

## **TRANSCRIPT: BALANCE IS THE NEW NORMAL**

### **1.0 INTRODUCTION**

3. Cities have been the product of our convergence since time memorial:

4. Our yearly festivals, our monthly political rallies, our weekly religious sermons and our daily commercial transactions.

5. We converge at various times. And then we disperse.

6. Cities have grown out of the convergence of economic prosperity, power, knowledge and culture, and have attracted and seduced people to migrate to them.

7. As Samuel Johnson said of his city: "if you are tired of London you are tired of life".

8. As populations grew and migratory patterns to urban centres continued, cities increasingly became 'theatres' for our time-specific performances and interactions: the street and the square being the stage set for society's 'actors' to converge.

9. Such convergences and transactions between people and place, coupled with centuries of industrial, technological and digital advancement,...

10. have seen our urban habitats transform from being cities of spaces, to cities of objects, to now networks of digitalised cities that do not require one's physical presence to be able to converge and transact.

11. While oceans account for 70 percent of the surface area of the Earth and deserts only 20 percent, cities account for a mere 3 percent.

12. Yet 70 percent of the global population will be living in cities by 2050.

13. We think nothing of migrating to cities in search of utopian dreams, despite their dystopian associations with crime, congestion, pollution, and the current biological threat of infection.

14. I say 'current' because pandemics, as we have seen throughout history, have come and gone. If time was a metric scale, various pandemics have shown up as 'millimetres' of disruption.

15. Whilst those 'blips' have helped shape our cities, we should be mindful that they have not stopped the march of inner-city migration, and growth. I want to see what the effect of those pandemics have been on the built environment

16. And what lessons can be learned, and how should we be shaping our cities of the future?

## **2.0 HISTORICAL OVERVIEW**

18. There have been pivotal moments in history that have shaped both social and spatial practices.

### **14<sup>th</sup> century: Bubonic plague**

20. Bubonic Plague, is a disease caused by the bacterium *Yersinia Pestis* that circulates among wild rodents living in great numbers and density. Often regarded as the worst pandemic in history, it was transmitted to humans via rats through bites from infected rat fleas.

21. It originated in China and gradually swept across Europe, killing nearly 25 million people which accounted for almost 40% of Europe's population.

22. Crowded human settlements acted as a catalyst in the transmission of the plague. This motivated fundamental urban improvements during the Renaissance that included the clearing overcrowded living quarters, opening large public squares and the developing quarantine facilities. In Venice, plague stricken Venetians and docking ships were isolated on

Lazzaretto Vecchio and Lazzaretto Nuovo islands respectively. The English term quarantine originates from the Italian term for the 40 day isolation period.

### **19th century: Cholera**

24. Cholera is an acute infection caused by a bacterium called *Vibrio cholera*. People contracted this infectious disease after ingestion of food or water contaminated with the bacteria which could lead to dehydration, septic shock and even death in a few hours.

25. The first cholera pandemic emerged in Jessore, India and claimed 1 million lives around the world. Rapid modernisation propelled the spread of the disease along trade routes; arriving in developed industrial towns in Europe, where its spread was aided by crowded housing conditions and unhygienic water sources.

26. It influenced 'The great sanitary awakening', which led to infrastructural initiatives in such as the installation of underground wastewater systems. London responded to the outbreak through a modern sewer system followed by the landscaping of the River Thames' muddy shorelines and a public awareness campaign relating to the drinking from public wells.

### **20<sup>th</sup> century: Spanish Influenza**

28. The Spanish Influenza is a highly contagious flu caused by the H1N1 virus, where the virus attacks the respiratory system and can lead to pneumonia. It transmitted from person to person via airborne respiratory secretions.

29. The origin of the flu was believed to be in Spain. However, this has been debated given recorded early US Naval personnel cases in the spring of 1918. It eventually spread rapidly, claiming 50 million lives worldwide. The spread of the pandemic has often been attributed to crowded neighbourhoods, poor nutrition and sanitation.

