MINIMUM…. OR MAXIMUM CITIES? LOCATING THE NEW FRONTIERS OF THE URBAN QUESTION

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ABSTRACT:
The urban imagination is today dominated by the anxious outlook of contemporary society, and fears over the future. A loss of confidence in modernity's ability to realise continual renewal means urbanism and planning are oriented towards a 'minimum' city programme. Constraining development and reducing risks through organising around perceived and often arbitrary sustainable limits has become the norm. To move beyond this limited and limiting worldview, it will be necessary to recharge the discipline of urbanism and the culture of planning through instigating a programme of exploration and discovery. The will necessitate overturning the constraints imposed by the current eco-centred worldview. Instead a 'maximum' city approach should aim to reconnect the project of building cities with the material and spiritual benefits made possible through the pursuit of human centred progress.
KEYWORDS: Planning; urbanism; fear; risk; sustainability; civilisation; progress.

1. INTRODUCTION

What is the future for cities? Are they expanding at an ever-increasing rate or are they being abandoned and shrinking into oblivion? Are cities overcrowded, polluted and anonymous, or dynamic centres of innovation and culture? Are they sociable or anti-social?

These questions are important. Our view the future has an important impact in terms of how we organise ourselves in the present. The discipline of urbanism and culture of planning will be shaped by the answers we give. For example, if urbanisation is viewed primarily as a problem - environmentally harmful and socially disruptive - the solutions are likely to centre on '*minimum*' solutions - limiting growth, controlling human activity, and constraining the urban footprint. Planning will largely be focussed on managing the risks of development - new controls and policing design will be priorities. On the other hand, the metropolitan future might be viewed with confidence - an opportunity to expand the centres of civilisation and increase human control over the vagaries of the natural world. Here a '*maximum*' approach would pay dividends. An orientation to experimenting with new urban forms or technologies as the means to expand the human footprint could propel cities forward. If a 'maximum' city is the choice, then deferring to assumed growth limits, the focus on managing risks, and ever expanding number of regulations will prove hostile to realising a more expansive view of the future.

This paper argues that the urban question today centres on the issues that inform and are informed by the 'minimum' versus 'maximum' approach. Should we view the city to be a grand accident beyond human control that leaves us powerless to shape it to our requirements? Or is the city an act of human will that will benefit from us pushing back the boundaries of what we know, and what we try to achieve? I investigate the two opposing models of the 'minimum' city and the 'maximum' city as a device to examine the way we view cities and the process of change. The aim is to ascertain how the cultures of urbanism and planning might respond to the two models. I conclude that the current mood of caution and risk management underestimates our potential for problem solving, and undermines our ability to move the city and society forward.

2. THE MINIMUM CITY

2.1. Fearing the Future

A year on from the financial crash of 2008, the deep sense of unease about the future is visible from the releases this autumn in cinemas and bookstores. In *The Book of Eli*, America, seen through Hollywood eyes

is a post-apocalyptic wasteland. In *The Road* the survivors of unnamed catastrophe negotiate mindless violence and cannibalism in a landscape devoid of sunshine and covered in thick grey ash[1]. The fragility of the human condition is also a recurring theme in recent fiction where humanity is to a largely rendered a destructive force as in Cold Earth[2], or occasionally as the saintly victims of circumstances, as in the abused child who prophesises on the typhoons, tsunamis and other 'ecological' disasters in the Rapture[3].

Environmental fiction has certainly made the transition from sci fi genre to mainstream literature. More importantly however, it has entered the once sober worlds of politics and science. A recent "diplomatic push" on climate change by the UK Foreign Secretary turned on imagery of alligators basking off the coast of Sweden, a vast desert surrounding the Mediterranean and a largely uninhabitable mainland Europe[4]. UK chief scientist John Beddington predicts a "perfect storm" of food, water and energy shortages in 2030[5]. In public health, UK Chief Medical Officer Liam Donaldson has talked of the destructive capacity of 'Swine Flu', the latest in the line of pandemics said to threaten civilisation. Donaldson is remembered in some quarters for his prediction in 2005 that 750,000 global deaths from Avian Flu were "not impossible" (the actual figure was in the low hundreds)[6].

The apocalyptic imagination incorporating ecological catastrophe, technological disaster, social decay and a loss of control is also at work in recent thinking on cities. Respected urban commentator Deyan Sudjic argues cities are on the "edge of chaos" and can bring out our "lurking paranoia".[7] In a competition run by the US History Channel to design the City of the Future 2106, crystalline towers of Manhattan Island disappearing under flood waters clearly referenced Roland Emmerich's *The Day After Tomorrow*. "It is not undue pessimism that is dangerous, but undue optimism"[8] argues Homer-Dixon, and urban theorist Mike Davis agrees, criticising the UN for their failure to be pessimistic enough about cities. Praising the work of the Pentagon and war-games of cold war think tank the RAND Corporation, he argues we face an 'urbanisation of insurgency'.[9] Elsewhere Davis' Southern California landscape provides a setting for real and imagined disasters[10], prompting one reviewer to recommend the 'virtual mayhem' of these "entertaining travelogues in fear, crime and disaster" as useful material for horror writers.[11] Kunstler criticises Davis' "awful urban vision of the future" but nevertheless sketches his vision of a de-industrialised future in which the "nascent warrior culture" of the underclass redirects its energies from "hip hop entertainments to real guerrilla warfare".[12]

