

CITIES

the new deal



JCDecaux

CITIES

the new deal

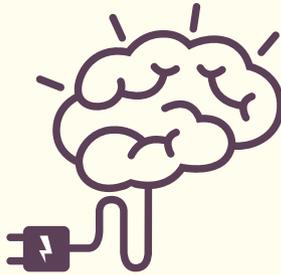
Foreword 11

Jean-Charles **Decaux**

Human 12



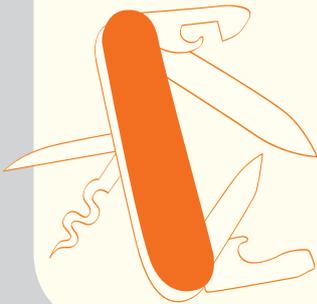
Smart 26



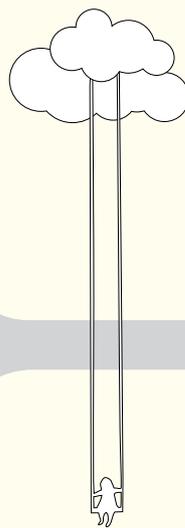
Shared 40



Versatile 54



Creative 68



Close-up 82



Going away for good?

Conversation 84



Yuriko Koike
Governor of Tokyo

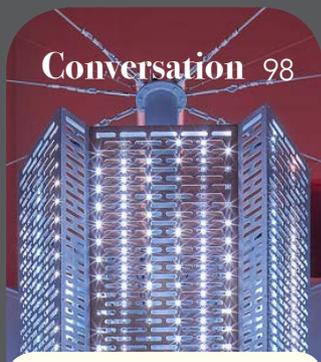
Agile 90



CITIES

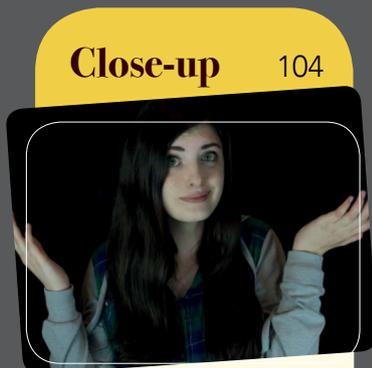
the new deal

Conversation 98



Elisha **Karmitz**, MK2

Close-up 104



Millennials, then what?

Postface 107

Albert **Asséraf**



‘The twenty-first century will be that of cities’. As days go by, the saying that once resounded like a prophecy is coming to life. Across the globe, cities have become the crucibles of our deepest transformations — economic, social and societal.

If our world is changing so fast and so decisively, it is because we have become aware of the need to think and to behave in new, different ways. Whether large or small, every city is contributing to the effort. They do not follow, but rather lead the way, demonstrating remarkable boldness as they steer innovation.

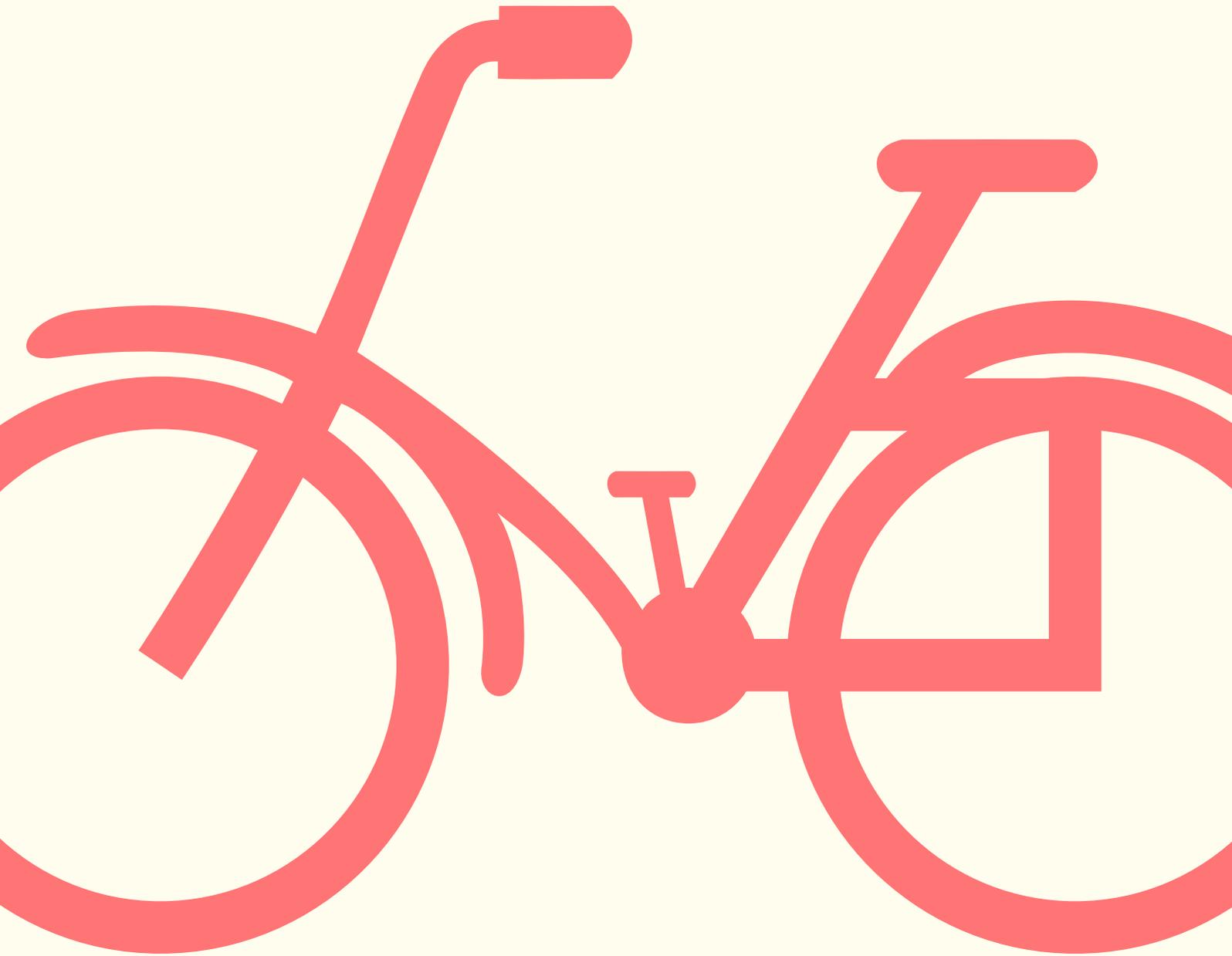
But what drives them? It is, beyond doubt, an acute awareness of their responsibility towards the future and the confidence that they can make it brighter, together: inhabitants, authorities, companies, entrepreneurs, creators, designers, researchers, agronomists, nutritionists and technologists... The city of the future needs us all, and appreciates the wisdom of each and every discipline.

This Trend Book has taken us to cities in motion, deeply committed to their digital revolutions and energy transitions. We have encountered numerous endeavours, many of which were attuned to our own and to our plans for the future. Our mission, at JCDecaux, is to make cities more welcoming, enjoyable, comfortable and for everyone to benefit from a better quality of life. We are committed to these goals with passion and responsibility in equal measure. This book is intended to celebrate a future in which we all have a part to play.

Jean-Charles Decaux

Chapter 1

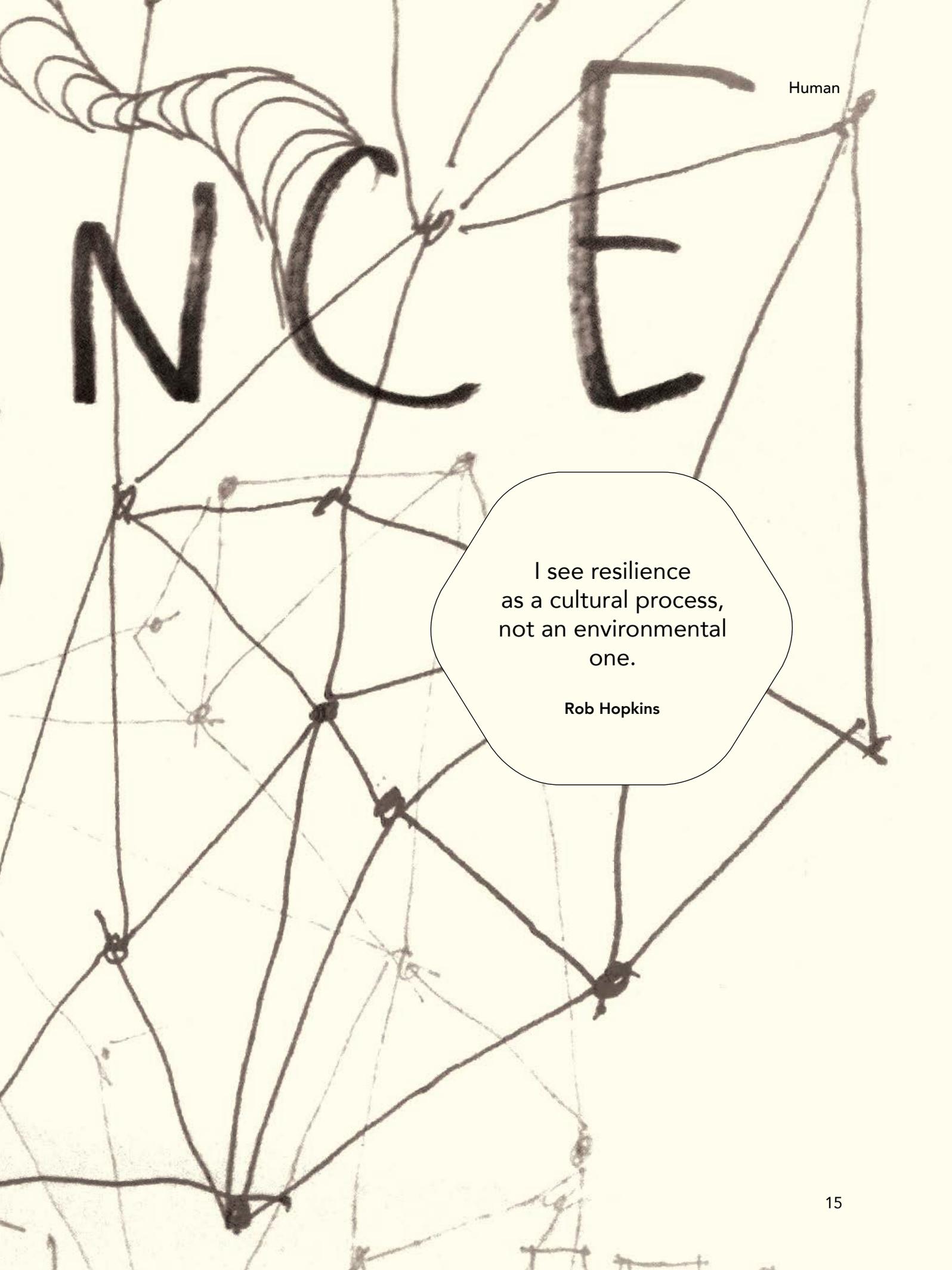
Human



Quote

RESILIENTE





KNOWLEDGE

I see resilience
as a cultural process,
not an environmental
one.

Rob Hopkins

Human-centred is the new smart

Carlos Moreno

The nineteenth century was the century of empires, the twentieth that of nation-states and, beyond doubt, the twenty-first century will be that of cities.

The concept of smart cities appeared during the digital revolution and was immediately attractive to all.

First and foremost, to be smart, we must dedicate our time, our skills and our creative minds to the greatest objective of all: improving quality of life by placing the **human element** at the heart of every urban project.

A smart city simultaneously tackles five major challenges — social, cultural, economic, ecological and a road map to resilience. In turn, overcoming such challenges relies on three important triggers: social inclusion, smarter infrastructures and an accomplished digital revolution.

In this 'smart human city' the reward within everyone's reach is **social value**. The main challenge we face is our ability to induce habits and services that contribute to the improvement of quality of life, but also how well we respond to people's urge to contribute, collectively, to the city's betterment and to the common good.

Ultimately, we seek to promote multiple forms of expression in favour of an open, vibrant, contributive and creative city.

Hyper proximity?

Carlos Moreno invites us to rethink proximity by reducing the gap between supply and demand; by developing social, economic and cultural interactions; by intensifying the spaces we live in; by multiplying the places where people gather and mix; by optimising services through digital and collaborative platforms; by creating low-carbon spaces that pedestrians and cyclists are eager to protect; by creating hyper-proximities comparable to those of Barcelona's **Superblocks** and by supporting short supply chains and biodiversity.

Carlos Moreno

Smart City Expert

moreno-web.net

Twitter [@carlosmorenofr](https://twitter.com/carlosmorenofr)



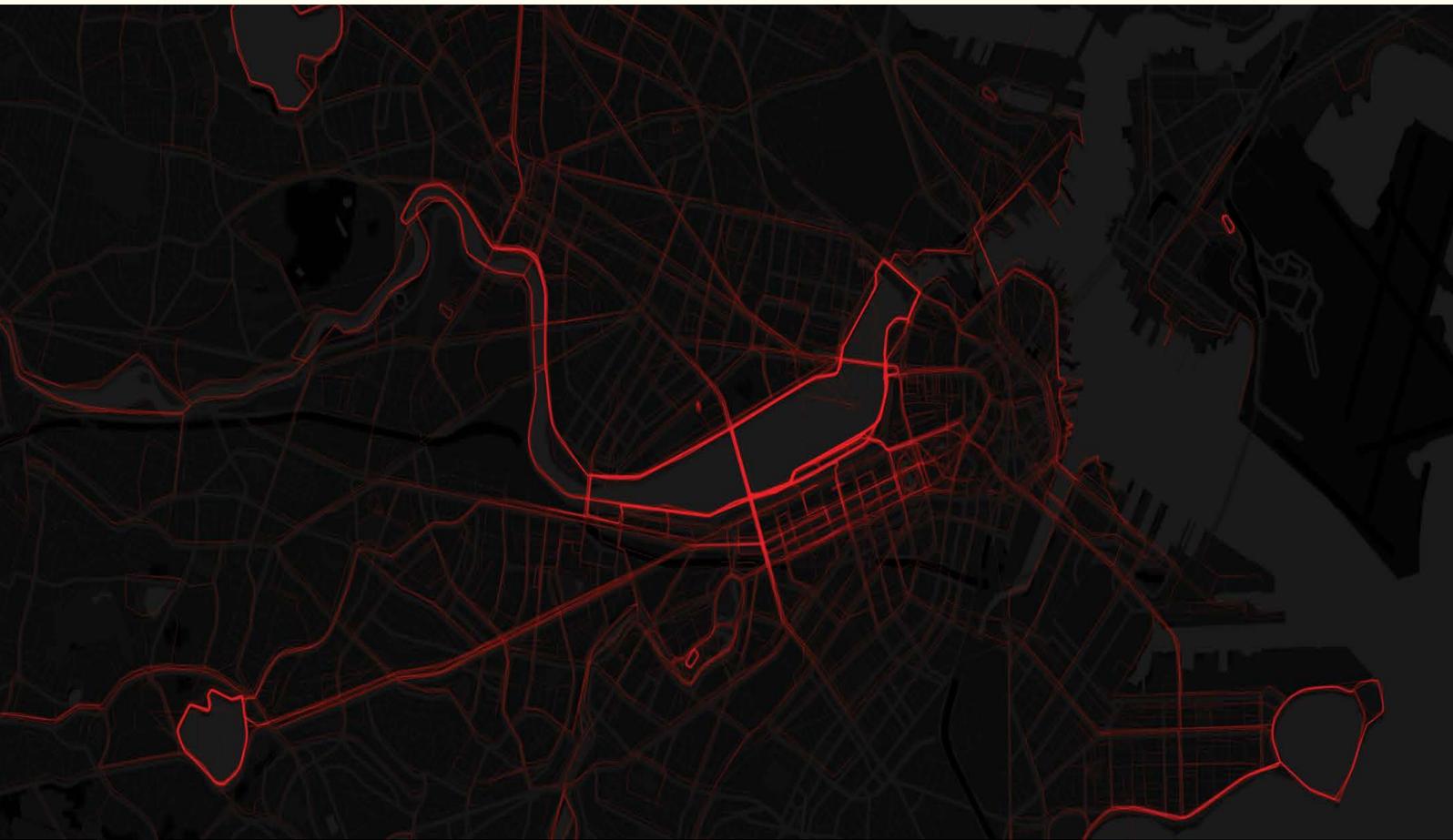
© Alamy

Barcelona's Superblocks

Barcelona, which is prone to high pollution peaks, has vowed to limit its car traffic to only major axes. The 'superilles' or Superblocks are mini-neighbourhoods that are easy to navigate and where spaces formerly reserved for cars have been returned to the inhabitants. Side streets have now become 'citizen spaces' dedicated to culture, recreation and community life.