30. Cities responded to the pandemic through public awareness campaigns and community quarantine measures that included the lockdown of public places. In New York, the "Ban the Cup" campaign aimed at doing away with community cups used for water consumption

from public fountains. The pandemic also helped shape new housing policies aimed at improving housing conditions throughout the city.

### **21<sup>st</sup> century: SARS**

32. SARS (Severe Acute Respiratory Syndrome) is an airborne virus identified in 2003 which commonly resulted in the development of highly-contagious and potentially life threatening form of pneumonia.

33. It originated in the Guangdong province in China and later spread to several countries in Asia and beyond. It resulted in over 8000 cases and 800 deaths globally. The outbreak of SARS raised concerns regarding health and hygiene issues, as many believed that the spread of the pandemic was aided by compact and crowded housing settlements.

34. It emerged as a public health problem, which tested the adequacy of public health infrastructure in cities. The installation of thermal cameras alongside community isolation measures aided the monitoring of quarantined individuals. Hong Kong responded to the pandemic by promoting better ventilation of spaces in communities as a guiding factor of future public housing policies

### **21<sup>st</sup> century: COVID-19**

36. COVID-19 is an infectious respiratory disease that can be transmitted by viral particles that can be directly deposited on surfaces, or suspended due to natural or mechanical airflow patterns; or other sources of turbulence in the indoor environment.

37. It is believed to have originated in Wuhan, China and has, thus far, led to 22 million cases and over 700,000 deaths worldwide – making it one of the world's most deadly pandemics in recent times. This has led to the worst financial crisis since the Great Depression and transformed our working, learning, playing and living regimens.

38. Countries such as Singapore have responded to the pandemic through fiscal measures to support the economy while also executing a nationwide “circuit breaker” period followed by digitally advanced contact tracing measures to successfully monitor and limit cases in the community.

39. Whilst these tragic events show up as blips on the Cities evolutionary scale, they have left an indelible mark on our cities. Quarantining, social distancing of 2m, face masks, public facility lockdowns and screening/contact tracing have thus far been the primary means of combating the pandemic, and arguably echoes the very socio-cultural and political mechanisms that were historically used with prior pandemics.

40. Covid has challenged our basic human needs for convergence, physical interaction and social co-presence. It has forced us to recalibrate our use of space in cities, buildings and landscapes; and to use technology as a means to converge at in a safe, virtual manner.

41. Remote working, e-learning, online shopping and digital cultural offerings from the comfort of your sofa or terrace negate the need to be 'physically out in public' and are just some of the methods that we are seeing shape our new lives. So what have been the effects to the places in which we work, study, play, live; and the cities in which we connect?

### **3.0 A PLACE TO...**

#### **3.1 Work**

44. Changes in the workplace that reflected a shift from manufacturing to digital-based economies; as well as the occupancy / density / productivity conundrum, started way before the pandemic. The workplace was increasingly being perceived as either a fluid ‘campus’ of collaboration, a highly-tuned box of spatial efficiency , or a repurposed space with good coffee and Wi-Fi. All are united by a belief that being ‘smart’ (in terms space, technology and work culture) can deliver better productivity and enhanced revenue of the corporation, group or individual.

### **A sanitised workplace**

45. But with the pandemic, a further factor united these models, and that was the increasingly 'prophylactic' and sanitised experience of the workplace. Thermometers, hand sanitisers, QR codes and masks serve as further lines of defence before we arrive at our work stations. Hot-desking is being made possible with disposable paper pads on which a worker sets a laptop upon arrival. Despite the sanitised experience, the office lures us back as an employee's comfort blanket of normality and an employer's psychological crutch of productivity.

### **Space in the workplace**

46. So what can one expect of the new office? More space (temporarily). Companies wanting employees to return to the office will have to reduce capacity on each floor by between 30-50% given social distancing measures. This has led to concepts such as the '6 foot office'. The concept resembles a series of socially distancing circles that are etched into the floor as a conscientious effort of personal space awareness. The workplace, which increasingly proffered the benefits of space to aid the health, wellbeing and productivity, will serve as a beacon for convergence to collaborate. After all, we are still creatures that need social interaction and the workplace will re-assert itself as a place of meeting – especially as homeworking has become, and will continue to be, an extended working environment.