2.2. A Risky World? The Loss of Confidence in Modernity

The apocalyptic imagination of the future has been mirrored in recent years by our anxious view of the present. The sociologist Ulrich Beck argues we now live in a 'risk society'[13] and points to environmental degradation, nuclear power and terrorism as examples of the large scale risks we now face.[14] The globalised, borderless world of the risk society is said to undermine our ability to delimit risk, either spatially, temporally or socially. Hence "one is no longer concerned with attaining something 'good', but with *preventing* the worst".[15]

Contemporary pessimism reflects a collapse in belief as to the benefits and the certainties of modernity. This is expressed through the sense that the future direction of society is beyond our control. For Leith[16], as a result of modern 24 hour lifestyles, 100,000 Britons suffer from chronic fatigue, the consequence of relentless consumption, spiralling debt and the information overload. His exhausted, sleepless characters are apparently representative of the "millions of people at the end of their physical and spiritual tether". Leith cites a doctor who argues; "if you put a human being in a modern city, and add computers, mobile phones, credit cards, neon lights and 24 hour shopping, what do you expect?" In this "age of exhaustion" our lives are ruled by clocks and artificial light and modern lives endure a distorted relationship with the natural world. "Complexity begets choice, choice inspires technology, which in turn creates further complications. We end up out of sync with the rhythms of nature".[17]

This sense of society cut adrift from its moorings bears relation to the idea that the risk society is "a second era of modernity when the *controllability* of first modernity has collapsed". Lack of controllability is a strong feature of contemporary urban discourse, for example in writing on sprawl. A critic of the theorists of sprawl explains that behind the criticisms of sprawl is the way that modernity is today experienced as a "loss

of control, of the city, of the countryside, of community and of the body". He argues that human beings experience modern life as being swamped by trends outwith their control.[18]

As modernity has come to be viewed negatively, change, and the ambition to alter our circumstances is viewed disdainfully for risking adverse consequences. Kunstler argues that there was "no limit to what the men of vision could imagine", and scoffs that the vibrant future they depicted failed to materialise[19]. The lesson drawn by many - that the pursuit of change is destabilising - underpins the rise of a conservative, and fatalistic outlook within urban discourse. Just as new urbanism is to be defended for its "modesty of ambition",[20] plans that do seek transformational change are increasingly viewed through a misanthropic ecological framework. For example, unable to accept the possibility that extreme weather events can occur as part of a natural cycle, Head and Lawrence argue that "there is no such thing as a natural disaster, only human interference in the natural world, which causes problems".[21]

2.3. The Rise and Rise of the Sustainable Urban Risk Manager

In line with recasting human endeavour as "interference", growth, technologies, and development itself have, under the doctrine of sustainable development, become viewed as problematic activities that threaten the stability of the natural and social worlds. The failure to mount an intellectual challenge to theories hostile to modernity and to human progress has had a significant effect on the culture and practice of urbanism. No aspect of urban change is now outwith the reach of the risk managers who use arbitrary, perceived limits of the capacity for environmental, social and economic change in order to exert constraints on all building activity. The urban professions now operate risk managers.

The repercussions of this approach are evident in the way a view of the city has emerged which is the antithesis of its former self. In line with concerns over population growth, human activity – traditionally the very essence of city life - has become something to fear rather than celebrate. Material prosperity, bright lights, cultural experimentation, and social freedoms were all once underpinned by an expansionary dynamic in both the social and physical manifestations of the city. This sentiment is captured well by Suketu Mehta who argues that Maximum City Bombay is a "gateway… to money, to position, to dreams and devils"[22].

Recently, the energised Maximum City and its culture of congestion[23] have been recast as 'unsustainable'. Urban risk managers have become obsessed with a Minimum City emphasis of limiting human activity. Metropolitan mobility has become frowned upon amid admonishments to live locally, and to cycle and walk; instead of bright lights, turning off the lights has been popularised in a new ritualised acknowledgement of the sins of energy use. In the Minimum City, planning *what* to build is less in evidence than obsessively analysing what *may* occur as a result of what *might* be built. Consequently materials, structures and waste are endlessly subjected to the remorseless logic of carbon counting. In the Minimum City the masterplan has given way to the audit as the urban risk manager's tool of choice, applied to energy use, embodied energy, travel, social inclusion, social exclusion, physical health, mental health, stakeholder involvement, and more.