Look who's talking

Big Data has revolutionised the way we see the world, but it remains important to observe, to talk to people and to compare the present and the past by looking at pictures. Today's innovators are eager to capture the way we behave 'in spite of' what the city had initially designed for us. Images, sometimes, speak for themselves. (See illustration 4).



1

Millions of pedestrians are now using apps that keep count of how much they walk during the course of a day. It is thanks to such data that MIT's Senseable City Lab was able to visualise the paths of Boston's pedestrians. The output has revealed a certain number of recurring obstacles and incentives. City stakeholders were then able to use this data to envisage the city as a continuous, seamless experience in which they could each play a role.

2

According to designer Weiee Ying, being outdoor in Zenga, Shanghai or New York should be an experience. In his studio, Weiee Ying does not design benches or parks, but rather multi-functional sociability modules that meet the needs of the contemporary walker. Do you wish to rest, read, meet someone, play, work or access information? (Illustration 2).

More at weiee.co

3

From 2007 to 2013, under the leadership of Janette Sadik-Khan and Mayor Michael Bloomberg, the city of New York enhanced its public space with more than 600 km of cycling paths and the pedestrianisation of 60 public squares, including Times Square. Although this was labelled bold and controversial, it received massive support from New Yorkers. Below, Times Square after its pedestrianisation.

Read *Streetfight*, Viking Publishing.



© Weiee Ying

2



© Matthew Radwan

3

4

User Experience, or UX, is an expression that digital natives use all the time. Apps that have 'a good UX' provide an easy, intuitive, flow.



4

When social bonding and proximity work — for real

Emmanuelle Hoss

On behalf of the City of Paris, SEMAEST is implementing a concrete policy aimed at supporting and boosting local economies by giving priority to small businesses and manual crafts.

In 2004, the City lent more than 50 million euros to SEMAEST so it could outbid the takeover of an entire Parisian district by textile wholesalers. In 2007, given the success and the positive impact of the operation, the City of Paris decided to expand the scope of its action to other districts.

Setting up small businesses induced immediate social bonding and a greater sense of well-being. Pavements filled with shops brought together people and generations that had no reason to interact before.

Trade returned to being an effective agent for social interaction with an array of positive side effects that are often disregarded: the more independent businesses there are, the fewer people succumb to depression and the fewer senior citizens are tempted to live in specialised homes.

Such economic vitality is not only ultra-local and stable, but it also provides security to a healthier community.

In April 2017, based on these findings, the City of Paris launched the Commercial Revitalisation Contract, a similar plan targeting the so-called political districts of the city. The plan invested 37 million euros to refurbish ground floor retail premises.

Paris's attractiveness lies in its unique commercial and artisanal fabric. Both have proven essential to maintain a thriving local economy and healthy relationships among citizens.

Emmanuelle Hoss
SEMAEST, Director
semaest.fr

Twitter @emmanuellehoss



© SEMAEST

Local, sustainable economies

Maison Château Rouge is a fashion shop supported by SEMAEST. It bears the name of the neighbourhood in which it was established and sells traditional 'wax' garments with a contemporary twist. It symbolises and celebrates the cultural diversity of Paris's 18th Arrondissement.

Dancing in the street

In 1975, in the UK, 75% of children played in the streets. Since 2005, only 15% still do! Today, associations like Playing Out have made it easy to request the temporary pedestrianisation of residential streets for children and adults to meet and play. The benefits? Togetherness, social bonding, physical activity, discovery and a sense of shared ownership.



1



© Playing Out

1

Playing Out has created a complete kit that allows the inhabitants of any neighbourhood to request the temporary pedestrianisation of one or more streets. Playing Out's kit covers everything, from standard letters you should send to your elected officials and local authorities, to programs and fun games for children. Playing Out has taken a comprehensive approach that can easily be replicated throughout the country.

More at playingout.net

2

People usually take to the streets to express their support or their disapproval but when they set off to go to Brussel's Picnic, it's quite a different story. What they claim is the street, the street itself — they will take it and enjoy it! In such picnics, no one has ever seen a banner or a sign because the message is clear: we want this space to be shared. The street represents 60% of the urban fabric and leaving so much to the sole benefit of transportation seems... outdated?



© Floris Van Cauwelaert

2



**GREAT
GREAT
SUTTON
STREET
STREET
PARTY**
FRIDAY 25TH JUNE
 OPEN STUDIOS (from 3pm)
 MUSIC & FOOD 6 until late



wish list

P U B L I C S P A C E

R E A P P R O P R I A T I O N

P R O X I M I T Y

S O C I A L B O N D I N G

I N C L U S I O N

W E L L B E I N G

R E S I L I E N C E

means

O₁ B₃ S₁ E₁ R₁ V₄ A₁ T₁ I₁ O₁ N₁

C₃ O₁ L₁ L₁ A₁ B₃ O₁ R₁ A₁ T₁ I₁ O₁ N₁

P₃ A₁ R₁ T₁ I₁ C₃ I₁ P₃ A₁ T₁ I₁ O₁ N₁

D₂ A₁ T₁ A₁

D₂ I₁ V₄ E₁ R₁ S₁ I₁ T₁ Y₄

R₁ E₁ P₃ E₁ A₁ T₁ A₁ B₃ I₁ L₁ I₁ T₁ Y₄

S₁ U₁ P₃ P₃ L₁ Y₄

C₃ I₁ R₁ C₃ U₁ I₁ T₁ S₁

Chapter 2

Smart



Smart cities are intelligent, predictive, persuasive and even conscious, but the smartest city of all is **omni-disciplinary**. It feeds on every skill and all wisdom in its reach; it attracts every talent; it fosters creative economies and governance. It vows to be aware of people's needs and aspirations; it pledges resilience and accountability.

Assuming that such innovations rely on science and technology, one is struck by the new levels of simplicity and seamlessness that have been reached. Between substance and form, designers have spoken in favour of substance: a better experience of the city for a greater quality of life.

Quote

Cities
could begin
to sense
and respond.

Carlo Ratti

On digital public spaces and digital socialisation

Jean-Louis Frechin

Smart cities often promise more than they should. A smart city essentially comprises public and private networks of 'informed infrastructures'. They measure and optimise our flows — public transportation, individual mobility, water, waste — in order to better anticipate supply and demand.

If such advanced goals are difficult to implement in our ancient European cities, it is because they suffer from a lack of urban culture, and preparedness for our random behaviours. They all too often boil down to 'solution-driven' approaches which, at best, will provide the mayor with a pseudo 'dashboard'.

Despite a decade of research, smart cities are often understood in the context of 'equipment' instead of usage and human experience.

The digital city is more about usage than it is about infrastructure. It is defined by social, creative and economic artefacts. The digital city is not so much a 'technological story', let alone a technological spectacle. On the contrary, such artefacts stem from pragmatic, human and even political realities.

Future uses of the city cannot be speculated upon or anticipated by technological operators alone. To create novel urban representations, we propose a new type of environment — digital public spaces — which would be able to capture our imagination and inspire new services.

We believe that social and contributive approaches support interactions and cooperation between citizens and operators — and always to the benefit of a better urban experience.

Digital public spaces — combining services, networks and editorial sharing platforms — may be seen as an interesting opportunity for the 'physical' city. They are the condition for a digital socialisation of urban space by which the digital medium becomes a space in its own right, but also a bridge between both worlds. It allows the virtual mapping of people's points of interest and breeds a network of territories.

A digital city with such features would echo the history and DNA of the European city, a territory where people can easily get lost, fall back on their feet and wander about (on foot);

a city subject to perpetual changes, to rehabilitations, to extensions (the Grand Paris project), to shifting signs and symbols, to ever changing dynamics between public and private spheres.

Such cities require the continuity of a digital MetaVerse which one should be careful to shield from strictly utilitarian and commercial appetites.

Street furniture and dynamic signage are also more necessary than ever. They contribute to the creation of a sense of belonging and, in the age of smartphones, they provide moments to share with others.

Screens, which are the new signs and billboards, will offer services, information, ads and public information that is always contextual. To be effective, they will have to boast high quality graphics and be conceived at an appropriate scale.

And finally, the future of digital cities will certainly happen around symbiotic relationships between the physical and the digital, between infrastructures and services.



Créteil-l'Échat's metro station

This multi-functional building is located above Créteil's metro station and connects with the city's newly designed exchange hub: Grand Paris Express. Its strategic location was considered to be ideal for an intergenerational residence project. It is part of Créteil's efforts to support urban livelihood and diversity.

Agence Devillers

Architect : Tae Hoon Yoon

Vinci design and digital services

Front elevation design : NoDesign.net

Jean-Louis Frechin

Designer

nodesign.net

Twitter @nodesign

Will cities become conscious?

By integrating elements of cognitive neuroscience in urban design and city management, Itai Palti and Moshe Bar suggest that cities can make people feel better and even happier. Although mobility data can easily tell us *how we move* about the city, it fails to tell us *how we feel* about it. To that effect, **conscious cities** are eager to explore the impact of the environment on our mood and overall psychological balance.



TRAFFIC
SIGNS
NOISE
CLUTTER



1

By measuring the cognitive overload of certain streets, neuroscientists have observed its effects on our ability to concentrate, to retain information and to maintain our psychological balance. Imagine that the city became 'conscious' and was able to regulate, in real time, peaks of sensory and cognitive saturation. Wouldn't the impact on our stress levels be immediate?

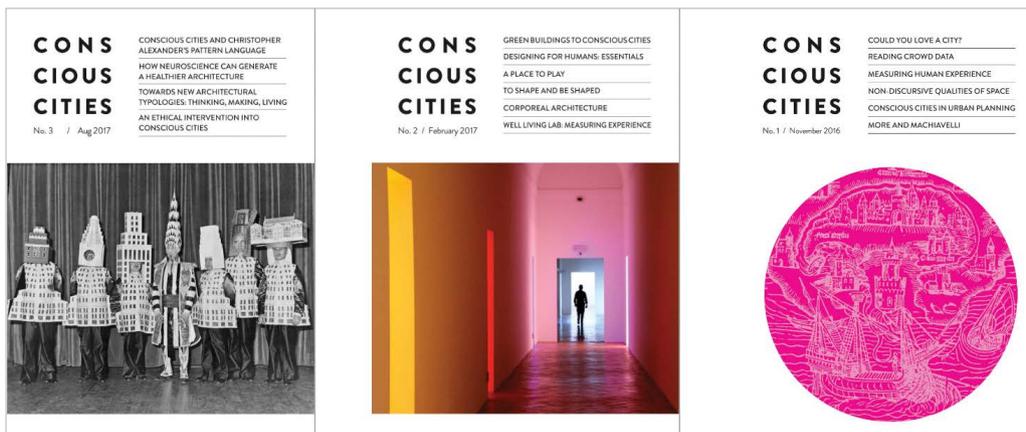
2

Conscious cities is a new discipline that is eager to design responsive environments that are attentive to people's needs and emotions. It relies on insightful data, AI, cognitive science and design. The concept stemmed from a Manifesto for Conscious Cities, co-written by architect Itai Palti and Professor Moshe Bar. In 2015, Conscious Cities also became an annual conference.

3

Insisting first and foremost on the human character of smart cities, urban neuroscience suggests simple and informed actions that improve people's lives. Based on social demographic data, a street corner usually visited by elderly people can for example accommodate a module where neighbours can meet and keep each other company. Conscious cities strive to provide the attention one would expect from a graceful host.

More at ccities.org



2



© Conscious Cities

3

What would a persuasive city look like?

Agnis Stibe

Can you imagine a city that feels, understands, and cares about your well-being? Future cities will reshape human behaviour in countless ways. New strategies and models are required for future urban spaces to properly respond to human activity, environmental conditions, and market dynamics.

Persuasive urban systems will play an important role in making cities more liveable and resource-efficient by addressing current environmental challenges and enabling healthier routines.

Persuasive cities research aims at improving well-being across societies through applications of socio-psychological theories and their integration with conceptually new urban designs.

To achieve substantial behaviour changes at scale, the persuasive cities research agenda is focused on reshaping and redesigning three main urban areas: outdoor environments, indoor environments, and mobility in cities.

Outdoor environments

Public spaces can be advanced in many ways, e.g. supermarkets can project a portion of how many healthy products have been purchased that day, week, or month.

Responsive environments can use ambient lights to provide feedback about behavioural patterns of crowds. For example, streetlights can change colour depending of how many-joggers have been on that street on that morning.

Indoor environments

Digital-supported strategies can be implemented to encourage the use of stairs instead of an elevator. For example, a situated display that represents various comparisons of what can happen when stairs or an elevator is chosen. Strategies can be introduced to increase water intake in offices. For example, a situated display can present an increase of water consumption, which can be used to compete with other offices. New ways can be designed for office workers to increase socialising among individuals from various groups and departments. For example, specific game-like activities can be set up for employees to promote socialising.

Mobility

Mobility within dense urban districts can be reshaped in multiple ways, for example, by introducing influential strategies to facilitate bicycle commuting. Street signage can be used to display 'how many cyclists have ridden over a bridge today'. Mobile apps

can be developed to engage bicycle riders in reporting experiences with bike lanes and their quality in a selected urban area.

Future computer-supported innovations should be designed with intent to understand and respond to human activity, environmental conditions, and market dynamics. The design of future cities requires optimal combinations of automated systems, just-in-time information for personal control, and interfaces to persuade people to adopt sustainable behaviours.



© Matthias Wunsch

Technology, design and simplicity

How to reduce car congestion, air and noise pollution, energy consumption, accidents and, finally, improve the health of residents? The sign above indicates that in the hour that has elapsed, cyclists have been moving faster than motorists. This persuasive design does not summon residents to prefer bicycles over cars, but simply reminds everyone that alternatives exist. This information is generated thanks to the real-time capture of cars and bicycles flowing through the city. An algorithm then crunches the data and displays a result that is more persuasive than a thousand words.

