corridor chase scene and an exploding chemistry lab. The video won plaudits for innovative use of virtual reality, winning the award for Best Use of Virtual Reality in Storytelling – Narrative Short as well as The Audience Choice Award at the Society of Motion Picture & Television Engineers Hollywood Professional Alliance Student Film Festival 2016. The video also picked

up the Best Director award at Seoul ICARUS Drone International Film Festival and the Silver Award in VR Motion Imaging at the 2nd Advanced Imaging in Motion Awards at HKCEC during FILMART 2017. It was also selected for the VR Showcase at The Special Interest Group on Computer Graphics and Interactive Techniques conference, September 2016, at the Venetian Macao.

Student production team:

Apple Chan, Daniel Poon, Mary Chan, Ng Ping, Victor Tang, Masaharu Kubota, Lau Hoi Hin, Chan Wing Hin, Bob Tsang, Gary Lam, Sin Hok Man, Wing Yuen Ching, Chung Ka Hei with lecturer Ken Lee.





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