Central to the risk management ethos is a reverence for safety – expressed in technical terms as the 'precautionary principle'. Whether, new materials or structural solutions in architecture; the permeability of urban neighbourhoods; or the design of road layouts and junctions; all design decisions now operate around the logic of safety first, and demanding standards of proof that no harm shall come. The criteria for assessing 'harm' varies widely - bio-diversity, crime levels, increased traffic, degraded water quality to name but a few factors. Given the level at which a plan becomes 'harmful' is arbitrary, practically any reason not to build can be justified[24]. Particularly problematic is the way the logic of managing risks introduces an incentive to exaggerate potentially harmful impacts as a means to secure a decision against building. The apocalyptic imagination we encountered in Davis and Kunstler is driven by the current logic of urbanism in which talking up the potential risks is the means to secure a favourable decision. The precautionary principle exemplifies sustainability's *reliance* on imagination, and *collapse* of imagination[25].

2.4 Reliance on Imagination

In 1950's horror films, cinematic monsters were mainly the product of *specific* aspects of societal unease. For example, the aliens or monsters that attacked young couples or single women reflected a society worried

about the coming sexual revolution. Today, the cinematic apocalypse in films such as *The Road* reflects a more unfocused angst. The sociologist Frank Furedi argues that our fears are often no longer shaped by our direct experiences. Unlike the risk society thesis which posits new and bigger threats, for Furedi anxieties no longer attributable to clearly formulated threats indicate the emergence of a *culture of fear*[26]. In a society that perceives itself as permanently 'at risk', the priority given to managing risks derives from the cultural perception that society is vulnerable. For some this sense of vulnerability reflects a period of intense change - the virtual world, the rise of China, or new ways of fighting wars. Yet for Furedi, the cultural sense of vulnerability reflects not the *magnitude* and *pace* of change itself, but our *inability to endow change with meaning*[27].

The intense consciousness of change today is paralleled by a sense of disorientation about knowing how to interpret it. For Homer-Dixon, in an era of 'unbounded uncertainty' we can no longer operate on the basis of manageable risks. He argues that "we can't estimate probabilities because we don't have any clear basis for making such a judgement". [28] Along similar lines, Beck argues that "risks presuppose decision. These decisions were previously undertaken with fixed norms of calculability, connecting means and ends, or causes and effects. These norms are precisely what the 'world risk society' has rendered invalid."[29] The 'basis of judgement' or the 'norms' referred to above are not a reference to our *technical* capacity to asses risk. They refer instead to the *explanatory framework* that we need to interpret risks. Put another way, the collapse of 'norms' is actually the collapse of *values*, the beliefs that society holds, and which give it meaning and allow it to envisage the future. Without a credible set of beliefs, those charged with making decisions no longer have clear and adequate reference frameworks within which to take their decisions.

The consequences are clear in planning where the absence of belief in the future and therefore a credible vision for cities has become particularly damaging. For example, as sustainability has called into question the previous beliefs in improvements to mobility, it has become difficult to build transport infrastructure like airports or railways which are subjected to endless consultation and risk assessments processes. A relatively simple road bridge over the London Thames was in planning for almost 25 years, stranded by the designers inability to convince economists that it would pay for itself; environmentalists that no more emissions would result; and communities that it will be safe enough. Modellers modelled, communities mounted safety campaigns, and economists searched for the figures that prove "less congestion = economic advantage". Yet the bridge was recently rejected on the grounds that it would encourage more traffic at each end of the bridge. A clear commitment to social progress to be realised through improvements to mobility would have resulted in a designers developing the technical means of dealing with extra traffic safely and efficiently. Instead the risks attached to the plethora of 'sustainable' targets undermined project[30].

Finally, it is notable that for those opposed to the project, the best means to stop it was to inflate the potential environmental and safety risks. One of the few points of connection left between figures in authority (including planners) and the public is to engage around the public's fears – for example potential threats to community safety. At a time when safety takes precedence talking up the risks is likely to sway a favourable assessment. Consequently there is an impetus towards speculating on worst possible outcomes, or what has been termed 'possibilistic' thinking[31]. According to one researcher, encouraging imagination of worst case scenarios "convinces people to prepare for disasters by changing their behaviours through puncturing their rationalizations". He adds that "communication which produces high fear can lead to sensible action"[32]. The imagination is imprisoned by a framework in which a feel good factor derives from inflating risks and then claiming to be acting safely and responsibly in the face of supposed threats.[33] Worryingly, setting aside rational thinking and cranking up the levels of fear are invitations to defer to intuition and prejudice rather than to rely on human knowledge – the very attributes that urbanism and planning rely upon.