### **The split office**

47. This brings us to the consequences of accepting the very existence of the home office and its relationship to the workplace. Turn of the 20th century workplaces resembled factories of office workers patrolled by the office manager, with the view that presence meant productivity. The essence of surveillance as a tool to coax the worker had largely remained unchallenged until the pandemic predicament made us home-bound. Working from home has become part of our digitally-enabled future, suiting some roles and personality types more than others. 'WFH' negates the need to travel, and can allow for a greater flexibility in one's lifestyle to be more productive. There is no value in commuting to make back-to-back calls all day; which can be done from home. Depending on role, we should be able to choose 'when to go in' according to 'what we need to do'.

### **Presence does not mean productivity**

48. With WFH, the workplace 'vibe' may also have changed and runs the risk of becoming polarised between 'those who are in the office, and those who are out'. And the psychological effects can be potentially damaging. It is thus essential for us to carefully recalibrate the workplace not just in terms of space but also the psychological well-being of the employee. Those with childcare needs; is a primary caregiver or who has a disability, may less likely return to the office, and should not be excluded from the conversations before the pandemic started; or disadvantaged through their lack of physical presence. This necessitates a culture of trust from the employer and the eradication of the 'presence means productivity' mentality. By using technology as a means of closer virtual connection, 'out of sight' need not mean, 'out of mind'.

### **3.2 A PLACE TO LEARN**

50. During this time of lockdown, we have witnessed a remarkable disruption in education that had typically been delivered through traditional teaching environments. In universities across the world, classrooms, dormitories and auditoria that support teaching students through timetabled lectures have, up until now, largely been unaltered. They exist as multi-functional communities in themselves, and as such would not be incomprehensible to a 19th century don teleported into the 21st century to make such an inspection. As many of those educational environments gathered dust, some 1.2 billion global students retreated to virtual classrooms and lecture theatres from their own homes.

#### **A sanitised learning environment**

51. For many students and academics, the return to campus life, its cultural practices, opportunities for knowledge transference, collaboration, community engagement, the broadening of one's networks, will collectively form multiple points of much needed convergence a Zoom call cannot provide. But, like the workplace, these experiences will similarly need to be tempered. In addition to a more sanitised, de-densified environment, effective containment methods that include regular testing, robust contact tracing, and ample quarantine space, should be in place to sustain the well-being of those on campus.

### **A recalibration of pupil density**

52. Like the workplace, social distancing measures will prevail; from classrooms, to auditoria, to dorms as a means of reducing pupil density. Desks facing in the same direction will reduce transmission from virus-containing droplets. However, this directly contradicts the intent behind project-based learning, where students work collectively face-to-face. Lecture theatres will see seating configurations that will reduce students to 25% of original capacity. Student dormitories, a major source of income for universities has seen the reconfiguration of quads, to twins, and even single rooms. Finally, universities are setting aside space for quarantine, which will reduce the amount of available, on-campus housing regardless of capacity. But the biggest contributions to the reduction of pupil density comes in the form of 100% online or blended learning.

### **Blended learning**

53. Even before the pandemic, many universities were embracing a blend of institution-based and home-based learning; and a curricula conceived as 'kits of parts' delivered in a far more time-flexible manner. These are often via ubiquitous platforms such as Blackboard® or Moodle®. Having a combination of online and in-person teaching can reduce the costs of running a full capacity education campus and can make the education arena more economically accessible for all. According to a World Bank report from 2010, only 1 in 20 people have completed tertiary level education. By being able to stay at home, there is a heightened flexibility for those students wishing to continue being gainfully employed. This makes education potentially more affordable and equitable.