Pr. Agnis Stibe

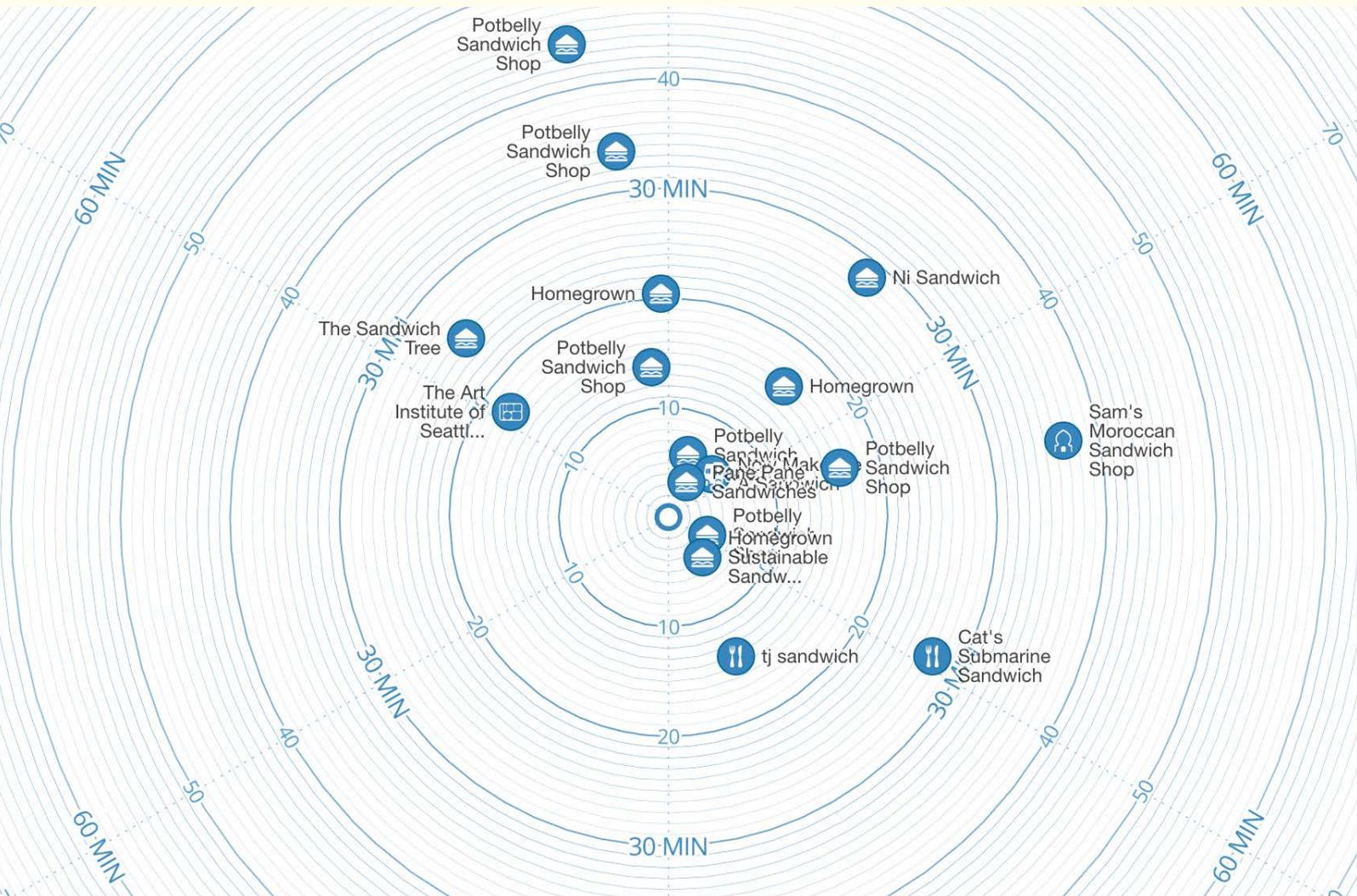
MIT Media Lab, Cambridge, USA

transforms.me

Twitter @agsti

Data-driven mobilities

Big Data, sensors, versatile maps, private data, contextual information, AI, drones and automation are deeply transforming our mobilities. Urban space is reshaped by personalised maps; driverless cars are waiting for their moment followed by delivery drones, fire-fighting drones or even police drones. Such disruptive inventions raise legitimate questions about privacy, and about our potential dependence on fully automated, unmanned systems



© Mapbox © OpenStreetMap

1

GPS location, simple design and an understanding of a traveller's expectations have allowed Peter Liu to design a new way of mapping the city. In this view of his 'Time Map', one cannot see streets or buildings. The map has adapted to the user's sole urge for a quick, tasty sandwich! The application will then guide the user using a traditional map. Map personalisation is a booming art that has become accessible to all. Mapbox lets everyone take advantage of their technology and... your imagination is the limit.

More at mapbox.com

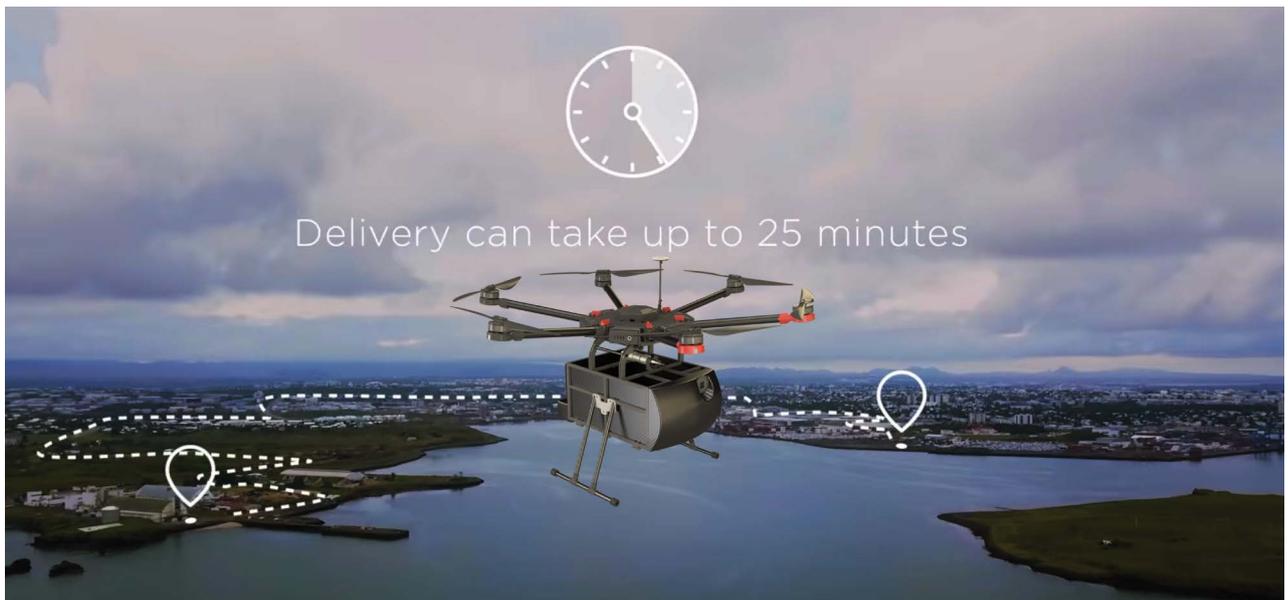
2

How could driverless cars improve the urban experience? According to Jeff Schneider (Carnegie Mellon University), they would have a major impact. To give just one example, Schneider reminds us that a total of one billion private cars in the world remain parked 96% of the time. In some cities, parked cars may take up to 20% of the urban space. Schneider sees driverless cars as friendly to the city, allowing for urban spaces to be reassigned to collective uses and to alternative means of transportation.



© Tesla

2



© Flytrex

3

3

Your shopping delivered in only 4 minutes instead of 25, with a 60% discount on delivery costs, not mentioning a fully electrical power

supply? In 2017, Flytrex drones made their first deliveries to early adopters in Reykjavik, Iceland.

wish list

F₄ L₁ U₁ I₁ D₂ I₁ T₁ Y₄

P₃ E₁ R₁ S₁ O₁ N₁ A₁ L₁ I₁ S₁ A₁ T₁ I₁ O₁ N₁

R₁ E₁ A₁ L₁ T₁ I₁ M₃ E₁

R₁ E₁ S₁ P₃ O₁ N₁ S₁ I₁ V₄ E₁ N₁ E₁ S₁ S₁

F₄ U₁ L₁ F₄ I₁ L₁ L₁ M₃ E₁ N₁ T₁

H₄ E₁ A₁ L₁ T₁ H₄

means

O₁ P₃ E₁ N₁ D₂ A₁ T₁ A₁

N₁ E₁ U₁ R₁ O₁ S₃ C₁ I₁ E₁ N₃ C₃ E₁ S₁

A₁ R₁ T₁ I₄ F₁ I₃ C₁ I₁ A₁ L₁
I₁ N₁ T₁ E₁ L₁ L₁ I₁ G₂ E₁ N₁ C₃ E₁

O₁ M₃ N₁ I₁
D₂ I₁ S₁ C₃ I₁ P₃ L₁ I₁ N₁ A₁ R₁ I₁ T₁ Y₄

D₂ E₁ S₁ I₁ G₂ N₁

Chapter 3

Shared



Quote





A shared city is a place where you are — all at once — the owner, the host and the guest.

Szilvia Szargó

A culture of care

Rob Hopkins

I strongly believe that a future that manages to achieve the scale of cuts in carbon emissions that the science demands will not be a future of 'smart cities', nor of a growth-based economy that has seamlessly switched to running on renewable energy. For me, the changes we need to see will run much deeper, and demand a deep shift in the scale on which we operate, from ever more global, to increasingly local.

The Transition movement, now active in over 50 countries, is showing that the move towards economies that are more localised, low carbon, resilient, diverse and imaginative can produce solutions which reduce carbon emissions, but which also address the 'epidemic of loneliness' we are seeing in our societies, better enable us to reach public health goals, bring people and communities together, offer opportunities for entrepreneurship and the building of new economies.

In Liege in Belgium, Liege en Transition's 'Ceinture Aliment-terre' initiative brought together the University, the city government and many others around the idea of creating a 'food belt' around the city. Already 60 hectares of grains and 55 of vegetables are in production, new facilities for processing food to create more jobs are under construction, 2 shops are thriving in the centre of Liege, and new businesses are being added every year. Just before I wrote this piece, the city's municipality added Ceinture Aliment-terre's plans into their

own 20-year vision for the city, stating that in 20 years, 10% of the whole land mass will be under alternative agriculture, creating over 5,000 jobs.

This is a new model of economic development for cities. To be more precise, it is actually an old model of economic development for cities, rebooted and re-imagined for the 21st century. In our rush to 'smart cities', I fear that we are missing the point. We know that every hour we spend online makes us 5% less connected to our friends and family. We currently spend 65% of our waking hours in front of screens. We are seeing record levels of depression and anxiety among young people, and an 'epidemic of loneliness' among the population at large. Digital technologies are wreaking their havoc on our attention spans.

I worry that as our interaction with knowledge becomes more and more superficial, we tend to be drawn to 'smartness', rather than wisdom. We move into a time of poverty of the imagination. We mistake data for wisdom. I wonder what, instead, a move towards 'Wise Cities', or 'Imaginative Cities' would look like. They would use technology, for sure, but in service of the creation of a culture of care, connection, celebration, conversation, conviviality, carnival and creativity.

Enabling our cities to become places where food is grown everywhere, in parks, in public

places, on rooftops, on building façades, would make urban life so much more delightful and allow curiosity to thrive.

Some cities are creating their own local currencies as a way of locking money into the local economy. In Bristol, over 5 million Bristol Pounds are already in circulation, and they can be used to pay local taxes, bus and train tickets and even energy bills. But they are just part of a bigger story, one of a new story for cities.

The city of Preston, in the north of England, recently brought together its key organisations, who between them spend £750 million a year on goods and services. They discovered, to their horror, that only 4% of that spend actually went into the economy of the city. They have since changed their approach, supporting the creation of local co-operatives, changing their tendering process to make it easier for local companies to bid, bringing their pension funds back to the city to build affordable housing. They are actively blocking the holes in the 'leaky bucket' of their economy. And unlocking so much in the process. Now that's what I call a smart city.



Bristol Pounds

The Bristol Pound is a non-profit initiative, a partnership between the Bristol Pound Community Interest Company and the Bristol Credit Union (BPCIC). Bristol residents and retailers can open Bristol Pounds accounts. They can pay bills in cash, through bank transfers or by SMS. BPCIC promotes 'ethical business' which, thanks to the local currency, helps the community reap the benefits of producing and consuming locally.

Rob Hopkins

Founder of the Transition movement
transitionnetwork.org
robhopkins.net

Shared responsibility

Deep transformations often stem from simple ideas that help us see the world anew. Energy transition reminds us of a very old idea: a society cannot exist without a collective project in which we all 'take part' — equally contributing to the collective effort and equally benefiting from it.



RUES &
QUARTIERS
EN TRANSITION

JOURNÉE
des
GrATUITS

Dimanche
8 octobre 2017
14h à 17h



Gratifieria
Bourse
aux plantes
Repair Café

à ATH

Dépôt des dons
le matin même (10h-12h)

Renseignements : 0489/58.75.61



Editeur responsable : Repair Café ATH

Ne pas jeter sur la voie publique

1

Ath is a city in Belgium located in the Walloon Region. Currently ‘in transition’, Ath invites its residents to take on new consumption habits; it allows young entrepreneurs to gain access to agricultural land; it launches alternative distribution cycles and empowers its consumers. It also provides training for new jobs that were created in the light of this transition. Additionally, it ensures that all means of production are shared. Finally, Ath’s ‘Free Day’ brings the local community together to donate or share books and know-how, to fix broken appliances, to buy or to sell local products whose prices are affordable.



2

Herbivores eat plants, carnivores, eat meat, and **locavores** eat local products. Being a locavore means more than having a food preference. It is a way of life, an individual commitment to a better environment, to the development of local jobs and to a culture of shared responsibility.

2

3

Mercado Plaza is the result of a community-driven initiative to turn one of San Francisco’s less welcoming streets into a safe and friendly haven. Local participation was led by the Gehl agency and procured a sense of shared ownership — especially when people’s suggestions were taken into consideration and brought to life — shading devices, wind shields, seats and trees as well as the possibility to gather for celebrations. The shared objective was to establish a flexible urban space, suitable for families, businesses and, of course, children’s games.

More at gehlpeople.com



© Gehl

3

'This city is also our city'

Saskia Sassen

Cities are complex but incomplete systems that cannot be fully controlled. It is this mix of complexity and incompleteness that has given cities their long lives across enormously diverse historical periods. Across the centuries and across diverse geographies, cities have outlived far more powerful but closed systems. London, Beijing, Cairo, New York, Johannesburg, Bangkok, to mention just a few, have all survived multiple types of rulers and multiple types of firms.

A key consequence of this mix of the complex and the incomplete is that cities have long been spaces where those without power have been able to make a history, a culture, a local economy. To a large extent, it is in cities where the powerless have left their imprint — cultural, economic, social — even if mostly in their neighbourhoods; eventually each one of these imprints can spread to a vaster urban zone as 'ethnic food', music, therapies, and more. This has meant that also the modest neighbourhoods of cities, which usually account for most of a city's spaces and people, have outlived those far more powerful systems.

None of this can happen in an office complex, no matter how vast and how dense. These are privately controlled spaces where low wage workers can work but not make. This also

signals that density per se is no longer enough to mark the urban — it was for many centuries. Nor can those without power mobilise in our increasingly militarised plantations and mines that in the past were spaces where powerless workers could gain that complexity in their powerlessness by the sheer concentration of their numbers.