2.5 Collapse of the Imagination

By downplaying the human capacity for rational action and intervention, the corollary of the reliance on imagination (of disaster) is the collapse of the imagination as to how humans might improve the future. For Homer-Dixon surprises keep coming out the blue, because we're fundamentally "ignorant of our own ignorance. We're surrounded by unknown unknowns"[34]. Yet if we are ignorant of our own ignorance, then we become paralysed and unable to act. Sudjic reflected on the era of modernism, and lamented that "theirs

was a generation that was freed from the luxury of self-doubt. Ours is not and that is why we struggle now when we try to think what cities should be."[35] Lacerated by self-doubt, unsurprisingly the priority becomes merely avoiding destabilising the world further. Fostering 'resilience' is now the height of ambition. Disconnecting from global mobility systems, going off grid with decentralised energy supplies, local materials and food are part of a survivalist mentality that contrasts with maximising ambitions of the past where global connections, integrated supply chains, and a sophisticated division of labour were considered forward thinking.

Confidence in creating dynamic cities integrated across the planet is now seen as either distinctly utopian, dangerous, or both. Whereas utopian thought experiments expressed the idea of human perfectibility, today the human figure is derided or absent. Bestseller *The World Without Us* anticipates the post-human future where cities are re-colonised by nature as the weather and vegetation destroy buildings, and infrastructure systems collapse through the cessation of maintenance. However, rather than realising its objective of making the case for population controls, the book instead confirms the extent to which the planet would be degraded without a human presence. It is, after all, humans that give meaning to the world. In the Minimum City nature is idealised and human intervention frowned upon, but in the words of one interviewee, "if people are gone from this cycle, nature itself will be over".[36]

3. THE MAXIMUM CITY

3.1 Reconnecting Cities with the Search for Civilisation

Some of the finest urban design relates to periods in history when humanity prospered through a heightened confidence in its ability to comprehend the world, and through doing so, to improve it. From the Renaissance onwards, as humanity moved to the centre of the universe, breakthroughs in cosmology, astronomy, and physiology exerted an enormous influence on human thinking and the vision for society. The essence of the Florentine creative genius was a desire for constant experiment, constant improvement, and constant change[37] and the primacy allocated to rationality and experimentation over superstition and speculation were synonymous with the advance of civilisation. The ability to observe, organise and abstract led to a growing mastery of geographical space. Under Pope Sixtus V, designers drew upon more than 200 years of intense interest in expanding human knowledge to revolutionise the organisation of urban space which was addressed at a hitherto unexplored scale. The motivations for Baroque Rome, Baron Haussmann's Paris, and Daniel Burnham's Chicago differed substantially – religion, Napoleonic state power and the explosive dynamic of capitalist markets all played their part. However the ambitious plans and celebrated results all reflected confidence in the human ability master his environment and turn it to his advantage.

Florence, Rome, Paris, and Chicago are synonymous with the advance of civilisation. However, as Armstrong argues in *In Search of Civilisation*,[38] the concept has become distinctly unfashionable. The book contains some important pointers as to how we might think about the future if the city. The Latin word 'civis' is, he recaps, the root of 'city'. With the possible exception of God he argues, civilisation is the grandest, most ambitious idea that humanity has devised. Liberal use of old fashioned words such as 'noble', 'ideals', 'beauty', and 'truth' remind us that architecture and urban design were once noble arts, and that urban space benefitted from a commitment to spiritual prosperity embodied in civilised ideals. Importantly, Armstrong argues there are two sides to the pursuit of civilisation; the *spiritual prosperity* commonly associated with civilisation is only possible in combination with advancing *material prosperity*. There are many examples of how these forces can work together. Renaissance Florence was the richest city in Europe; the boulevards and street life of Haussmann's Paris relied upon financial services innovations; and in Chicago, the frontier of American capitalism, grew famous skyscrapers and urban parks. In place of material prosperity (now the moral disease of 'affluenza'), contemporary urban discourse celebrates well-being and happiness – a largely therapeutic concept concerned with the inner-state. But 'happiness' argues Armstrong is inadequate in the search for civilisation. He offers a useful alternative as the more 'active' notion of human 'flourishing'. Loss, disappointment, suffering and self doubt are certainly all present. But achievement is valuably grounded in developing the character and actions to realise ambitions.

So how can we make use of some of these ideas about civilisation – the pursuit of knowledge, spiritual *and* material prosperity, and human flourishing? Again Armstrong provides a useful answer by suggesting that

pursuit of civilisation must engage the imagination: "Civilisation is not so much what we have as a picture of what we need."[39] As we have seen, pessimistic times have given rise to the sentiment that the future is not be about what we can achieve, but what we should prevent. Reconnecting cities with the search for civilisation requires the reverse. It requires us to develop ideas of what we want and need, and therefore produces an orientation towards what we can achieve. Yet this requires more than merely an exercise in positive thinking. The idea of human flourishing requires us to recover confidence in realising the human potential.

