

Radical change, or just more of the same? Thoughts on COVID and urban change

Peter J Larkham

Keynote paper presented at the First International blended conference on Pandemics and Urban Form, "Pandemics and the changing built environment", Istanbul, Turkey, April 2022

This keynote paper presents an opportunity to think about issues of urban change, and the types of factors that institute change or shape the nature and speed of change. We are used to thinking of catastrophe as an impetus for change in terms of war, natural and human-made disaster. Some might even consider a booming economy and a landscape of construction cranes to be an urban catastrophe. But the extent to which medical catastrophe, a pandemic, can lead directly to urban change is perhaps debateable. Certainly the last major worldwide pandemic, the so-called Spanish influenza after the First World War, did not lead to appreciable *urban* change, and only temporary behavioural change. It might have informed the post-war British housing standards, though; and there is a suggestion that it influenced the forms suggested by the Modern Movement. Perhaps the last pandemic where we could see change was the Black Death in the mid-thirteenth centuries. The scale of urban depopulation in Britain was so great that areas of open space in town centres, almost certainly previously occupied, remain evident in some urban maps of the 1500s. So although the COVID pandemic does provide an opportunity for us to rethink the shape of future cities, I would be cautious.

Even so, there are many aspects of urban form that could be linked to health, or the lack of it through physical factors - and indeed one of the key originating factors for the growth of town planning in Britain - from where I draw most of my examples - was concern for public health, after the recognition of physical factors in the spread of urban cholera. And, inevitably, much has been written even since the start of the COVID crisis. I thought Mike Crang's 2000 paper 'Urban morphology and the shaping of the transmissible city' was something about virus contagion - for example whether some diseases are more contagious in some urban forms - but instead it was about "the implications of an electronically mediated environment". Nevertheless I'll return to one of his ideas at the end of this presentation. Jabareen and Eizenberg are more directly relevant and more contentious: they assert that "the current situation of the COVID-19 pandemic and its related spatial practices construct a new socio-spatial urban order with far-reaching implications ... [they] suggest that the prevailing urban form holds some major deficiencies that impede its functioning and its adaptation to new conditions". I will explore both statements. In fact COVID as an impetus for critically rethinking urban form, urban design and planning has been commonplace: we are exhorted to review urban mobility; housing, working and public spaces; resettle underpopulated rural areas, and more.

First, being cautious, there are some factors which I would call 'principles of urban change' that we need to consider. First might be inertia. A dictionary definition of this is "a tendency to do nothing or to remain unchanged". Unless there is an impetus for change, urban form will remain relatively static, for relatively lengthy periods. Conzen recognised this when he identified the different rates of change of street, plot, building and land use patterns. Streets persist longest, but other features from fragments to entire buildings may persist as relics when their original landscapes have largely vanished. Caniggia showed how Roman building features could affect the position and size of buildings in Como even today. The longevity of some features shapes urban character and appearance.

Second is the scale of investment, both financial and cultural, in the existing built environment which, unlike the destruction in calamities of war, fire or natural disaster, is still with us despite the deaths of a pandemic. Our built environments during COVID may have been lacking in people, but the structures remained unchanged. This could be seen as an inertia factor, but the impact of finance - funding and investment - on the built environment is often poorly recognised.

Third is the speed of change: this can be fast or slow, or - to use a geological metaphor – catastrophic or gradualistic. Some things, as Conzen recognised, are quick and easy - subdividing and selling a plot; others more difficult - buying land and moving infrastructure to change a street alignment. Through urban history, most change appears to have been small-scale, incremental, gradualistic; but interspersed in some (but not all) places by short periods of catastrophe and response. This leads to the model of ‘punctuated equilibria’, developed in evolutionary biology by Niles Eldridge and Stephen Jay Gould in the early 1970s - and more recently adapted to fields ranging from organisational change to changing energy and environmental policy. Here we might consider what happens during the period of crisis, and how the urban form in one period of relative equilibrium differs from its predecessor.

Fourth, we might consider the scale of change: small-scale and – to use Conzen’s term, ‘adaptive’, or large-scale and more radical, that might fall into a Conzenian category of ‘augmentative’. Adapting an existing urban fabric can be relatively easy; augmenting it with new street and plot layouts can be expensive, problematic and time-consuming.