Today that possibility of gaining complexity in one's powerlessness and leaving a historic trace can happen in our large messy and somewhat anarchic cities. No power can fully control the filigrane of diversity of peoples and engagements in such cities. In this combination of complexity and incompleteness also lies the possibility for those without power to be able to assert their claim. As the legendary statement by the fighting poor in Latin American cities puts it, 'estamos presentes': we are present, we are not asking for money, we are just letting you know that this is also our city.

Pr. Saskia Sassen

University of Columbia, New York

saskiasassen.com

Twitter @saskiasassen



© Vinicius Depizzol

Pop culture in street signs

In Brazil, it is also in the streets that rising football stars are discovered. In the town of Vitória, you may come across a sign like the one above: 'Attention, a game is in progress'.

The sharing generation

Since social networks, sharing has become a new, trendy habit. Could social media have inspired people to share the city in new and different ways — **real** ways this time, not virtual? With that in mind, inspired artists and associations are reinventing public space. What we receive in return are magical moments to share with others.





© François Abélanet

2

Shared

More than illusions

2 'My creations bring fiction into reality. A garden or a square can become a playground or a game in which all are invited to play and that includes nature itself. The public makes my installations come alive by playing with them, by sharing them via smartphones and social networks. Without people, without their interactions and without their emotions, my work would not bear the same meaning — or would not exist at all. My installations breed diversity, emotions and a sense of unity that people, most of the time, are eager to share'.

Water, the city's second nature

1 'Have you ever swum in open water in a French city? Unless you have broken the law, I will assume that you haven't.

York, London, Berlin and Melbourne. In France, Paris has taken the lead, also motivated by the Olympic games of 2024.

The Laboratory of Urban Experimental Bathing was born in this very context, after having thoroughly analysed the relationship that existed between urban space and bathing, as well as the effects of 'pirate' (yet friendly) events. Our hope is to shift people's understanding of a practice that was quite common a century ago. Our goal is twofold: first, we wish to put water-related activities at the top of everyone's mind, including urban planners (as access to water brings people together and makes every space alive and attractive). Second, our role is to show that it is possible to think differently and to point out that many cities are doing exactly that. We hope above all, that citizens will reclaim the right to bathe and that public authorities will listen.

Pioneering cities like Copenhagen, Zurich or Basel consider the subject to be a strong 'urban marketing' identifier.

In regard to transition and sustainability efforts, we believe that urban bathing sets a powerful example.

Bathing also defends a certain vision of urban space which is less standardised and less normative than many spaces we have today.'

Today the relationship between nature and water (and therefore, swimming) is reinventing itself in many cities. Cities are showcasing projects in New

Pierre Mallet
Laboratoire des baignades urbaines expérimentales
Twitter @malletp

François Abélanet
Anamorphist
francois-abelanet.com



© Open Closet

3

Caring is sharing

3 Located in Seoul, Open Closet is a non-profit organisation that lends formal suits to young women and men looking for a job. South Koreans think that anyone, even the homeless, should feel comfortable enough on their appearance to welcome a friend or to attend a job interview.

wish list

T₁ R₁ A₁ N₁ S₁ I₁ T₁ I₁ O₁ N₁

L₁ O₁ C₃ A₁ L₁ J₈ O₁ B₃ S₁

L₁ O₁ C₃ A₁ L₁ E₁ C₃ O₁ N₁ O₁ M₁ I₃ E₁ S₁

C₃ O₁ N₁ V₄ I₁ V₄ I₁ A₁ L₁ I₁ T₁ Y₄

S₁ O₁ L₁ I₁ D₂ A₁ R₁ I₁ T₁ Y₄

A₁ U₁ T₁ O₁ N₁ O₁ M₃ Y₄

means

P₃ E₁ R₁ M₃ A₁ C₃ U₁ L₁ T₁ U₁ R₁ E₁

L₁ O₁ C₃ A₁ L₁ S₁ Y₄ N₁ E₁ R₁ G₂ Y₄

R₁ E₁ G₂ U₁ L₁ A₁ T₁ I₁ O₁ N₁ S₁

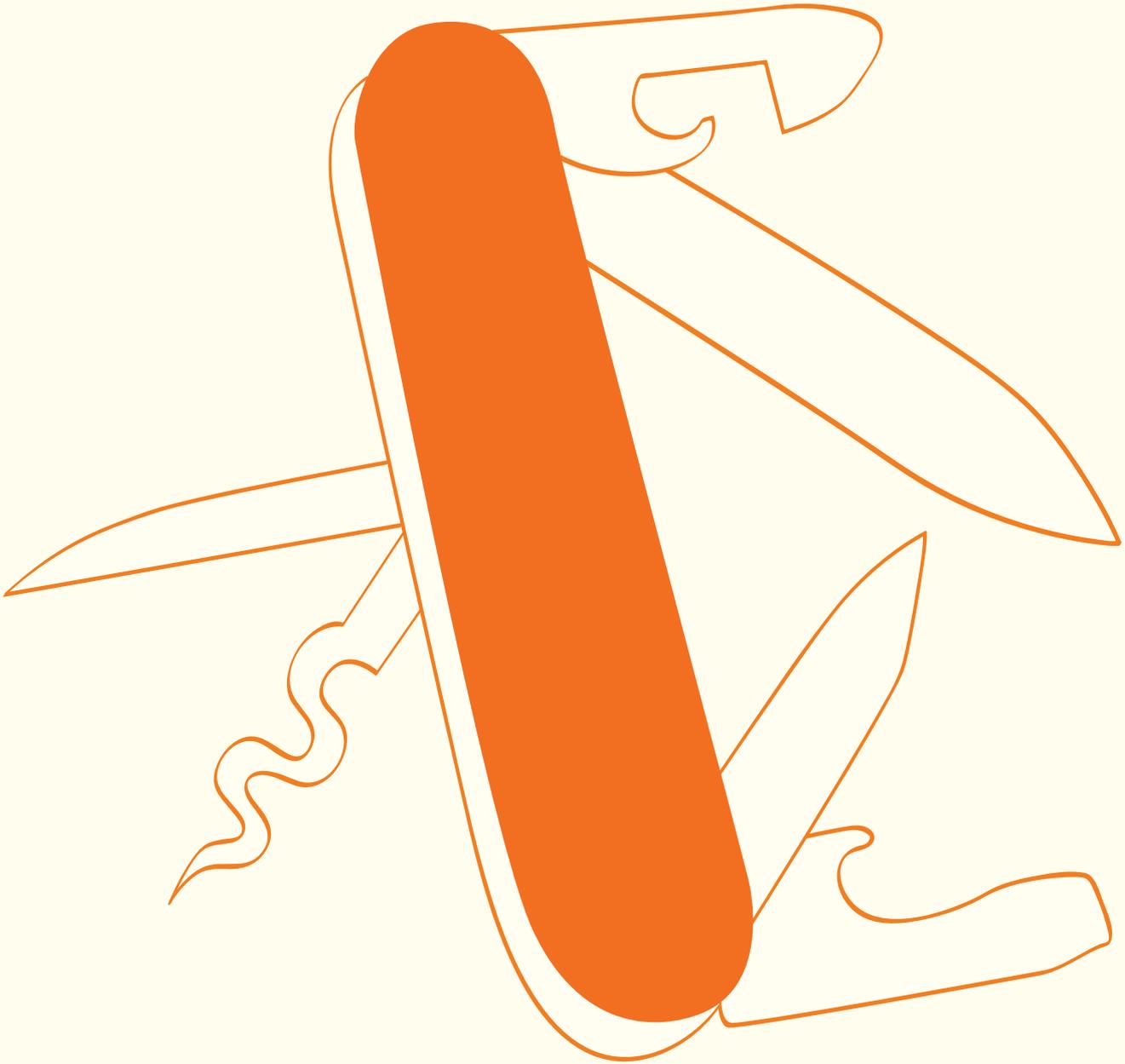
M₃ U₁ T₁ U₁ A₁ L₁ I₁ S₁ A₁ T₁ I₁ O₁ N₁

C₃ O₁ O₁ P₃ E₁ R₁ A₁ T₁ I₁ V₄ E₁ S₁

L₁ O₁ C₃ A₁ L₁ C₃ U₁ R₁ R₁ E₁ N₁ C₃ Y₄

Chapter 4

Versatile



Quote



There is nothing
more attractive in cities
than other people.

Jan Gehl

Cities can grow

Julie Boissier

Urban resilience can hardly be conceived as the sum total of our individual actions. To be viable, it needs our commitment to act **collectively**.

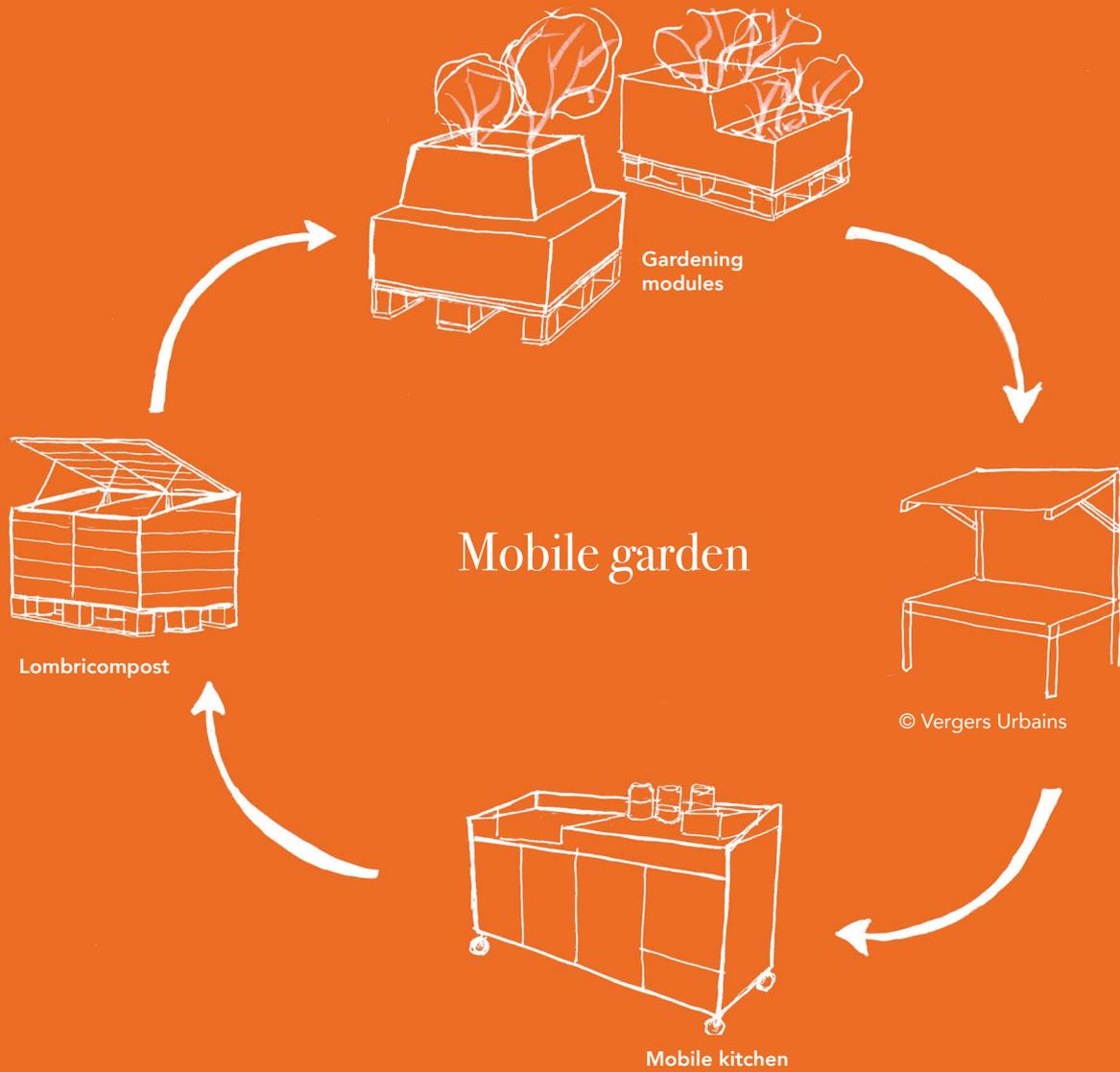
The Vergers Urbains association (Urban Orchards) develops and implements the concept of 'edible cities': it aims at transforming the city by implementing fruit ecosystems with the participation of residents. Fruit bearing trees and vegetation become the bridge to an ecological management of the city and an important step towards biodiversity and locally produced foods. They contribute to the demineralisation of cities that have often spoiled the land on which they were built. Fruit trees, unlike ornamental trees, breed social interactions simply because they are **convivial**. People gather to plant them, to harvest them or even to cook.

Rather than top-down decision making (that is often the privilege of public authorities) we wish to reclaim public spaces and support citizen mobilisation. We believe that all should be empowered to create 'edible', public spaces and, by doing so, to improve the environment we share. Our actions strive to remind us that public space is a common good and, to that effect, we are constantly experimenting alternatives to separation, enclosure and privatisation of public space. Such dynamics are inevitably and sadly exclusive.

We wish to put human beings and edible plants at the very centre of public space so that, together, they may become a stepping stone to a better environment, to healthy social interactions and to stronger, local economies.

To reach such goals, our association has co-designed and built a variety of hybrid modules that bring people together and that are free to use by all (see illustration on the next page).

Julie Boissier
Vergers Urbains
vergersurbains.org
Twitter @projetvu



For an edible city

The Mobile garden is a multi-faceted project that revolves around a variety of modules that have more than one function. By being collectively useful, mobile and versatile, such modules softly reclaim urban space and attract positive feedback from residents. Their very presence reminds us of the benefits of service-oriented city planning, local food production, versatile public spaces, biodiversity, low heat and low carbon spaces and, finally, social bonding.

Posting in the city?

In 2007, a Japanese brand told the world to 'go create' and, 10 years later, it seems that an entire generation has done exactly that. Coincidentally, it was also in 2007 that YouTube, Facebook, Twitter, and blogging platforms began their spectacular growth. Although creating remains difficult, it has become easier to build an audience without intermediaries such as publishers or distributors. What if the city allowed for that too? What if we could 'post' our creations in the urban timeline as easily as we do on social networks?



1

© Extreme-Cashmere, photo : Anne Dockter

1

An oversized cashmere cardigan, worn as a dress? Why not? No one said yes or no to designer Camille Serra who went ahead and did it. Her creations appear here and there, in pop up events in Paris or Amsterdam. Like many independent designers, Camille knows the fashion business from the inside. She knows the immobility of big groups, the harsh conditions of mass distribution, the commissions of all intermediaries, the management of multiple outlets... Camille wished to shorten the distance that separates her from her audience. Today, she draws her designs, she produces them and she invites her own community which, over time, grows organically. This business model, which is as viable as any other, is attracting creators and producers, whether artists or farmers. As always, big brands have emulated pop culture strategies that are equally useful to them, but for other reasons (See illustration 3).