3.2 The City as an Act of Will

In the urban design classic *Design of Cities*, Bacon outlines his hope of "dispelling the idea, so widely and uncritically held, that cities are a kind of grand accident, beyond the control of human will" which "respond only to some immutable law". He contended that "human will can be exercised effectively" and consequently "the form that [cities] take will be a true expression of the highest aspirations of our civilisation"[40]. Bacon was responding to an emerging problem which has been consolidated in the time since. In the 1960's improving computer power and emerging mathematical techniques were used capture and model evidence of existing trends in society. Presciently Bacon recognised that urbanism was at risk of surrendering to a mathematically extrapolated future which at best can be nothing more than an extension of what existed before. He concluded that "we are in danger of losing one of the most important concepts of mankind, that the future is what we make it"[41]

Six years before Bacon, Jacobs[42] concluded her attack on modernism by embracing the new science of complexity. Jacobs' instincts were largely humanising ones, and were exemplified by her defence of the street, the symbol of modernity. Yet she was writing was at a time when the benefits of modernity were being called into question and "beneath her modernist text there is an anti modernist subtext, a sort of undertow of nostalgia for a family and neighbourhood in which she could be securely embedded".[43] Modernity, which Berman argues is the process of continual reinvention or "the desire to wipe out whatever came before to achieve a radically new departure", is now off limits. As urbanism adopts the science of complexity it absents the human agency associated with modernity. Bacon's fears that cities would be treated as a grand accident are confirmed as complex systems, non-linear behaviour, and feedback processes becomes the means through which urban economies and cities are self-organising. The adoption of the model of self-organisation confirms the collapse of a humanist framework for building cities. Christopher Alexander is one of the few contemporary urbanists comfortable talking about beauty. But he can only do so adopting a value system based on ecology and mysticism ("beyond the limits of space and time" .[44]). He throws away not only the 'mechanistic idea of order' but rationality and values rooted in human civilisation.

3.3 Maximising the human footprint

Use of the word 'civilisation' came into widespread use in Britain and France during the enlightenment years of the eighteenth century. One of the key ideas of the day was that civilisation represented an improvement on the way that things happen to be.

At times *humanity adapts itself to nature*. We have learnt to live in even the most inhospitable environments - hot, cold, wet, and dry; and, when we had limited transport, we thrived even on limited natural resources. Yet cities flourish when *humanity takes more control of nature* and channel it to our advantage. For example, our ability to build aqueducts and piping systems that can move water away from where it happens to gather, and retain it in reservoirs near where we want to use it, has helped cities and its citizens prosper. Sometimes the solutions are merely practical; but often they go way beyond what is needed to practically achieve our aims. The aqueducts that march across the countryside of southern France, or the Basilica Cistern beneath the streets of Istanbul are beautiful engineering solutions to the requirement to adapt the environment to our own needs.

At other times still, we do much more than channel nature, we *transform nature*.[45] It seldom merits a mention now, but the grand avenues, public spaces and parks of City Beautiful Chicago were made possible only by reversing the flow of the Chicago River as the means to impose control over a low-lying, lake side environment. Improvements to the operation of urban Osaka and the mobility of its citizens were realised through building a new airport in Osaka Bay. The manmade islands that support the airport comprise three

mountains demolished and moved into the bay. In each case, whether to beautify the city environment or to make us more mobile, transforming nature worked to the benefit of mankind.

The risk management approach today resists this type of ambition, and endorses the argument that the very attempt to experiment and exert greater control can end up exacerbating the problem.[46] Consequently, of the options outlined above, adapting and transforming the environment to meet our needs are now less popular than the idea humanity must adapt to nature's requirements. Lawrence and Head argue that a "disastrous element" is added when human society puts itself in the way of likely natural phenomena or changes the ecosystems that have evolved"[47]. By reversing the enlightenment view of civilisation, not only is nature idealised, but the knowledge and technologies that we use to shape cities are viewed as problematic, or even dangerous. For Beck, the limited controllability of the Risk Society means that not only is knowledge incomplete, but more and better knowledge often brings more uncertainty[48]. Conservative thinker John Gray argues that science increases human power but merely magnifies the flaws in human nature. He argues the diffusion of knowledge to create new technologies will lead to knowledge-enabled mass destruction[49] . Often marxists hold similar views. One argues that there is an inner connection "between technological dynamism, instability, dissolution of social solidarities, environmental degradation".[50]

Opposition to cars, aeroplanes, systems building and nuclear power suggest that we no longer to see a technology as positive means of exerting control over our circumstances, and illustrate the collapse in confidence in human progress. It is this same loss of confidence which underlies the idealisation of biological and evolutionary solutions which are now considered more attractive than 'mechanical' solutions derived from the human imagination. "Human development in many ways is the opposite of bio-mimicary", and exhibits at best "bio-ignorance, or even bio-arrogance"[51]. Once shaping the world to our own ends is abandoned, and nature becomes the primary determinant of what we do, the role of designers becomes not to interfere with nature's ways. When representatives of the leading engineers Arup argue that "it may be possible to discourage future development"[52], it is clear that the barriers to building the future come not from NIMBYs but from the intellectual framework that operates across urbanism and planning.