In summary, what I am considering is how resilient our current urban landscapes might be. But I’m using it in the definition of “the ability of a substance or object to spring back into shape”, rather than - as so much of the urban literature uses it - “the capacity to recover quickly from difficulties”. We might term this the “bounceback theory”.

My caution over ascribing change to COVID also derives from other factors that are happening at - historically at least - much the same time.

First might be the long-lasting world economic crisis from 2008. This has been long-lasting with major consequences for economic growth, quality of life, and the amount of money available for urban change.

Second would be the rapidly-increasing awareness of climate change and its likely impacts – rising temperature and rainfall, extreme weather events and so on: so great that it is now often called the climate emergency. This brings issues of the energy efficiency of buildings and other urban activities such as transport to the fore, and we have been seeking physical responses to this for three decades now, albeit slowly.

Third would be the pace of technological development that can be applied to buildings, cities and the factors of urban life. We now adopt technology changes very quickly. For example, a move from petrol to electric vehicles, while driven by awareness of finite fossil fuels and the climate-change impacts of their combustion, will lead to small-scale changes in the provision of charging points and, perhaps, on a slightly larger scale the redundancy of the petrol filling stations that are still common and sometimes prominent in our urban landscapes. A move, technology permitting, to more autonomous vehicles, and a new model of ownership and use that is more communal than individual, might free much space in terms of suburban

and city-centre parking and, with more efficient use of street space, might free some of that space for other uses such as cycle lanes, pedestrians or even other pavement uses.

Technology has also allowed more online retailing, with a resultant decline in the use or need for traditional high street space from the middle of the last decade. Consumer behaviour has also changed in other ways from before the COVID outbreak, including - in the UK at least - a reduction in new car purchasing (although cars have become larger!), and a reduction in dwelling and garden sizes - in the UK beyond what we see elsewhere in Europe at least.

So far, then, we have seen a range of longer-term factors affecting built-form use and change, and factors tending to result in urban inertia, or the 'bounce-back to previous state' definition of resilience. So what did COVID bring?

First, I'll suggest that it brought nothing that had not been foreseen. An online simulation of a respiratory pandemic, involving ten thousand online participants in 2008, predicted virtually everything that has happened in the last two years. But responsible authorities didn't learn much from it, and this isn't unusual: the US Navy's 1932 fleet battle simulation identified the vulnerability of its Pacific bases to surprise attack, yet 1941 still surprised them.

The first key change was behavioural. Willingly or otherwise, most urban people began to wear masks, observe some form of social distancing, and reduce their socialising, shopping trips and work commuting. So retail footfall declined quickly and catastrophically, while online retailing, for those fortunate enough to have the capability and equipment, rose equally swiftly. This, of course, led to road use falling and city centres lying empty. We saw a massive rise in cycling (green on the left-hand graph) but a rise in vehicle speed amongst those still using motor vehicles. In lockdown and since, many people have worked from home; while this has proven good for some, with reduced commuting and increased quality of life, for others the pressures of space and competing uses have been problematic. Not all dwellings have had appropriate physical space or even bandwidth.

When lockdowns were lifted, if only partially, we saw physical changes. COVID did produce some fast changes, but they seem to have been largely small-scale and temporary. Here are a couple of examples in my home town. They are little different from those last weekend to cope with the tourists visiting for Shakespeare's birthday celebrations. Typically, to accommodate social distancing for pedestrians, we temporarily widened pavements and closed some streets to traffic, or imposed other restrictions - easier when there was so little vehicular traffic (apart from the increased number of delivery vans in suburban areas!). Even in the UK's climate, on-street cafes and pubs became quite common. In several countries, restaurants colonised outdoor space with small greenhouses or other temporary structures to create dining spaces resistant to disease transmission. Similar approaches have been used to break up the previously-popular open-plan offices into much smaller spaces. We have seen other land-use changes, with unused car parks converted to COVID testing sites, vaccine centres and so on. Similar approaches occurred within buildings, with one-way systems, barriers, signs and so on.