More at extreme-cashmere.com

2

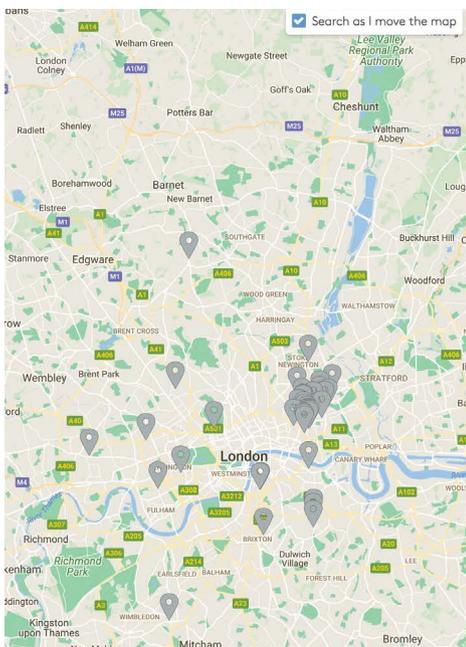
It comes as no surprise that after Uber and Airbnb came Storefront, a peer-to-peer rental service for stores and show rooms. Storefront lets anyone rent a store with direct street access and (very) short leases. The world is at your fingertips: New York, Paris, Milan, Hong Kong, London — coveted capitals are all listed. A store front in London can be rented for less than 100 € a day, while larger and more luxurious spaces might cost a few thousands.

More at thestorefront.com

3

Since 2012 the formerly all-digital eBay began to hit the streets. The pop-up store below was set in the heart of London, in Covent Garden, and bore an interesting label: 'social shopping'. The relatively small space comprised thousands of products that one could buy or ask about and, of course, there were no samples or back rooms stocking products. All goods were displayed on screens, ready to be scanned by smartphones. But why 'social shopping'? Because the very selection of all products on display was driven by consumer preferences and purchasing patterns.

© dalziel-pow.com



Smart Showroom Space in Peckham
 Peckham - London, England
 from £103.20 est. daily
 300 sq ft



Corner Pop-Up Shop in Hoxton
 Shoreditch - London, England
 from £114.00 est. daily
 320 sq ft



Urban Gym Space Near Finchley
 Camden - London
 from £120.00 est. daily
 800 sq ft



Art Gallery Space in Edmonton
 Edmonton - London, England
 from £120.00 est. daily
 900 sq ft

2

© Storefront

Another transition

Aalam Wassef

In 1999 one 'needed to have a website' and had to open shop, an e-shop, of course. Fast forward to 2018 where the lingo and challenges have evolved.

In an all-digital world, brands are focused on their 'digital transformation', on adapting their businesses, teams, communication strategies and their production to an ecosystem that is increasingly steered by empowered consumers and social networks.

E-Commerce of the naughties has slowly become **social commerce**, a type of transaction where people are as strong as brands, where people can make or break reputations, products and campaigns.

Brands that were well established before the digital revolution have accepted the terms of the new economy: they have created Facebook, Instagram and Snapchat accounts; they have hired agencies and community managers; they have promoted their 'posts' to reach 'targeted' audiences; they have seen their 'followers' and their 'likes' growing exponentially. Nonetheless, the apparent success of their metrics didn't seem to convert to measurable benefits and it wasn't long before analysts described such metrics as a 'number game' or 'vanity metrics'.

Some brands have also favoured the digital ecosystem over the physical world, heedless that successful strategies require balanced approaches. Others might have also misjudged the true value and advantage of their

footprint in the 'brick-and-mortar' world and how it could become the backbone of their digital success.

It was only when young, digital brands began to think about their transition to the real world that 'legacy' brands truly appreciated the value of what they had built over the years.

Brands are now hiring consultants who help them foster continuity and seamlessness between the physical and the digital, between virtual audiences and people walking the streets or stepping into venues. Strategies are no longer split in two — physical on one end and digital on the other. The objective is indeed to engage the audience in a continuous, seamless experience.

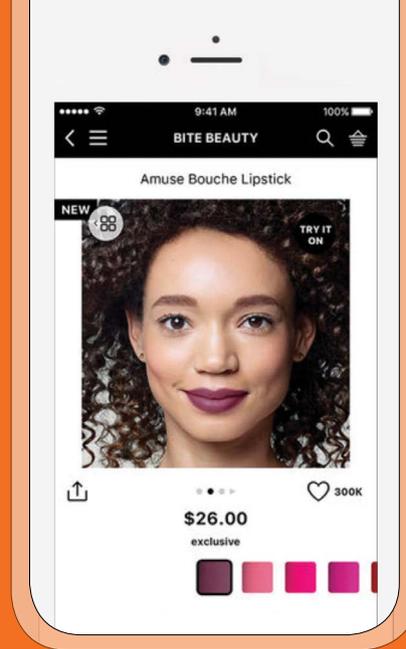
Both physical and digital have their strengths and their weaknesses: it is online that we grow 'organic' audiences, around interactions that are specific to social commerce. It is also online that we publish tailored content and that we 'converse' with the audience. The more genuine these relationships, the more brands are rewarded with organic growth and 'earned exposure'. But to reap the benefits of such hard work (that many have seen dissolving into thin air) a jump to the real world might well be the answer.

70% of Millennials admit that their favourite gift is a 'real' experience — a test drive, a concert — anything real. While they find

it smart and convenient to order products online, Millennials also describe a feeling of loneliness and disembodiment. After the hype and appeal of webrooming (searching and buying products on the Web), online consumers are going back to real stores with the sole intention of 'show rooming': finding, touching and trying a product that they will later acquire online... at a lower price.

If show rooming can easily be seen as a threat, the trend is rather to conceive of it as an opportunity for retailers to capture useful knowledge: Dixons, an electronics brand, uses it to collect consumer ratings that help it improve its online and in-store experiences; luxury brands reward online purchases with gifts to be redeemed in store and engage their 'visiting' customers in real, one-to-one, experiences; Sephora, a cosmetics brand, encourages its customers to go online **while in store** so that the brand may better understand the way they connect certain products to other products — such information is inspiring to store managers, always eager to layout products in creative, educated ways.

Likewise, brands that exist predominantly in the physical world are using their advantage to convert 'real audiences' into virtual streams. Once limited to the collection of email addresses, such brands are now engaging their customers in participatory, creative and personalised tactics — real experiences that are prompt to be shared online as 'stories'. Let it be said: user generated content is the preferred currency of social commerce. It is the way by which brands invite themselves into the communities of their customers.



Versatile

From real to virtual and back

Sephora's app allows in store customers to interact with products and to simulate various 'looks' that can be shared on its own platform, but also on social networks.

As brands and consumers skip from one world to another, the city is actively accommodating everything and everybody. Versatile and flexible by nature, it reconciles the old and the new, it champions every expectation from the most dazzling technologies to the most genuine, human interactions which, gladly, we seem to cherish more than ever.

Aalam Wassef
Consultant
wassef.co
Twitter @aalam_wassef

The age of multiplicity

Urban versatility can be viewed as the coexistence of different ways of life, creative processes and business models. By allowing every voice to be heard, the Web has bred alternative visions that challenge the very idea of mainstream culture and expectations. **Multiplicity** is the new mainstream, a sum total of ideas and preferences that gather the support of large, medium and small audiences.

Good read *L'Âge de la multitude*, Henri Verdier, Nicolas Colin (Éd. Armand Colin).



1

Co-working spaces that flourish around the world are welcoming growing numbers of independent workers, but also small teams, single entrepreneurs, digital nomads and remote workers.

In such spaces, people who usually work alone enjoy healthier routines, filled with social interactions and professional perks.

These spaces often become integrated networks where clients meet providers and where people decide to work together, spontaneously. Co-working spaces also host events and professional trainings that are an opportunity to evolve and become part of a local community that is active and supportive of its members.

More at coworker.com

2

Kiss Kiss Bank Bank, Indiegogo or Kickstarter are crowdfunding platforms that transform the scale and nature of innovative projects and, with them, the landscape of cities that host them. All endeavours are welcome as long as they garner enough support from friends and friends of friends. At a time when journalism faces a number of ethical and financial crises, a French team chose to create a weekly that was exclusively funded by its readers. In return, Ebdo promised an independent, trustworthy weekly magazine. The magazine raised over 400,000 euros and received the support of private investors. Sadly, after a flamboyant debut, sales and subscriptions seemed less promising than expected. Investors withdrew, putting an end to the project.

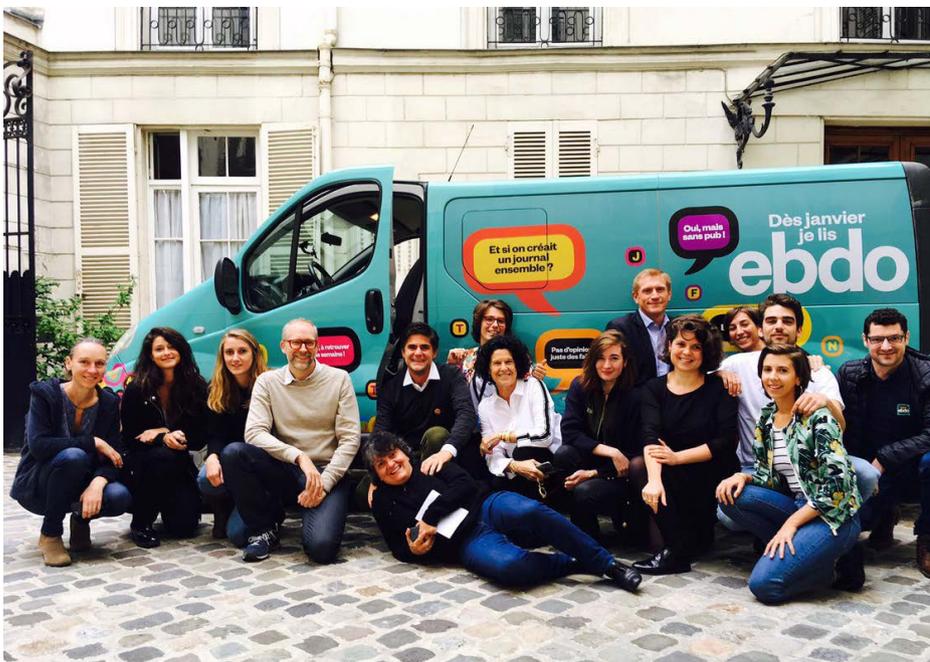
3



Stigmergy is a form of collaborative organisation of work: 'In the diagram above, all workers have complete autonomy to contribute and create as they please. The power of the group lies in its ability to accept or reject work. Since there is no designated person to perform a task and no obligation to approve of it, users are free to suggest alternatives. Workers are also free to create without taking into account acceptance or rejection by others. In this organisation, a task can be accepted by a large group and alternatives by other smaller groups of contributors, even if only one. This model mimics History which has rarely witnessed the general and immediate acceptance of radically new ideas. History has also shown us that new ideas are often the work of isolated individuals. Always subjecting innovation to the approval of the larger group often leads to paralysis and creative stagnation'.

The way stigmergy works reminds us of the underlying principles of **crowdsourcing**, **crowdfunding** and the first attempts of **collaborative governance**.

More at lilianricaud.com



© Ebdo

Takeaways

wish list

I₁ N₁ D₂ E₁ P₃ E₁ N₁ D₂ E₁ N₁ C₃ E₁

E₁ X₈ P₃ E₁ R₁ I₁ E₁ N₁ C₃ E₁ S₁

A₁ U₁ D₂ I₁ E₁ N₁ C₃ E₁ S₁

P₃ A₁ R₁ T₁ I₁ C₃ I₁ P₃ A₁ T₁ I₁ O₁ N₁

C₃ O₁ N₁ T₁ I₁ N₁ U₁ I₁ T₁ Y₄

means

POP UP

COLLABORATIONS

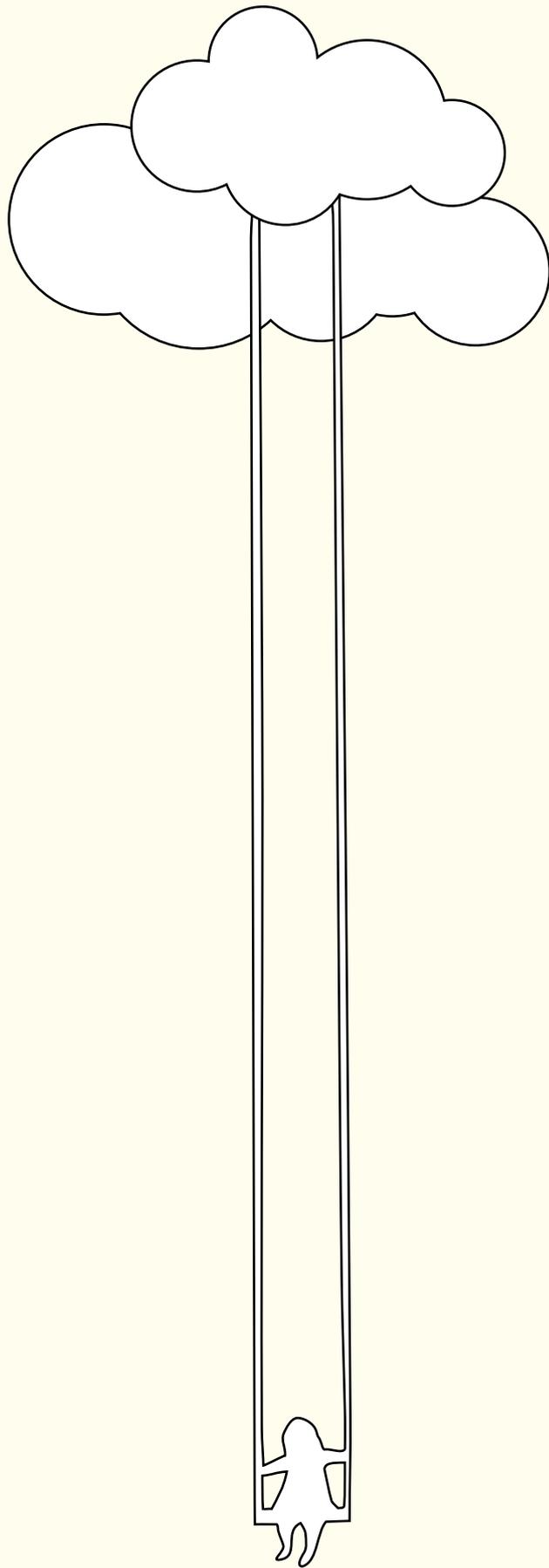
SOCIAL COMMERCE

COLLABORATIVE
GOVERNANCE

DIGITAL
TRANSFORMATION

Chapter 5

Creative



Every decade brings new meaning to old concepts. Today, a creative city refers to a place that is **open to all** and, if that sounds familiar, a closer look may prove otherwise.

The novelty lies in the myriad of grassroots and bottom-up ideas that are spreading like wildfire across the globe and, of course, across social networks. Day in day out, invisible bonds are being woven between individuals and, therefore, the cities they live in. Their relationships are neither industrial, nor political, nor economic; their motivation is to share ideas that can impact the world positively.

Service providers and public authorities are often taken by surprise and have to contend with communities that are empowered to implement their own solutions.

Illustration on the next page

The Amager Bakke power plant converts waste into biomass. Also the largest artificial ski slope in Denmark, it is the symbol of a possible cohabitation between inhabitants and clean energy sources.

Quote



Create opportunities,
solve problems,
innovate. All three
are inseparable.

Jane Jacobs

Experiment, imagine, co-create

Kevin Hsu, Deland Chan

To meet the challenges of the 21st century, we must understand the city as a nexus of environmental context, built systems and infrastructure, and human communities. They are inter-related, influencing each other every day, and generating profound impacts over time.

In today's hyper-connected world, designing and implementing an urban vision requires an exchange that transcends national boundaries and disciplines. How do we draw on knowledge and wisdom arising from the whole world? But while our vistas have broadened, educational resources appear to be concentrated among elites, who are able to acquire the cutting-edge skills required to navigate such a world.

Meanwhile, the prevailing model of unfettered urbanisation, driven by powerful entities, whether market or government, and motivated by capital, reputation, and profit — but not always the public good — results in social dislocation and environmental degradation, particularly among the poor, the voiceless, and the disenfranchised.