### **Life-long learning**

54. For prospective students, the benefits go beyond accessibility and affordability; blended learning in the future may become a necessity. Average life expectancy has increased from 65 between 1985-1990, to 72 years between 2015-2020. Arguably, the life-long job and token gold watch upon retirement is becoming an obsolete model, and there is the increasing prospect of people having more than one career in their lifetime. This would warrant further education. We will see more enrolments in online programmes, often



driven by adult learners made redundant and looking to wait out the recession, using their time productively by up-skilling. It would therefore seem imperative that blended education provides life-long learning to allow everyone to stay relevant and resilient.

### **3.3 A PLACE TO RELAX OR PLAY**

56. So after we have worked or studied hard, where do we go to relax? What will be the complexion of those places that we have grown accustomed to be like, post-Covid? And will hospitality, who's etymology evolved from the Latin root *hospes* (and also gave us the word 'hospital'), take a sanitized cue from its healthcare cousin?

#### **A sanitised experience**

57. Regardless of whether a hotel, theatre, or restaurant will my drop-off experience include bio-hazard screening, before my access via QR code? Will my room, seat or table have an air of the clinical after being cleansed using anti-viral agents? And will my dining experience turn into a claustrophobic a la carte affair of Perspex screens and e-menu's? Well, these are already happening. The challenge will be to see how the hermetically sealed, artificially lit and ventilated theatres, galleries and museums, can embrace a greater openness to natural light and ventilation for their environmental and social benefits. Perhaps we should say "goodbye" to confined, 'petri dishes' of disease; and "hello" to porous, inclusive 'cultural clusters' that promote knowledge and well-being for all.

#### **To play or not to play?**

58. As we now return to the comfort of re-opened cafes, restaurants, theatres, galleries, museums, the circles of 'exclusion' remain, and continue to challenge our acts of being appreciative of our host's hospitality. The marriage of de-densification with time-conscious schedules and limitations on visitor numbers, seek to make best use of the current situation. However, of all the forms of entertainment, the sadness can be most felt in the theatre, many of which have been forced to open at 25% of original capacity. The need for an audience is palpable for performers to thrive, and has resulted in organisations like 'The Society of London Theatres' to commission scientists at the University of Oxford, to develop alternative protocols, (such as people sitting with masks next to each other) to maintain the 'vibe'.

## **The virtual and physical experience**

59. For those not able to venture outside, it probably comes as little surprise that our physical experience of culture and entertainment will be increasingly balanced by a twinned virtual experience from the comfort of one's home. Our design and research works that were exhibited at the Mori museum in Tokyo was twinned with a virtual exhibition which allowed a broader audience to experience our work. There is no replacement for being physically present when circumstances permit; but we need to be conscious of technology's potential to decentralise activities for the greater benefit of society. Decentralising the places to relax and play may sound like an Aristotelian cliché, but the greater inter-relationship between the sum of hospitality, culture, entertainment and leisure 'parts' can offer the prospect of more local, diverse choices for the public.

### ***Hospes: guest and host***

60. Just as a zoom call is no replacement for personal interaction, neither is a virtual cultural or entertainment experience a replacement for the real thing. Safety is important, but we should ensure that the pandemic does not swing the hospitality pendulum far from the values and meaning of the word *hospes*: the interrelationship between 'guest' and 'host'.

## **3.4 A PLACE TO LIVE**

62. The space in which we live has always been the most universally understood and in the simplest terms, provides a place of shelter, protection and rest from extremities. Man's technological and cultural advances over time has shaped how we live, turning space into *place* and being a mirror to the culture and lifestyle of those within. As homes over the years have taken on further technological advances that reflect our shift into the digital age, they can similarly represent the complexity of our daily lives. Our ability to work from home and yet be connected to colleagues in a different global time zone further decentralises our need to be anchored to a particular place. The home therefore needs recalibration if we use it not just as a residence but also as a place of multiple uses.