The desire to minimise what we do and the retreat from imposing humanity's vision represents the biggest problem in the current culture of planning. Yet it seems clear that extending humanity's reach offers the prospects of further improvements for society. Today, despite a huge growth in population, from a historical perspective, food, energy and materials are more affordable than they have been for much of human history. Human well-being has never been higher[53]. It is true that with respect to the environment, the position is mixed, but here the signs are also promising. Initially, in the rich countries, affluence and technology worsened environmental quality, but eventually they provided the methods and means for cleaning up. After decades of deterioration, many areas of the environment have improved substantially undergoing what Golkany calls "environmental transition". While developing world countries have yet to undergo full transitions, technological diffusion and increasing affluence place them ahead of where developed countries used to be at equivalent levels of development. Unfortunately, at precisely the point when we should be open to experimenting with new techniques and technologies to continue this improvement, we have come to reject the idea that we should explore further what the future might have to offer.

3.4 Exploring the future

The time scales for achieving environmental transition illustrate that while we might, as Armstrong suggests, paint a picture of what we need, development is a long term game. It was 200 years after the emergence of perspective drawing that obelisks were used as structuring device in Baroque Rome, and it is clear that integrating human insights into the building of cities sometimes happens relatively slowly. Civilisation is not a completed state, but is better considered a process in which we constantly renegotiate our situation by exploring the future. Critics of sprawl for example, commonly argue that growth must be reigned in because the modern city is an unfathomable entity that lacks a pleasing order. Yet there is a structure and logic to the vast metropolitan areas that represent the contemporary city – they are based on modern transport technologies that allow us hitherto unforeseen levels of mobility. But the contemporary city is still young, and what we have not yet achieved is to give satisfactory expression to the constituent parts.

Today, the rate of scientific discovery remains impressive and sometimes this is translated into practical uses relatively quickly. Unfortunately, the limits imposed by sustainable risk managers often mean we do not take full advantage. Take the area of technological development labelled 'urban informatics'. The Italian architect and researcher Carlo Ratti and colleagues at the MIT SENSEable City Lab recently modelled real time movement in Rome, illustrating the huge potential for digital technologies to help adapt how cities will work in the future.[54] However, the way that this technology will be used is an open question. At a time when localism trumps metropolitanism, improving citywide movement networks is viewed as inhibiting the construction of workable bonds within local communities. Better mobility is perceived as a *social problem.* Consequently, the possibilities for new developments are downplayed in lieu of making us adapt to what is considered permissible in accordance with the limits set by the risk manager. As Ratti argues, for the first time ever, the bus may follow us rather than we follow the bus[55]. Yet if travel is considered unsustainable and localism is the priority, the journey is likely to take us no further than the local shop. The perception of sustainable limits that dominates our cultural worldview inhibits us from realising our potential to do more.

Instead of constantly inventing and deferring to limits, renewing the culture of planning needs to centre on freeing ourselves to think about, and then tackle some of the questions that we can genuinely make a difference. The question of interaction and exchange has been fundamental to the success of cities, but technological progress and evolving urban forms requires these questions to be constantly reviewed. Given modern metropolitan areas incorporate both compact, high density spaces *and* diffuse, low density spaces, a 21st century transport system requires both vertical flexibility and horizontal velocity. Differentiated spaces capable of responding to a range of activities, and organised to incorporate the highly varying velocities of modern movement systems is the challenge that 20th century urbanism effectively turned its back upon. The 3rd dimension (or Z factor) in cities has never been systematically explored in a way that can move cities beyond a 2D urbanism[56]. In far too many cities transportation remains located almost wholly on the earth's surface. Given the technologies for jet packs, flying cars and moveable houses have been in existence for almost half a century, we should ask why it is that European cities considered to be the most forward thinking are once again looking to the tram, a 19th century form of technology.

By moving beyond the framework of sustainable risk management, some common questions would take on new meaning, and offer the potential for new, improved, and solutions. Take the question of the densities that we would ideally build at. Today, the answers are derived from the prejudices of what is considered sustainable, usually considered as a derivative of energy use. Compact city advocates view density as a means of using less energy in transport; advocates of suburbia see possibilities for permaculture (thereby avoiding industrialised agriculture), and off-grid renewables. Yet, who is right in this 'debate' should actually be of no consequence at a time when humanity, if it chooses, has already gained the means of creating almost unlimited amounts of energy.[57] Yet the question of why energy use should determine urban forms is rarely asked. Yet instead of enforcing minimum/maximum densities on the basis of our needless fear over energy, we should explore how individually, and collectively we want to live in the future.

Yet the question of how we would like to live is rarely asked with any seriousness or conviction. But what would an ideal neighbourhood look like if we had unlimited supply of cheap energy and no restrictions on mobility? How should public space be dimensioned to reflect modern considerations of beauty? If genetic engineering and crop modification can revolutionise productivity in agriculture, what represents desirable new uses for newly redundant agricultural land? And given many of us seem to like living near to the sea, why have we never built an entire floating city? Surely the future is there for us to explore if we want to?