A new paradigm is needed.

We must explore, experiment with, imagine, co-create, and evaluate Human Cities — cities that recognise the centrality of human beings and communities, and that place humanity at the heart of any urban development strategy.

Cities are not simply collections of concrete and glass skyscrapers; they are made up of living communities of human beings.

When we speak about development and urban change, we must not forget the people whom we are serving — the people who reside in these places, who maintain communities and habit, with cultural roots and systems of belief, with a sense of place and an identity.

Human Cities are necessarily by and for the human beings who live in them. However, this process can be facilitated by partners of goodwill who respect communities and their unique ways of living.

Building and maintaining the world's cities requires strategies that are informed by global best practices, but that remain sensitive to local needs. To bridge those ideas, we must prepare the next generation to understand this critical task ahead of us. Therefore, a crucial part of a Human Cities strategy is to train designers, planners and engineers to be cognisant of these ideas and to awaken in them their social commitment.

In the end, one cannot 'complete' a city and then walk away. Cities are processes in motion, and experiments will continue at all times. But by increasing quality and access to education about cities, by broadening the types of skills

New wave

'The problem, Amonbofis, is that you always do things the way we used to'¹, said Cleopatra to her old fashioned architect. Indeed, old ideas die hard, but in cities around the world, economic and environmental necessities are increasingly motivating people to invent new solutions and, eventually, to overcome the status quo. Their ideas are sometimes so simple that they are mind-boggling. Here are some stories from Copenhagen, Paris, Mumbai and Manilla.

¹ *Asterix and Obelix : Mission Cleopatra*, Alain Chabat, based on *Astérix et Cléopâtre*, Goscinny/Uderzo (Dargaud).



1

© Copenhagenize

1

The city of Copenhagen has launched a permanent campaign that celebrates and thanks cyclists. The message 'Hej cyklist' (Hi cyclist) is printed on bicycle lanes and on innovative pieces of furniture: foot-rests at an appropriate height for cyclists to take a break, and waste baskets that are tilted so one can easily drop in a banana peel!

© Mairie de Paris

2

2

Paris without its expressways on the banks of the Seine river? Some say that life will become impossible while others argue that the pedestrianisation of expressways will make life more beautiful. Seoul agrees. The new business district of Songdo also banned private cars.

3

3

Even Forbes can't figure out how the dabbawalas of Mumbai manage to deliver 200,000 hot meals a day, cooked by the families of their recipients, without ever being late, without knowing how to read or write, without any technological support, and all in the city of Mumbai, infamous for its congestion and chaotic organisation.

© Meena Kadri

More at bit.ly/dabbawala-docu

4

4

A Liter of light is a 'social enterprise' that was implemented for the first time in the Philippines. It provides ecological and cheap lighting to thousands of homes as well as a source of income. During the day, all one needs is an empty bottle, a teaspoon of chlorine and a piece of metal. For night time lighting, one adds a DIY electronic circuit.

© Liter of Light

More at literoflight.org



Beginning a new cycle?

Steven Ware

Exciting digital tools are challenging and transforming the construction industry, undoubtedly leading to revolutionary new ways of designing cities. Big Data will become part of the brief, Building Information Modelling will provide the digital scaffold, and 3D printing will enable the manufacturing of building components themselves, even entire structures, perhaps cities. But are we missing something in our reliance on technology to find accessible and appropriate innovation, particularly in light of the threat to our biosphere? Our research team thus asked itself a precise question: 'how would the ideal 3D printer work and what would it produce?' The answers that came back were both straightforward and ambitious, leading us to a remarkable and unexpected conclusion.

The ideal 3D printers should of course operate on solar energy. They would sequester carbon whilst operating and use this carbon as a primary building material. They would extract complimentary materials from the site, especially recycled organic matter, adapting to any locale or soil. They would produce oxygen as a by-product. The printers themselves would not need to be housed in sheds; they would stand alone despite the weather and seasonal changes. They would harbour biodiversity as they operate. The printed materials themselves would be strong, fire resistant, and easy to transform. They could be used for both ambitious structural systems and furniture, providing sensual finishes to interiors.

They could be insect repellent, perfumed, and even edible. The very presence of the printed material would have a biophilic effect on humans, reducing stress levels, its intricate decorative patterns governed by sophisticated production algorithms, fractals and otherwise. It would smell good and offer a perfect humidity balance for human living. And just a couple more things; let the printers form symbiotic relations with other species. And last but not least, they could produce other printers by themselves at no cost.

This extensive and astoundingly ecological 3D printer range exists and has a name; the tree. Other ranges exist; hemp, flax, bamboo. We refer to them today as bioresources. This analogy of the tree as a 3D printer is a useful benchmark as we judge the pertinence of today's construction methods. The machine age and now the information age have led us to develop structural systems and materials that confer superpowers on our buildings, even a certain intelligence. Sometimes we ignore that even the most humble of our neighbouring species are infinitely more resilient and intelligent than the latest skyscraper or smartphone. The resurgence of timber at the cutting edge of construction technology may mark the beginning of a new cycle. The last centuries saw the development of steel with its ability to span vast new dimensions, and concrete with its rapidly assembled moulded masses. Energy was readily available from fossil fuels and split atoms. These developments are driven by



Project for the Jerusalem public library

© Art and Build

the techniques of war where speed is of the essence, and defence achieved through impenetrability. Wars were waged to gain access to more energy, more materials, if only to wage more war. But who would wage war over a forest?

There is a certain irony when one considers that lime for cement for construction and fossil fuels for energy have been provided by millions of years of 'printing' from corals and molluscs forming sedimentary limestone, to plankton, algae and decaying forests offering us fossil fuels. These gifts of nature are not limitless; we need to turn to the living nature in order to satisfy our means. We need to adapt today's human activity to nature's many cycles, to maintain them, even design them. Burning precious, ancient molecules for energy – each one a highly sophisticated molecular battery – makes little sense when we are surrounded by

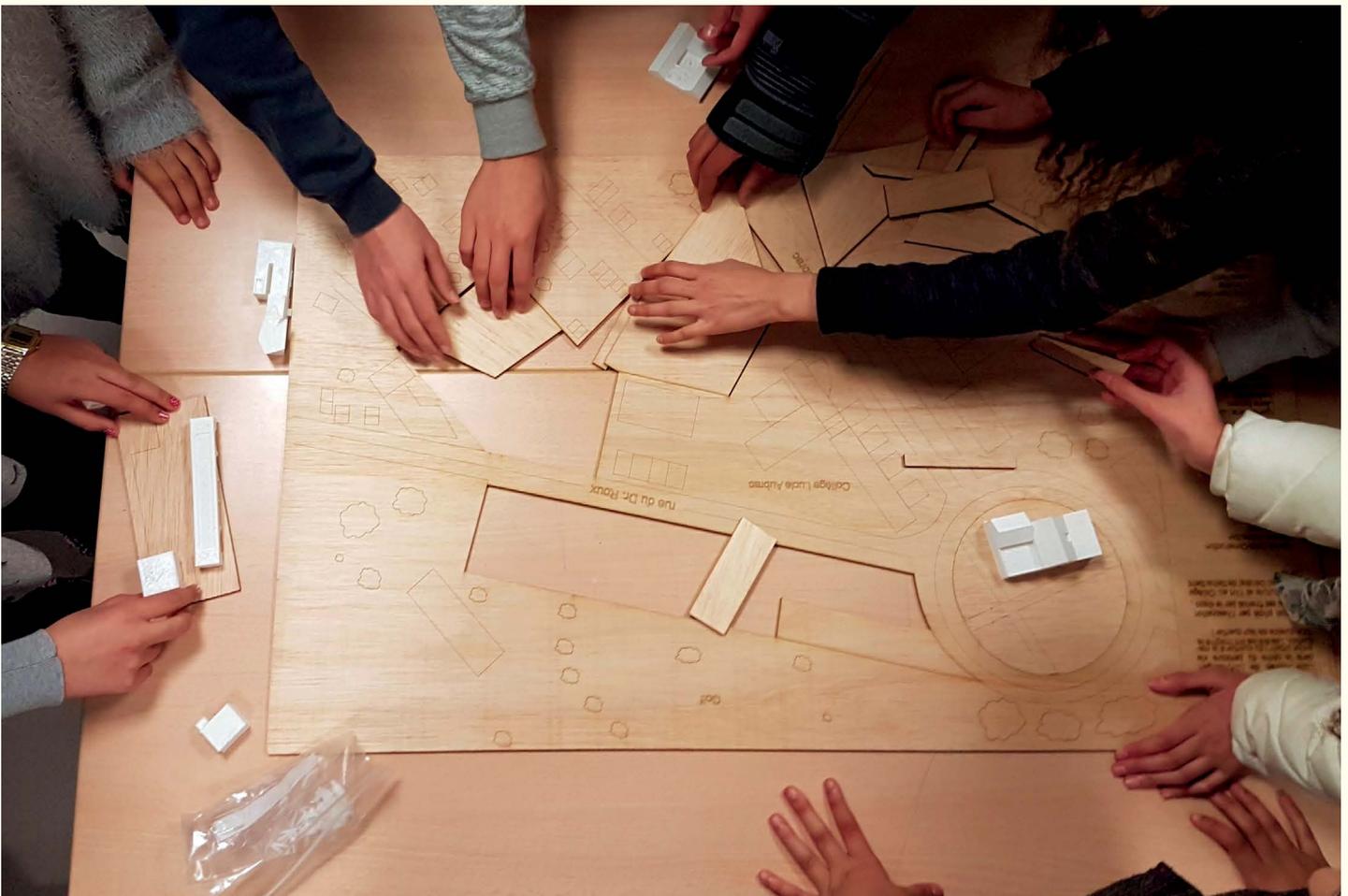
nature's living encoding machines and printers, quietly but incessantly providing us with materials for the future.

Steven Ware
 Architect
 Art & Build
artbuild.eu

Made in town

According to Jean Haëntjens¹, 'cities will be shaped by millions of individual decisions and by multicultural people belonging to four generations. They will have various requests and expectations at the top of which is the desire to be involved in **making** the city'. Although co-creating the urban experience has always been the hallmark of cities, one must highlight the recent acceleration and democratisation of people's ability to transform the urban landscape, if only temporarily.

¹ Jean Haëntjens is the author of *Éco-urbanisme. Défis planétaires, solutions urbaines* (Écosociété).





© Shutterstock.com

1

'Wheeldo is a mobile fablab that aims to democratise digital manufacturing technologies such as 3D printing and laser cutting. Our founders, former architects and urban planners, have found in 3D printing an inspiring tool to support residents who wish to transform and reclaim their surroundings. By having access to professional tools — to reproduce and to re-imagine their environment — participants are given the opportunity to see their ideas and visions come to life'.

Casimir Jeanroy-Chasseux, wheeldo.eu

2

The Chinese companies Ofo and Mobike and the American Limebike are competing over the market of 'dockless' bicycles. Such bicycles are accessible via an application that locates them for users anywhere in the city. Costing a dollar for half an hour of use, one is free to ride and park a bicycle anywhere. In big cities, the concept has taken an unfortunate turn, the abundance of supply often leading to disregarding the product (with vandalism, theft, public anger vis-à-vis bicycles that are parked on sidewalks, haphazardly).

Stockholm has chosen to equip the city with 5,000 hybrid electric assistance bicycles served by 300 e-parking stations. Implemented and managed by JCDecaux, this service is controlled through a smartphone application. Throughout their journeys, cyclists are free to pedal or to opt for silent, electric power.

3

'Queuing is one of the things that make our modern world look terribly old.

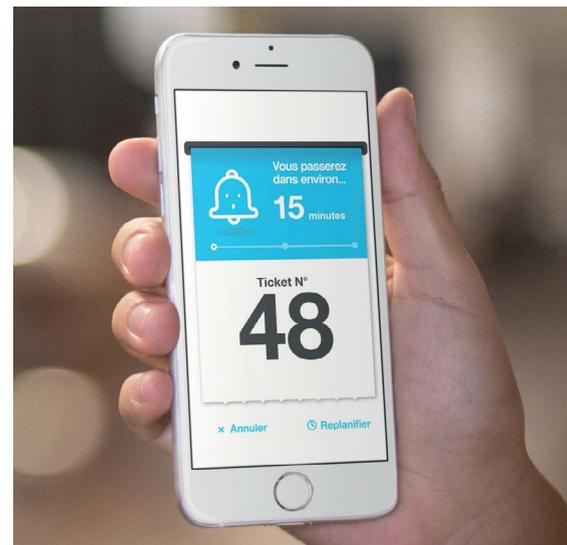
Who hasn't queued to visit a monument, to shop, to be served by a public servant, to receive advice from a shop attendant or even to entertain their children in amusement parks?

We all lose precious time which, in the end, adds up to one hour for every week. If you add them all together, the French lose 400,000 years each year!

Lineberty, our smartphone app, has transformed waiting into free time and has improved people's visiting and shopping experiences.

The application is easy to use: choose a time of passage and be given a ticket in a virtual queue.'

Alain Thaly, lineberty.fr



© Lineberty

3

Takeaways

wish list

S O L U T I O N S

P A R T I C I P A T I O N

I N C L U S I O N

B I O D I V E R S I T Y

S H A R I N G

means

C₃ O₁ L₁ L₁ A₁ B₃ O₁ R₁ A₁ T₁ I₁ O₁ N₁

B₃ O₁ T₁ T₁ O₁ M₃ U₁ P₃

C₃ O₁ C₃ R₁ E₁ A₁ T₁ I₁ O₁ N₁

B₃ I₁ O₁ R₁ E₁ S₁ O₁ U₁ R₁ C₃ E₁ S₁

O₁ P₃ E₁ N₁ S₁ O₁ U₁ R₁ C₃ E₁

Going away for good?

1. Cash, cards or mobile money?

While we wait for cryptocurrencies, mobile payments are already in use and our paper money might well become a souvenir.

2. Purchase of goods or access to services?

Owning a car, a bike or a house? What a funny idea. Owning property is not a priority for Millennials who prefer paying for experiences and services.

3. Absence or ubiquity?

Young generations do not experience absence the way their parents used to. They feel connected wherever they may be and, often, they see each other for free.

4. Wait or run errands?

Museums, cinemas, department stores or administrations have customised notification systems that let their visitors get on with their errands until their turn comes (read page 79).

5. Drive or enjoy the landscape?

Hands on the wheel and eyes on the road? In driverless cars people might just want to peer at the city as it unfolds before their eyes.

6. Passwords or biometrics?

Iris scanning and facial recognition are no longer science fiction. Password hacking is paving the way for biometric safety devices.

7. Remote controls or talking out loud?

Don't IoT and artificial intelligence make our remote controls look a bit old? 'Hey Siri, dim the lights please'.

8. Memory cards or 'Cloud'?

We thought that tiny little flash cards couldn't become any smaller till seamless cloud storage made them obsolete.

9. Gas or rechargeable batteries?

With the energy transition (read page 44), what will become of the stylish motorcycles and vintage cars? Climate change might well be telling them to take a hike.

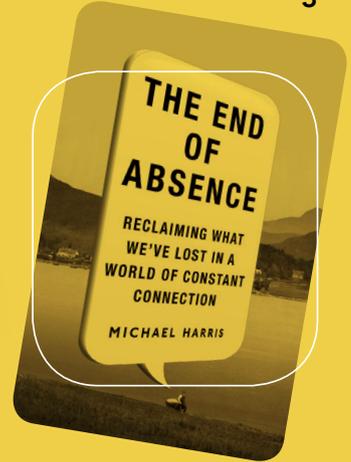
1



2



3



4



5



6



7



8



9



東京 2020

Behind the scenes of the 2020 Olympics, with **Yuriko Koike**, governor of Tokyo.