## **A sanitised living environment**

63. Spending more time at home to work, learn and play thus potentially increases the number of people in close proximity during the course of 24 hours and necessitates greater consideration for the need for natural light and ventilation. Florence Nightingale's revolutionary hospital wards helped combat the spread of infectious diseases by acknowledging that the exposure to outdoor air and sunlight played a critical role in diluting and dispersing infectious agents and greatly reduced their chance of survival further. One only needs to look at the housing reforms that have taken place over the previous 100 years to correlate our health and well-being with the provision of what has always been a basic human need for our survival.

64. The importance of natural light, natural ventilation, and a connection to the outside for their socio - physiological well-being cannot be under-estimated. It's for this reason that the winter-gardens we designed in our recent housing project in Sweden, served as hermetically sealed warm rooms in winter; but could be converted into verandahs in the summer. This allowed residents to connect with the great outdoors as a space for exercise, rest and recuperation. Treating terraces as additional 'outdoor rooms', can provide an element of self-sustenance when edible plants are incorporated; or can be densely foliated for their environmental attributes of absorbing noxious pollutants and reducing temperature. The positive psychological effects of observing lush greenery also bodes well for those whose family bonding moments required further distancing for everyone's psychological benefit!

## **Bridging the urban services divide**

65. This pandemic has made it painfully obvious that people living in high-density environments, such as slums and migrant dormitories, are more prone to contracting and spreading the virus given proximity and the sharing of facilities. Density is often the pre-condition to an effective urban service solution, whereby running water, power and communication infrastructure can be provided efficiently to entire communities. Yet far too many people in cities today lack access to essential services such as water, housing and

health care, and this challenged our responses to COVID-19 in many cities. Poor access to services that we may take for granted makes lockdown orders almost impossible to comply with in some places. Closing this urban services divide must be a priority for cities moving forward.

### **Social divergence vs spatial convergence**

66. The digital age that allows us to work, learn and play from the (dis)comfort of our increasingly spatially constrained homes has thus resulted in many capsule concepts, such as MIT Senseable labs offering. They seek to address spatial, economic, and now viral pressures. Our various, time - sensitive activities that may have historically been dispersed through the course of the day in the city can be now programmed into singular flexible and adaptable space, that further reduces the need for multiple rooms of multiple functions. When it comes to these micro-solutions, our moment of social divergence is paradoxically having a moment of spatial convergence.

### **3.5 A PLACE TO CONNECT**

68. For centuries, our streets and squares have provided the social and spatial gel that have allowed people to connect and generate a sense of belonging to a part of the city. 'Urbanity' refers to the public life that happens as a result of these exchanges that a city can enable. The combination of cultural diversity; with a density driven through close proximity, achieve urbanity. This is why cities have densified for centuries; and the perceived wisdom to densify cities has been to achieve culturally rich, politically powerful, socially and economically, prosperous places. But the pandemic has already altered urban life and the recent advocacy for dedensification and decentralization challenges the concept of urbanity.

### **From void space to social space**

69. As the 19th century saw engineered 'channels' of 'void space' cut through cities to provide modern urban sanitation systems for public health, the 20th century saw 'social spaces' cut into buildings in the form of terraces, skycourts and skygardens to offer further

environmental and mental health benefits to its occupants. Our continued urbanisation in the 21st century has seen such sky rise spaces increasingly scattered through our urban habitats to better accommodate the social needs of urban populations whilst helping to restore our eco-systems. In doing so, they have joined the urban vocabulary of the street and the square and, when richly-foliated, can act as environmental filters and sponges to noxious pollutants.

### **Decongesting our streets**

70. During this time of crisis, we have felt the value of such spaces, as being outdoors with natural light and ventilation is safer than being indoors. But such dedensification exercises has also extended to street level from a mobility perspective. During the lockdown, we witnessed (albeit temporarily) less travel on public transportation; and an increase in walking and cycling. Working or studying from home, and the digital means to converge, has negated the need to travel unless an absolute necessity. The reduced frequency of cars on our streets similarly reduces the pressure to expand our road infrastructure and instead optimises walking and cycling routes. This offers the prospect of cleaner, car-free streets that can emphasise active personal mobility and integrate with public transportation. This in turn helps reclaim congested streets for the people.