In *Design of Cities*, Bacon revisits the work of Paul Klee. From *The Thinking Eye*[58] he looks at the drawings of two types of men. In Bacon's words, Ingrown Man "is inward looking, self-concerned and safe. He reduces contact with the outside world to a minimum avoiding exposure and involvement". Alternatively, Klee/Bacon give us Outgoing Man who is "ebullient, involved, exposed in both his strengths and his frailties. He reaches for more than he has or knows, he leaps into space, aware of the possible consequences of a fail; Outgoing man has the courage to be vulnerable". Building cities means having the confidence to think about going where we have not yet been, to transcend existing limits. Yet to explore requires establishing the freedom to engage with new situations and experiences, *free of an advance guarantee that the results will be as anticipated.* As Klee argues, *the Future is what we make it.*[59] It is this aspect of urbanism that is

antithetical to the contemporary risk managers who impose ever more limits in the hope *of minimising* future problems. The urban question of today centres on how we recover the confidence to explore the urban future in pursuit of maximising the human potential.

CONCLUSION - THE URBAN QUESTION TODAY

The urban question today is not centred on developing new forms of governance, updating stakeholder strategies, developing environmental guidance, or devising design audits. These will not only fail to recognise the real problem, they will reinforce it and move the planning in the wrong direction.

Looked at through the prism of Minimum and Maximum cities, the urban question requires first and foremost tackling the cultural disposition that leads society in general, and urbanists and planners in particular, to advocate less and not more from life. It relates to the predilection for precaution over experimentation, safety over taking risks, and regulations over greater freedom. Planners need to be prepared to challenge the fatalistic outlook that drives the imagination of disaster.

At root, the urban question is centred on how the project of building of cities can be reconnected with a broader, reinvigorated search for civilisation. For those who view the building of cities as part of this broader project, the freedom to embark on a process of exploration and discovery is essential. Recovering a sense of the human potential requires that urbanists and planners are prepared to reject the doctrine of sustainability with its controls based on the idea that human activity must be limited, its conservative imposition of arbitrary limits, and its reverence for safety. Discovering a better future means taking risks. "Dare to know, dare to act, dare to fail" should be the motto of the urbanists of the future.[60]

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[1] "Book of Eli" http://www.imdb.com/title/tt1037705/. "The Road" http://pro.imdb.com/title/tt0898367/
[2] Moss, S., "Cold Earth", London, Granta, 2009
[3] Jensen, L., "The Rapture", New York, Doubleday, 2009
[4] Vidal, J., "David Miliband sets out to shock on global warming tour", UK Guardian, 7 September 2009.
[5] Mulvey, S., "Averting a perfect storm of shortages", BBC News, 24 August 2009. http://news.bbc.co.uk/1/hi/sci/tech/8213884.stm
[6] Anthony, A ., "Liam Donaldson: The nation's own flu fighter", UK Observer, 5 July 2009
[7] Sudjic, D., "Cities on the Edge of Chaos, UK Observer, 9 March 2008
[8]Homer-Dixon, T., "Fear is Good", Toronto Globe and Mail, 4 April 2009, www.homerdoxon.
[9] Davis , M., "Planet of Slums", London, Verso, p203.
[10] Davis , M., "Ecology of Fear: Los Angeles and the Imagination of Disaster", New York, Vintage, 1999.
[11] Kleffel, R. "Book Review, Mike Davis, Ecology of Fear", Review Date 2001 http://trashotron.com/agony/reviews/davis-ecology_of_fear.htm
[12] Kunstler, J.H. "A Reflection on Cities of the Future", Undated, www.kunstler.com
[13] Beck, U., "World Risk Society", Cambridge, Polity Press, 1999.
[14] Beck, U., "The Terrorist Threat: World Risk Society Revisited", *Theory Culture Society*.2002; Vol 19, No 4, pp39-55.
[15] Beck, U., cited in Hammond, P., "Media, War, Postmodernity, London, Routledge, 2007, p106.
[16] Leith, W., "Sleepless? Stressed? Anxious? Exhausted?" UK Observer, 12 July 2009.
[17] Op-cit
[18] Sharro, K., "Density vs Sprawl" in Eds, Clements, D., Donald, A., Earnshaw, M. & Williams, A. "The Future of Community: Reports of a Death Greatly Exaggerated", London, Pluto Press, 2009
[19] Kunstler, J.H. "A Reflection on Cities of the Future", Undated, www.kunstler.com
[20] Kunstler, J.H. "A Reflection on Cities of the Future", Undated, www.kunstler.com
[21] Head, P. & Lawrence, G., "Urban Development to Combat Climate Change: Dongtan Eco City and Risk Management Strategies", CTBUH 8th World Congress.
[22] Mehta, S., "Bombay: Lost and Found", London, Review, 2004.
[23] Koolhaas, R., "Delirious New York: A Retroactive Manifesto for New York" London, Thames and Hudson, 1978.