© Shibuya

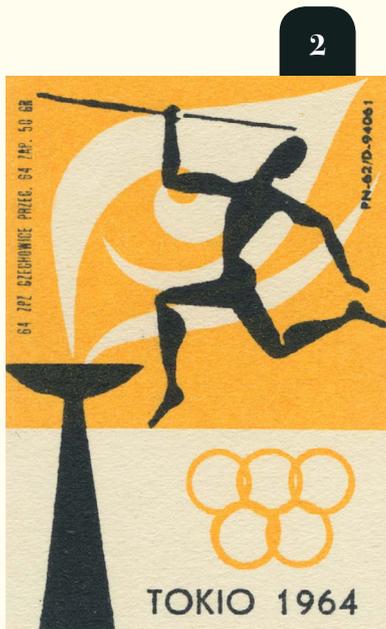
How is Tokyo branding itself during these games? What will be the narrative?

During the 2020 games, Tokyo will demonstrate to the world that it is a model city for a mature society. The Games are also an opportunity to promote innovations in environmental technologies. This is closely related to the IOC's goal of a sustainable Olympics. From a

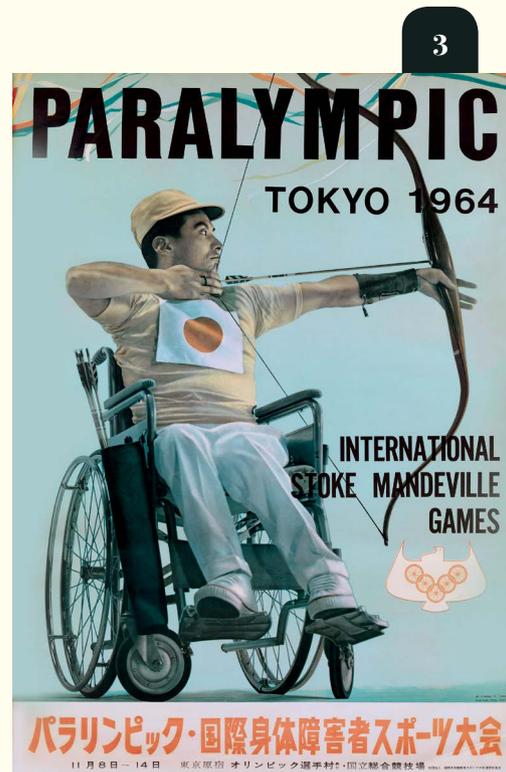
long-term perspective, we also aim to incorporate environmental, social governance (ESG) concepts with urban development, attracting international investment, and achieving sustainable growth in harmony with the environment.

We will be able to provide examples of how advanced technologies can enrich citizens'

- 1 Gundam, the giant robot in the Odaiba district, reinstalled in September 2017.
- 2 Matchbox, 1964 Olympics.
- 3 Poster for the Paralympic Games of 1964.



© Private collection



© Private collection

lives, and we will demonstrate how Tokyo is addressing urban problems such as welfare, the environment, and community planning. We would also like to offer Tokyo's experience, technologies, and know-how to other major cities around the world to help them tackle similar urban problems.

Furthermore, a key concept for the Tokyo 2020 Games is that it will support and raise awareness of the recovery in areas affected by the Great East Japan and Kumamoto earthquakes. Indeed, we can think of the unique narrative of

the 2020 Games as Japan's "Recovery Olympics". It will not only put a spotlight on the steady recovery of the affected areas, but it will also allow us to thank all the people around the world who supported us during these times.

With the help of the entire nation and as the head of the host city, I am making preparations with a determination to ensure that this is one of the best ever Olympic and Paralympic Games in history. We are all committed to making the 2020 Games a success not just for Tokyo, but for the whole of Japan.

Tokyo is a busy city. How will the Games be easy to interact with?

2020 will mark the second time that Tokyo has hosted the Olympic and Paralympic Games. The main legacies of the 1964 Games were infrastructure projects such as the Tokyo metropolitan expressway and the Shinkansen network. I want to leave a “softer” legacy from the 2020 Games that will lead to a change in mindsets and values.

Tokyo is the first city to host the Paralympics twice. This is an opportunity for Tokyo to make changes in terms of both physical infrastructure and attitudes, including promoting accessibility throughout the city, as well as encouraging barrier-free mindsets. I want to realise a society in which the lives of each individual are looked upon with kindness.

Further, we plan to mobilise more than 90,000 volunteers for the Tokyo Olympics, and will be calling on a wide range of people, including the working generation, students, and those with disabilities.

Through the implementation of such measures, and as the head of the host city, I will ensure that the experience of the Games changes the lives of everyone in Tokyo and Japan for the better.

How is Tokyo, as a city, going to win these Games?

Hosting the Olympics and Paralympics requires a great deal of preparation in many different fields. With just three years until the Games, we need to focus on our preparations and on

enhancing excitement among the citizens of Tokyo and Japan.

In terms of the city, we will establish systems to manage transport and other city operations effectively during the Games. We will make sure that athletes and spectators from around the world are welcomed with a well-prepared city system.

In addition, Tokyo needs to ensure the safety and security of all of the athletes, Olympic officials, and spectators who will arrive from around the world. To achieve this, we are considering measures for public safety and infection control through coordination between all bureaus and offices of the Tokyo Metropolitan Government, as well as through cooperation with police and other agencies. As head of the host city, I will make absolutely sure that we expand and strengthen our crisis management structure for the games, while cooperating fully with the national government.

Regarding the venues for the Games, we will develop them steadily to make sure that we can leave a legacy for many years to come, while also continuing our efforts to reduce costs.

What do you wish to learn from hosting the Olympics?

I heard that traffic was very congested during the 2012 Olympics, and therefore telework became more established in London. In Tokyo, alleviating congestion will also be important to allow visitors from all over the world to move around and enjoy the city with ease and comfort, in line with the Japanese sense of hospitality, or *omotenashi*.



© B. Lucava

Conversation

The 2020 Games are an opportunity to establish new common practices for Tokyo. This includes telework along with Jisa-biz or off-peak commuting, which would allow a larger number of people to experience a more pleasant journey to work.

Creating a better work environment through the widespread use of telework will help to resolve various problems facing society, such as the decline in the working population and the low level of female participation in the workforce. I would like to promote a society where everyone can actively participate.

What do you wish to experiment for the first time?

The world today is facing the unprecedented, major environmental risk of global warming. Tokyo, as the capital of Japan and one of the world's leading metropolises, needs to promote growth and simultaneously make a forceful effort to counter climate change. We have positioned environmental policies at the centre of Tokyo's growth strategy. Looking beyond the Tokyo Games, I would like the Olympic Village area to be a model of an environmentally advanced city. By utilising new technologies, we plan to promote more comfortable and eco-friendly lifestyles as well as the energy self-sufficiency of the community in preparation of any natural disasters. Specifically, we hope to install hydrogen stations to supply fuel cell buses, along with city blocks and residential areas which would be the first practical application of this sort in Japan.

With so many people gathering from around the world, we view the Games as an opportu-

nity to demonstrate Japan's cutting-edge technologies and utility of hydrogen. Therefore, we will promote this by setting up pavilions and showcasing hydrogen supply systems.

The recently announced energy development plan for the Athletes' Village district sets forth plans for the area leading up to and after the Games. In addition to working to reduce environmental impact by building hydrogen stations and employing hydrogen in fuel cell buses and residential buildings, hydrogen's superior storage properties will be used to enhance the self-sufficiency of the community if a disaster strikes.



What innovations are you looking forward to implement for good?

Tokyo is one of the world's leading major cities, and measures to reduce energy consumption are important.

The Tokyo government implemented a program to encourage household energy conservation through the replacement of incandescent bulbs with LEDs. Under this program, residents can bring two or more incandescent bulbs from their homes to their local electric goods store and exchange them for one LED bulb, along with advice on how to further conserve energy. We hope to improve awareness among residents and encourage a quick switch-over to LED lighting.

The Tokyo 2020 Games provides an opportunity for Japan to use its exceptional technological capabilities to foster a change in the way Tokyo's citizens think about energy conservation, and to spark a widespread energy-saving movement. This will help us achieve the goal of a Smart City, one of Tokyo's policy pillars.

Can you tell us more about your vision for the city of Tokyo in the next 10 years?

To realise the sustainable development of Tokyo, we need to leverage the legacy of the Games, and systematically pursue urban development looking 20 or even 30 years into the future.

Accordingly, as a vision for Tokyo in the 2040s, we have formulated the Urban Development Grand Design, and an accompanying set of policies to achieve this goal. Our aim is for



© Toyota

In agreement with Tokyo's Metropolitan Government, Toyota plans to introduce more than 100 FC (Fuel Cell) buses, mainly in the Tokyo area, ahead of the 2020 Olympic and Paralympic Games.

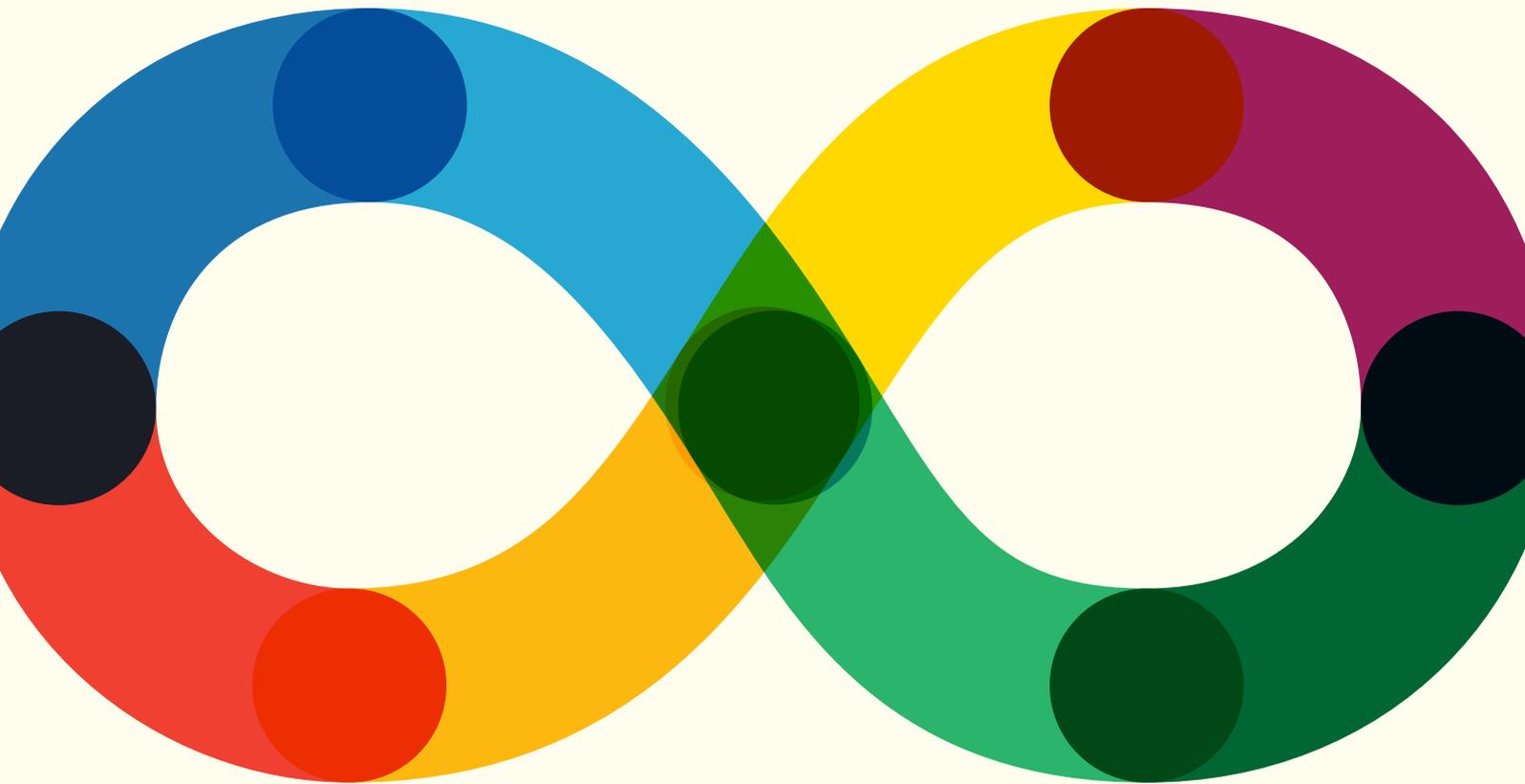
people from all around the world to think of Tokyo as a vigorous, open, and highly-developed mature city where everyone can choose how to live, work, and relax.

While integrating the concept of ESG and promoting urban development in harmony with the global environment, we will create a Tokyo where everyone can be healthy and vibrant, and live their lives with hope, energy, and peace of mind.

Tokyo, October 30th 2017.

Chapter 6

Agile



Cities seem to be influenced by concepts that stem from the digital world. They are, in effect, 'free software' that is open and transformable by their residents. Many cities give priority to individuals and interactions over processes and tools; they prefer small iterations to long-term planning and they recognise the value of multi-disciplinary approaches.

Mimicking production methods that revolutionised IT in the late 1990's, cities have become **agile**. Although the brick-and-mortar world isn't as kneadable as binary data, cities aren't shying away from difficult and transformative decisions. Pledging agility, they are amenable to change, risk and innovation, even if such innovations need to be matured and improved over time.

Quote



Have highways
brought us closer
or farther apart?

Gracie McKenzie

Time for something different

Jean Haëntjens

Because it is all at once a **knowledge economy** power house, a matrix to ways of life and consumption patterns and the epicentre of democracy and environmental issues, the city is the gateway to the twenty-first century.

Since the rise of Europe in the twelfth century, cities have been a driving force or, as French historian Fernand Braudel put it, the 'hare' accelerating historical transformations: over 8 centuries cities have shifted from merchant, to classical to industrial.

At each transformation, urban elites have managed (with or without the support of the State) to imagine new organisations whether social, technical, economic, political or spatial.

Each stage of our history has introduced new visions that have redefined the urban fabric and the balance between logistic, social, economic and ecological aspirations.

Such visions could only be implemented in the context of holistic approaches, such as Haussman's plan for the city of Paris — an ambitious plan that took into consideration every social issue, large and small, and involved every stakeholder.

This is where we stand today. After half a century of urban development dominated by cars, cheap fuel, urban zoning and the privatisation of public space, we are somehow under the obligation of inventing something different.

Whatever we do next will have to involve new methods of urban planning. Elected bodies and planners will have to be prepared for a paradigm shift with deep consequences that pioneering cities allow us to describe.

If such cities have managed to take a different path (sometimes dramatically different) it is often because they have succeeded to bring together a vision, a technical framework and a collective dynamic.

Such visions were often the product of a small group of elected representatives and stakeholders who shared the same convictions, but who were also committed to their implementation beyond the calendars and agendas of charismatic political leaders.

New ideas became feasible and were divided into achievable goals thanks to the support of multi-disciplinary teams who enjoyed relative freedom vis-à-vis municipal administrations.



© HackNY

Finally, the end result translated to strategies that were much easier to implement since they had been devised by the main stakeholders and beneficiaries and, naturally, by the residents themselves.