### **Decentralising for resilience**

71. As we grow accustomed to the notion that we do not need to go to the office, campus or central park on a daily basis but can be self-contained, the ability to decentralise our developments into more self-sustaining communities that are easily accessible has become the new normal. During the period of lockdown, we have felt the cascading economic effect of the crisis, which impacted supply and production chains and had a ripple effect on the national and global economies. The creation of more resilient, self – sustaining, yet connected communities will become a reality. Places like ‘Higashimatsushima Disaster Responsive Eco-Town’, that can manage their own clean - energy generation, food production, waste and water systems, should not only manage waves of further outbreak, but also be resilient to climate change-related disaster too.

## **Water as an alternative means of urbanisation**

72. And when we think of climate-change related disasters, it is not hard to dis-associate this with flooding. Over the next 50 years, the population of Tokyo, New Orleans and Amsterdam, will be surpassed by Calcutta, Mumbai and Tianjin - booming Asian coastal metropolitan areas where trillions of dollars of assets will be vulnerable to flooding. Densifying our cities by increasingly building skyward may have been the stock response in the 20th century, but our current population and urban density issues have been further compounded by the pandemic. This has yielded a re-evaluation of a surface that accounts for over 2/3 of the Earth: water. Ijberg, Netherlands, is a great example of a decentralised sustainable development that occupied an underutilised dockyard to regenerate an area of Amsterdam whilst being resilient to rising sea levels.

## **4.0 OBSERVATIONS**

73. There are a number of commonalities that present themes for consideration. In particular the ability to 1) Disinfect, 2) De-densify, and 3) Decentralise. These notions are supported by the use of physical and virtual space; and an increase in the integration of Technology to enhance people's lives. This may appear to be working now but how sustainable are they in the Long term?

### **1. Disinfect**

*Increased air rates; embrace of natural light and natural ventilation and encourage more porous and sanitized environments.*

75. This period of social and economic lockdown has seen a remarkable reset of our Earth - with cleaner waters, cleaner skies and cleaner air. But as industries crawl out of lockdown, we cannot afford to return to our carbon intensive ways. Our prophylactic and sanitized experiences have helped fight the viral pandemic, but the chemical and plastic-intensive nature of takeaway cartons and face masks has led to a 'plastic pandemic'.

76. Our hermetically sealed, sanitized environments need to be balanced with environments that are porous and can breathe. Buildings should embrace the benefits of natural light and ventilation...

77... as a means of enhancing the health and well-being of the individual and help combat viral agents via particle dilution through larger volumes of air and UV light.

## **2. De-densification**

*Decrease people to square meterage ratio; social distance and optimise space through more time-based structuring*

79. We may think that de-densifying our places to work, learn, play or live in is the answer, but it cannot be forever. Cost of real estate in city centres and their efficiencies to optimise return on investment have become so finely tuned that having lesser people in such places make developments unaffordable. We should balance the short-term need for less dense spaces and places with the long-term reality of population increase and continued inner-city migration post-pandemic – meaning a phased return of people to city centres over time.

80. We will also need to recalibrate the street and give precedence to the pedestrian and cyclist over the automobile; and thus reclaim streets for the people. And whilst this period has seen the decline in the use of public transportation given fears of infection spreading through enclosed proximity...

81...we should not lose sight of how public transportation in the long term can maintain our drive towards a car-lite, cleaner, greener built environment.

## **3. Decentralise**

*Apply technology to augment social practices and allow for remote working, learning, playing; include alternative social spaces, and promote self-sustenance and resilience*

83. We may think decentralising is the natural step to avoid social convergence through the acceptance of WFH, e-learning, e-commerce and e-culture and entertainment; but this potentially undermines the gains made by creating compact, connected urban

developments that have optimised public infrastructure and helped economic growth through the convergence of people in physical space given our craving for co-presence.

84. We need to balance decentralising our daily routine through technology with policies that maintain the importance of having dense urban centres that provide a means of convergence and co-presence. Decentralisation may also come in the form of looking at alternative forms of urbanism and under-utilised sites that are ripe for regeneration.