[24] Future Cities Project, "Position Paper: Consultation on EIA Guidance Documents" http://www.futurecities.org.uk/positions/pos09061.html
[25] Williams, A., "The Enemies of Progress: The Dangers of Sustainability" Exeter, Societas, 2008, p147.
[26] Furedi, F., "A Culture of Fear Revisited", London, Continuum, 2006.
[27] Furedi, F., "Invitation to Terror: The Expanding Empire of the Unknown", London, Continuum, 2007.
[28] Homer-Dixon, T., "From Risk to Uncertainty", Toronto Globe and Mail, 19 Mar 2008.
[29] Beck, U., "World Risk Society" Cambridge, Polity Press, 1999.
[30] Vidal, J & Milmo, D., "Transport for London scraps plans for six-lane road bridge", UK Guardian, 6 November 2008
[31] Clarke, L., "Possibilistic Thinking: A New Conceptual Tool for Thinking about Extreme Events", Social Research: An International Quarterly of Social Sciences Vol 75, No 3 (2008), pp 855 – 872.
[32] Arranson, E., "Fear, Denial, and Sensible Action in the Face of Disaster", Social Research: An International Quarterly of Social Sciences, Vol 75, No 3 (2008), pp 669 – 690.
[33] Williams, A., "The Enemies of Progress: The Dangers of Sustainability" Exeter, Societas, 2008, p147.
[34] Homer-Dixon, T., "From Risk to Uncertainty", Toronto Globe and Mail, 19 Mar 2008.
[35] Sudjic, D., "Cities on the Edge of Chaos, UK Observer, 9 March 2008.
[36] Weisman, A., "The World Without Us", London, Virgin, 2007, p270.
[37] Hall, P., "Cities in Civilisation", London, Phoenix, 1998, p77.
[38] Armstrong, J., "In Search of Civilisation: Remaking a Tarnished Idea", London, Allen Lane, 2009.
[39] Armstrong, J., "In Search of Civilisation: Remaking a Tarnished Idea", London, Allen Lane, 2009.
[40] Bacon, E., "Design of Cities", Harmondsworth, Penguin, 1967, (Revised Edition 1974), p13.
[41] Bacon, E., "Design of Cities", Harmondsworth, Penguin, 1967, (Revised Edition 1974), p13.
[42] Jacobs, J., "The Death and Life of Great American Cities", London, Penguin, 1961,
[43] Berman, M., "All that is solid melts into air" London, Verso, 1982, pp 324 – 331.
[44] Alexander, C., "The Nature of Order: Book 1 The Phenomenon of Life " Berkley, Centre for Environmental Structure, 2002, p23.
[45] Woudhuysen, J and Kaplinsky, J., "Energise! A Future for Energy Innovation", London, Beautiful Books, 2009, see Chapter 7, "Energising Humanity, Humanising the Planet".
[46] Walker, B & Salt, D., "Resilience Thinking", Washington, Island, 2006, p8.
[47] Head, P. & Lawrence, G., "Urban Development to Combat Climate Change: Dongtan Eco City and Risk Management Strategies", CTBUH 8th World Congress.
[48] Beck, U., "World Risk Society" Cambridge, Polity Press, 1999.
[49] Gray, J. "Straw Dogs: Thoughts on Humans and other animals" London, Granta, 2002. pxiii
[50] Harvey, D., A Brief History of Neo-liberalism", Oxford, Oxford University Press, 2005
[51] Head, P. & Lawrence, G., Urban Development to Combat Climate Change: Dongtan Eco City and Rosk Management Strategies, CTBUH 8th World Congress.
[52] Head, P. & Lawrence, G., Urban Development to Combat Climate Change: Dongtan Eco City and Risk Management Strategies, CTBUH 8th World Congress.
[53] Golkany, I.M., "Have increases in population, affluence and technology worsened human and environmental well-being?" The Electronic Journal of Sustainable Development Vol 1, No 3 (2009)
[54] MIT SENSEable City Lab http://senseable.mit.edu/
[55] Hill, D., "Towards and New Architect: Carlo Ratti" Australian Design ¦ Review 5 May 2009 http://www.australiandesignreview.com/feature/11635-Towards-a-new-architect-Carlo-Ratti
[56] Reeves, P., "The Z Factor: Exploiting the 3rd Dimension" Urban Design, Issue 109, Winter 2009.
[57] Woudhuysen, J and Kaplinsky, J., "Energise! A Future for Energy Innovation", London, Beautiful Books, 2009
[58] Klee, P., "The Thinking Eye: The notebooks of Paul Klee" cited in Bacon, E., "Design of Cities" Harmondsworth, Penguin, 1967 (Revised Edition 1974), p38.
[59] ibid, p13
[60] ManTowNHuman, "Manifesto: Towards a New Humanism in Architecture", July 2008. http://www.futurecities.org.uk/images/mantownhuman.pdf

All web articles last accessed 14 September 2009