Hack New York

HackNY brings together young 'hackers' that are likely to become New York's community of innovators. The event is co-organised by professors from NYU and Columbia and has been running since February 2010. It is held during the school year and, beyond a 24-hour hackathon, it offers to mentor and to support budding 'technologists'.

Jean Haëntjens

Economist and urban planner
jeanhaentjens.com
urbatopies.com

Fast-changing cities

'With more than half of the world's population currently living in cities, a proportion that is expected to grow substantially over the next few decades, the success of our cities is taking on an even greater importance,' said Jeremy Kelly¹. 'Despite various political upheavals and ongoing economic uncertainties, many cities continue to show impressive dynamism. The key to their success is their agility and openness, enabling them to adapt quickly to each new wave of global change'.

¹ Jeremy Kelly, Global Research Director at JLL.



1

JLL's Cities Research Center has developed an index that measures a city's momentum. 42 indicators are taken into account, grouped into three sub-indexes:

- **Socio-economic momentum:** relating to a city's GDP growth, its population, its air connectivity, its corporate HQs, its retail sales and, finally, its direct international investment;
- **Real Estate Momentum,** relating to construction, absorption, price, offices, retail, hotels, investment transactions and transparency;
- **Future-proofing,** relating to higher education infrastructures, innovation capabilities, international patent applications, technology firms, infrastructure and environmental quality.

More at jll.com

2

If the city of Nairobi features among the 10 most dynamic cities in the world (JLL, 2017), it is because of its efforts to bring together students, citizens, ICT players, scientific research and industrial stakeholders around a joint development plan. Created in 2014, the **Nairobi Innovation Week** sheds light on innovative start-ups, researchers and projects that are in the process of being incubated. It promotes skills, practices and initiatives that will have a positive impact on the lives of people and on the city. Here we find the conditions of success as suggested by economist Jean Haëntjens (read page 94).

3

IoT¹ now seems to have its capital: Barcelona. **Telecare**, a free service reaching more than 70,000 seniors, has become popular over a remarkably short period of time. Users wear a small pendant that is able to connect them to a call centre, 24 hours a day and 7 days a week. The centre's number is dialled at the simple touch of a button (see illustration below). Telecare supports frequent contact with the elderly so that they may be relieved of permanent anxiety, loneliness and a sense of being isolated. Barcelona also has a new smart bus network, 300 charging stations for electric cars, traffic lights that play sounds for the visually impaired and 500 Wi-Fi stations.

¹ Internet of Things



© Nairobi Innovation Week



© Telecare

3

2

Virtual realities

Conversation with **Elisha Karmitz**, Managing Director at MK2 Agency and MK2 Holding.



© Benoît Florençon

Why did MK2 invest in Virtual Reality?

When VR (Virtual Reality) appeared, we wondered if it was a gadget or a new distribution format for audiovisual content.

As film distributors, new formats are always interesting to us, but beyond that, we were keen to discover the link between cinema and VR.

At first sight, VR can seem scary, inhuman, expensive and promoting types of content that don't quite meet our quality requirements. We don't see it as a gadget, nor do we see it as 'the future of cinema', but rather as a revolution in the fields of communication,

language, creation and an opportunity to invent new, collective experiences that people can share in beautiful settings.

The difference between cinema and VR is that the latter convinces the brain that what is presented to it is real. There follow stimuli, reactions and reflexes that we wouldn't have in a cinema. As such, VR is a cognitive experience of a completely different nature.

In Paris, in December 2016, we opened the first space dedicated to VR and became a point of reference in the field.

In this space, the public is invited to discover the different expressions of VR: movies, documentaries, simulations and games. We also offer professional training activities. Some professional customers rent our space to present VR content to their employees, customers or future clients. In the area of urban planning and the real estate sector, we have the example of a real estate developer who offered virtual tours of housing projects in the making. The experiment was a great success and was repeated several times.

Can one imagine that VR could go out on the streets? In the city?

Street furniture is already a medium that isn't only reserved to advertising or to information, but also to leisure and services. Why not add VR to such equipment?

To date, VR still faces two challenges that we are trying to overcome. First, it is difficult for such advanced equipment to be fully automated. Human intervention is still necessary. Second, a virtual headset immerses you and isolates you from your surroundings. If you are in the street, outside, we are obviously concerned about your safety. Nonetheless, one can imagine dedicated modules in which the public would have access to services and virtual shops that are different from our online experiences — with haptic sensations and a real appreciation of the scale of every product. These spaces could very well become the phone booths of the future.

What is the future of VR?

VR is already pervading many areas, including education, vocational training, medicine, health or aeronautics. As for the city, when we talk about VR, we are talking about 'one of

the immersive technologies that are currently available. Augmented Reality, for instance, is another. The difference between the two is a matter of degree. In the first case, a headset immerses you completely in a new space, while the other adds a layer of digital content to the reality around you. The significant transition is that we no longer look 'at' objects or 'at' digital screens. We look through them. It's mixed reality.

Can VR be social?

Emerging technologies are concerned about the social dimension of VR, making it possible for many people to meet in virtual spaces. It should also be mentioned that one of the biggest investors in the field is Facebook, a social network.

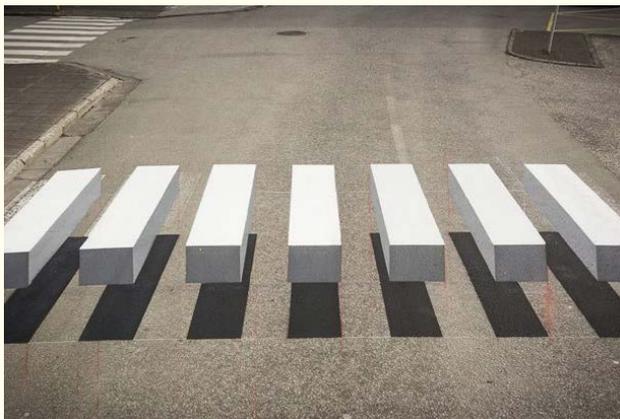
Edward Snowden sees VR as the opportunity for a revolution in the way we communicate with each other. He urges the young and the old to get involved in the creation and definition of VR's values and principles so that such important matters are not left to large corporations. That's what we're doing at MK2.

Paris, September 19th 2017.

More at mk2vr.com

Is this for real?

If cities are moving towards more innovation, it is also because great ideas are travelling fast and, as they do, they keep getting better. At other times, exporting ideas would have taken decades, but in our connected world, it has become a matter of days. With so many ideas coming our way, one is tempted to be **agile**, to 'try them out' by putting into practice fail-fast strategies: try it and, if it doesn't work, let it go. Some ideas also travel fast because, at first sight, they seem so outlandish that the world begins to buzz. Agility and the wildest imagination might well be twins...



1

© Talha Dar ; © Anonymous ; © Gusti ; © Yalbadar

1

The first 3D crosswalk was born in New Delhi in 2016 and went viral on social media. A few months later, the same idea appeared in China, Iceland, Kyrgyzstan and Turkey. More than a visual gimmick, 3D crosswalks increase the safety of pedestrians by slowing down drivers at junctions that are not equipped with traffic lights. Even if the idea is spreading rapidly, none of the cities mentioned above are, for the moment, committing to its generalisation. Each city is simply happy to experiment, especially that implementation costs and risk factors are low.

2

The project of a city suspended from an asteroid is quite real and its feasibility has been studied in great detail by New York firm, Cloudsao. The Analemma Tower is a traveling city, crossing the northern and southern hemispheres, flying over Panama, Havana, Atlanta and New York. The lower end of the tower plans to house business districts, while dormitories would be in the floors above. Residents would have access to gardening areas, places of worship and, on the lower level, places to eat, shop and play. The architects plan to equip the tower with solar panels to ensure its autonomous energy supply. Residents will access fresh water from cloud condensation and rain which will be collected and purified. And to get your feet back on the ground, all you'll need to do is jump — with a parachute, naturally.

More at cloudsao.com



A. © 2010 / ANUP / ELEV 3D.COM



B. © 2010 / DAILY / ELEV 3D.COM



C. © 2010 / FERRARI / ELEV 3D.COM



Takeaways

wish list

S O L U T I O N S

O P E N N E S S

E V O L U T I O N

I M A G I N A T I O N

T R A N S F O R M A T I O N

means

A₁ G₂ I₁ L₁ I₁ T₁ Y₄

R₁ E₁ S₁ E₁ A₁ R₁ C₃ H₄

E₁ D₂ U₁ C₃ A₁ T₁ I₁ O₁ N₁

S₁ U₁ P₃ P₃ O₁ R₁ T₁

I₁ T₁ E₁ R₁ A₁ T₁ I₁ O₁ N₁ S₁

Millennials, then what?

Generation Y? Millennials? Some people say they were born in the eighties while others prefer the year 2000. In 2018, and to accommodate everyone, let us consider that Millennials are somewhere between 18 and 38 years old.

Individually or in groups, they have induced deep economic, social, cultural and ideological disruptions. They are entrepreneurs, technologists, bloggers, researchers, creators or activists. All have impacted the world we live in and, sometimes, anonymously.

Thanks to them, society has witnessed both the positive and the negative. Indeed, mind-blowing creativity, unlimited communication, self publishing and the empowerment of virtual communities must not hide the worrying aspects of digital networks: 'fake news' are threatening no less than democracy itself; in some cases, social networks were proven to cause severe anxiety and dependence; the opacity of digital services in relation to privacy is a source of concern; bubbles of information lead to a distortion of reality and disruptive innovations create opportunities for some, but inequalities for others.

Who will succeed the Millennials? And also, how will Millennials behave when they are old and grey?

Will a generation of 'builders' succeed a generation of 'founders'?

According to a study commissioned by MTV in 2015, the generation of 'founders' would be the one responsible for every disruptive concept we know — YouTube, Google, Facebook, Airbnb, Uber... MTV's President Sean Atkins says that while Millennials have disrupted society, the next generation will have to rebuild it. 'They have this self-awareness that systems have been broken,' he told Time magazine. '(...) they can't be the generation that says we'll break it even more'.

Social media apologies

Research and reports are warning us against the negative impact of social networks on young people, children and society at large. By the end of 2017, and 2 billion users later, Facebook has publicly recognised its flaws and has pledged to fix them.¹

¹ *Facebook Conceded It Might Make You Feel Bad. Here's How to Interpret That*, New York Times, 15 December 2017, Farhad Manjoo.

Coding at school

Millennials are digital natives who, at a very young age, have consumed every technology in reach. More than simple consumers, the next generation is being prepared to master the digital craft with programming courses that start as early as primary school. Children will know how to code but, above all, they will understand the digital environments on which they depend on a daily basis. The generation of 'builders' expects that digital ecosystems will be open, transparent, amenable to change and easily verifiable.

And make it real, please

In 2015, 78% of Millennials admitted they preferred spending their money on **real** and **collective** experiences, and 83% of respondents participated in at least one 'live' event in the past 12 months.

Source : Harris, 2015

So, who's next?

Generation Z, iGeneration, post-Millennials, linksters, founders, builders... sociologists and marketing experts don't seem to agree on a name. Maybe it is because the next generation will be **unpredictable** — which is what teenager C. Angelina seems to be telling us in her testimonial (text to the right). Although this teenager sounds unpredictable, she is also determined, aware and confident as to how she can have a positive impact on her environment. It is a matter of choice, she says.



© Rachel Adams

Wild card generation

This is what an American teenager wrote in 2011: 'We were the generation too young to have voted for or against change. We are the generation who will have to deal with the consequences. We know the power of rhetoric now, we know the power of hope. We know the pain of a lie. Safety has been denied to us, we have seen the face of fear. We are the generation that has been looked over and ignored, nearly washed away. But is it because the older generations have no hope for us, or because they fear us and our power? We have seen fear, we have survived. Now, when we finally have a voice to go with our watchful eyes, what will our message be? Every generation has a chance to change the world. The question is, will we take that chance, or will we pass, another lost generation? Right now, as we come of age, we are powerful. We have seen power. Will we fear our own power, or will we use it to create a world our children will be glad to claim? We are the wild-card generation'.

C. Angelina, Colorado, www.teenink.com.



We have evolved in a world in which each person or entity had a designated place and a specific role to play: the producer produced, the consumer consumed, authorities decided, people followed, entrepreneurs created and investors financed. Today, such descriptions mean almost nothing and, rather than feeling sorry, this book gives us every reason to rejoice.

The World Bank announced that in about 30 years, in 2050, 70% of the world's population will live in cities. More than ever, it has become up to each one of us to understand the nature of the challenges ahead, to agree on best practices and to share both means and ideas.

Creators, innovators, scientists and researchers from around the world have joined us to tell the story of cities in motion. I would personally add that the future of cities, that is to say the future of the greatest number of people, lies in our capacity to imagine better solutions — better because they involve all of us and because they will cater to the common good.

Albert Asséraf

Executive Vice-President,
Strategy, Data and User Innovation
JCDecaux France

Credits

Editorial

Executive Vice-President, Strategy, Data and User Innovation

Albert Asséraf

Director, Strategic Projects

Isabelle Mari

Project Manager

Claire Gervais

Texts, visuals and art direction

Aalam Wassef

Editing, research and coordination

ColDev

Special thanks (in order of appearance)

JCDecaux wishes to express its warm thanks to the following contributors:

Carlos Moreno

Emmanuelle Hoss

Jean-Louis Frechin

Agnis Stibe

Rob Hopkins

Saskia Sassen

Pierre Mallet

François Abélanet

Julie Boissier

Kevin Hsu et Deland Chan

Steven Ware

Casimir Jeanroy-Chasseux

Alain Thaly

Yuriko Koike

Jean Haëntjens

Elisha Karmitz

Photography, digital art and screenshots (in order of appearance)

Christian Scheja, Aalam Wassef, Neil Cummings, Alamy, MIT Senseable Cities Lab, Weiee Ying, Matthew Radwan, SEMAEST, Playing Out, MIT Electric Transport Project, Floris Van Cauwelaert, No Design, Conscious Cities, Matthias Wunsch, Mapbox, Open Street Map, Flytrex, Incroyables Comestibles, Tesla, Ath en transition, Gehl, Vinicius Depizzol, Laboratoire des Baignades Urbaines Expérimentales, François Abélanet, Open Closet, Hiroyuki Takeda, Association Vergers Urbains, Anne Dockter, Store Front, Dalziel Pow, Sephora, Ebdo, Amager Bakke, Copenhagenize, Mairie de Paris, Meena Kadri, Liter of Light, Art and Build, Wheeldo, Shutterstock.com, Lineberty, Shibuya, B. Lukava, Toyota, HackNY, JLL, Telecare, Nairobi Innovation Week, MK2, Talha Dar, Gusti, Yalbader, Cloudsao, Rachel Adams, George Alexander Ishida Newman.

Websites mentioned in 'Trends' and 'Insight' pages (in order of appearance)

weiee.co	<i>Designer</i>
transitionnetwork.org	<i>Transition Movement website</i>
mapbox.com	<i>Interactive and customisable maps</i>
gehlpeople.com	<i>Consultants, architects and urban planners</i>
ccities.org	<i>Conscious Cities conference website</i>
francois-abelanet.com	<i>Artist, 'anamorphist'</i>
extreme-cashmere.com	<i>Start-up (fashion)</i>
humancities.org	<i>Human Cities website, Stanford University</i>
coworker.com	<i>Co-working platform</i>
bit.ly/dabbawala-docu	<i>Documentary about the Dabbawalas of Mumbai</i>
lineberty.fr	<i>Virtual queue application for smartphones</i>
wheeldo.eu	<i>Mobile fablab website</i>
jll.com	<i>JLL Consultants website</i>

JCDecaux