Official guidance for a built environment response to COVID was produced surprisingly quickly. Perhaps someone had indeed been planning ahead. This publication came out initially on 13 May 2020, and by September that year we were on version 7.3. It contains very detailed suggestions for managing all types of built environments and urban forms, although all were quick, temporary and relatively cheap. It prioritised providing additional

space, such as widened and one-way pavements, for those people allowed out under the various lockdown regimes.

Therefore, following the guidance, all of these physical changes - urban adaptations - were small-scale, rapidly done and have proven temporary. They are more adaptive than augmentative, in Conzen's terms. And, although we are not wholly free of the disease, what has happened in the last two-and-a-quarter years? Most signs, cones and bollards have gone - these in Sunderland in the north of England went as early as July 2021. Some municipal authorities sought public feedback about the changes, especially where roads were closed to vehicular traffic. While some respondents identified benefits, others - principally businesses and vehicle users - have fought to have the previous situation reinstated. Few seem to have been made permanent. My own observations in the English Midlands are that where streetworks are taking place there is little attempt to capitalise on the experience of the COVID period, for example by providing additional cycle space.

Why might this be so? Are we seeing urban inertia, or the resilient rebound to a pre-COVID state? One issue is that making temporary changes permanent costs money, and after both the global economic crisis and the direct financial costs of COVID many UK local authorities are in very poor financial shape, some only functioning with very large Government loans and several virtually bankrupt. A second issue is behaviour change. As soon as possible (and sometimes before, although I won't mention the UK Prime Minister's alleged parties) much behaviour returned to near normal, if that is defined by pre-COVID patterns. We see this in, for example, motor vehicle use: even if many are still working from home at least part of the time, many are returning to their places of work, at least some of the time, although there is much variation and some employers are accepting flexible work practices. Some report greater productivity and satisfaction with flexible arrangements, although others have sought to compel office workers back to the office, with the view that this constitutes more efficient use of space. Retail footfall rose quickly after lockdown, although online shopping and home deliveries have also remained popular. Perhaps some of this footfall is a return to "leisure shopping" - itself a behaviour change in Western economies from the 1970s and 1980s. Overall in the UK, by July 2021, after 17 months of crisis, urban economies were already recovering - though more quickly in smaller towns than in the major conurbations. But there are exceptions: my town, Stratford, lost about 45% of its shops, and they have not returned: but then, we lost over 4 million Shakespeare tourists, and they haven't returned yet either.

So, in my view, there is quite a substantial body of evidence showing a tendency to return a long way to the pre-pandemic urban situation.

What can we learn for the post-pandemic future? Some have mentioned the need for more urban space, lower densities, fewer city-centre offices, and hence the demise of the skyscraper. Certainly in 2020 and 2021 tall building starts and planning applications fell in London and elsewhere. Yet New York has also opened Central Park Tower, the world's tallest residential building. As another critic noted, "the history of the skyscraper is a history of people predicting its end". Indeed, after the destruction of the World Trade Center in 2001, and the view that skyscrapers were vulnerable targets, we have built more than five times as many skyscrapers than existed before. Others argue that urban planning policies should *continue* to advocate higher-density development, both because of the imperatives of responding to environmental change through sustainable development types, and the

equivocal evidence about the relationship between high-density areas and COVID infection and death rates.

Perhaps there may be changes in the form of work spaces. Larger shared spaces with lower-density occupation, better ventilation including openable windows, better IT and a more flexible management approach to the use of space, including bookable hot-desking, have been advocated. But such ideas are hardly new. They may produce work environments that are more resistant to COVID infection spread, but also lead to greater workplace satisfaction and, perhaps, productivity. They won't affect urban form much, being largely an issue for building interiors; but, surely, many existing buildings could be retrofitted in this way. There will surely be an impact for the commercial real estate market in terms of the values of unimproved office space, though.