85. This could allow for new self-sustaining and resilient communities that reduce the stresses and strains on inner-city life but are still part of the city.

## **5.0 CONCLUSION**

### **1987: Triple bottom line**

87. In 1987, the Brundtland report sought to address the concern 'about the accelerating deterioration of the human environment and natural resources, and the consequences of that deterioration for economic and social development'. It has been argued that if a development is to be truly sustainable, a balance between the needs of Man and Nature is required through the careful trade-off between social, economic and environmental parameters of equal weighting, for which the academic Mark Mawhinney refers to as the *balance theory of sustainability*.

### **2020: Culture**

88. In 2020, the World Urban Forum proposed Culture as the 4<sup>th</sup> pillar of sustainability. Our city's spaces, which may have once been imprinted by cultural practices and time-tested rituals, are also being compromised through the process of urbanisation, which potentially undermines the cultural identity of a place. If globalisation is really 'the globalisation of modernity, and modernity is the harbinger of identity', a 'cultural' sustainability may be able to form a localised counterpoint to globalisation.

### **2021: Space and technology**

89. But as we head into 2021 I think there are 2 further pillars that ought to be considered in that can redefine sustainability once more - that's the inclusion of *space* and *technology*.



Space continues to be depleted through urbanisation, and in this time of pandemic, has never been such an important commodity to preserve. One cannot have a discourse about society and the way people interact without also discussing the space in which they can do this. Spatial sustainability as a counterpoint to social sustainability seem inseparable and key to the success of our future urban habitats as we seek to find places to converge in times of safety; and diverge in times of pandemic. Society's continued use of Technology means many innovations have now become ubiquitous in our daily lives. We need to ensure that the use of technology is in itself sustainable – that it offers the ability to converge not just during pandemic stricken times, but can enhance our daily lives without replacing our basic human need for physical co-presence.

90. So allow me to leave you with 6 pillars for our post-Covid world and, hopefully, with some hope:

- 91. Social Balance:** The pandemic will not stop our need for co-presence. We will need to learn to balance periods of 'stepping-out' to the great outdoors with the need to periodically 'step-back-in', in a more responsible manner
- 92. Cultural Balance:** The pandemic will not stop our need to express ourselves through the arts. We need to balance how we converge in decentralised, local cultural arenas with more global, virtual cultural experiences
- 93. Spatial Balance:** (De)densification strategies should be phase-able according to the circumstances; balanced with decentralisation strategies that look at alternative opportunities for urban regeneration
- 94. Environmental Balance:** The hermetically sealed glass box needs to be balanced, if not challenged, by more porous, naturally-ventilated and lit spaces for the health and well-being of our natural and man-made environment
- 95. Technological Balance:** We should embrace new technology sparingly, and balance with the knowledge that some of the best lessons in combating the pandemic are low-tech solutions that have stood the test of time
- 96. Economic Balance :** The pandemic may have affected our economic growth near term, though long term we will need to learn to balance global connectivity with local self- sustenance if we are to be more resilient

97. We have witnessed how Oxford University, as an academic institution, has collaborated with Astra Zeneca, a pharmaceutical corporation, to find a vaccine in record time. This is made possible by fast track processes of agile governance that ensure people in clinical trials can be tested for the greater well-being of humanity.

98. Arguably, a model that allows the collaboration of academia, government, civil society and private corporation need not be reserved for the creation of a vaccine, but should similarly be a model for the creation of more resilient and sustainable built environments...notions covered in my recent book 'Cities of Opportunities: connecting culture and innovation'. But more of that on another occasion!

99. There have been pandemics in the past, and there will be more pandemics in the future. Thankfully, we, like our built environments, are remarkably adaptable and resilient, and it is with hope that we will continue to be so for the benefit of our future generations.

100. I would like to take this opportunity to thank the British Council, The British High Commission and to all of you who have joined today. Thank you, stay safe, and keep the faith!