Retailing patterns have changed, and seem likely to continue changing as online and delivery technologies improve. Again, though, this isn't a specific COVID response. There may be major real estate implications here, if high street retail floorspace continues to be under-used and vacancy rates rise as more retailing goes online. It has been suggested that some forms of retailing may need only small 'sample' shops, where customers can "feel the quality" but order online for home delivery. And these may be 'pop-up' shops. The value of un-needed retail property is likely to plummet. A problem for town planning is what should be done with this property, particularly in town centres, and more so in town centres that are also tourist destinations for their character, appearance and heritage value. How far can desirable characteristics be retained in re-use and conversion? But what would happen if heritage interests inhibit such alteration?

How do we want to live? Housing is equally likely to face changes, as indeed housing provision did in the UK following the crisis of both First and Second World Wars, with new governmental house design standards. Now we might want smarter homes, perhaps larger if we spend more time at home and less at work; with flexible work and social spaces. More flexibility for adaptation to changing life stages might help. More space at entranceways for storing potentially contaminated clothing, and washing, has been mentioned. And, for sustainability rather than COVID reasons, we need better insulation and more use of renewable energy and concern for water management. We could re-think domestic access to nature, and even increase domestic-scale urban agriculture. The balance between private and shared space might change with, for example, wider pedestrian footpaths. The space allocated for individual vehicles might change if we use fewer private cars. Garage space could be re-purposed. But we might need more storage space for cycles. However, we also need to remember the inertia factor: in the UK at least, the great majority of the houses we will have in 2050 have already been built: many some decades ago. While we can improve the houses themselves to some extent, it is much more difficult to change the urban landscapes in which they sit.

Streets and spaces will also change. I have mentioned some aspects related to residential areas, where people have been walking on traffic-free streets rather than on narrow and badly-maintained pavements. But town centres are likely to change, as many have enjoyed using traffic-free spaces for other uses. Cyclists certainly benefited. Widened pavements made walking more comfortable. COVID may have given considerable impetus to town-centre pedestrianisation or, at the least, more sharing of space. More urban green spaces may be desirable, as this has been shown to improve mental health, as well as lead to a reduction in risk of obesity and diabetes – conditions which significantly increase vulnerability to

COVID-19 and other diseases. Urban Astroturf, though it has been popular, is surely not the right long-term answer! Of course, it will be easier to design such space into new layouts, if that space can be afforded: who will pay?

However, some of these visions could be just as visionary, and remain just as unbuilt, as the visions following the catastrophe of Second World War damage. More buildings and cities exist on paper (or, I suppose, online now) than are ever built. The design ideal hits the inertia factors I mentioned earlier.

To conclude, then. Mike Crang (2000) suggested that “city shape should be thought of a morphology, a logic of changing and transmission, rather than a static shape”. I would agree: and COVID has pushed us to review that logic, to challenge the accepted standards and ways of operating that are rooted, often, in the immediate post-Second World War years. Cities certainly are not static, and they will change after COVID. But, despite all of the interesting ideas - not all of which are really new - we do not yet know the direction or speed of that change.

Will a ‘new normal’ emerge? One that, for example, prioritises active and green travel, and reallocates road space? A more sustainable attitude to development, travel and other behaviour shows that we do need to do this, and the hiatus of COVID has shown that it can be done, and delivers benefits. So perhaps Jabareen and Eizenberg were right: the pandemic has led to “a new socio-spatial urban order”, albeit often temporary, emphasising that the “prevailing urban form holds some major deficiencies that impede its functioning and its adaptation to new conditions”. To move to a new normal, a more sustainable normal, involves overcoming the substantial forces of inertia and ‘bounceback resilience’ that I have discussed here. Inevitably this will be a lengthy and expensive process. While COVID gave every person in the world a wake-up call, rather like the neutron bomb of the late Cold War period, it killed and incapacitated people but caused no direct property damage. So all of our inherited structures, the drag of inertia, still remain.

Finally, two quick comments: first, we should not be too swift to draw conclusions and predict post-pandemic trends. We are still *in* the pandemic, to one extent or another; and other factors including war in Ukraine have inevitable effects. So last weekend’s headlines from the *Financial Times* warn us of a slowdown in workers returning to their offices, and high street retail sales falling because of high interest rates. The trends I mentioned earlier may have been only short-term. So perhaps the enduring COVID impact in the UK will be the efforts by one community in Liverpool to re-name their street - Corona Street is felt to be inappropriate!