

The Post-Pandemic World: Are Big Cities Hollowing Out?

Ever since cities first emerged in Neolithic times, they have been organised and have grown around their origin locations which invariably have been the places where trade and exchange first took place. In the contemporary world, certainly since the beginning of the industrial revolution, these origins are usually their commercial cores, now known in US parlance as central business districts or CBDs. Cities have exploded in this fashion, growing outwards in concentric rings which have fallen in population density as new transportation technologies have made it possible to live at greater distances from their centres. This process of decentralisation associated mainly with population movements, has been accompanied by one of concentration. Commercial activities have grown massively in central locations, with these forces competing with one another for space but with the urban extent growing ever bigger in size.

Some cities have declined in population but in global terms, these are rather few. Although a shift of manufacturing industry from their original centres where their raw materials were located has taken place in most industrialised economies where such activities have been transformed though automation and miniaturization, growth has remained the dominant force. In the last century, urban populations have become suburbanised while commercial and retail activities have tended to remain and further concentrate in the CBD with some evidence in the last 25 years of populations also being attracted back to more central locations. In my book *Inventing Future Cities*, I have called this the 'standard model' (Batty, 2018).

This model has been thrown into the air by the pandemic. In early 2020 when the disease first struck, most governments mandated non-essential workers which in Britain for example constituted about 80% of the population, to 'work from home' (WFH) for long periods (months) as the pandemic waxed and waned. This would have been impossible had not the world economy become global, based on largely service-orientated and highly automated manufacturing production. New information technologies which enabled people to meet remotely first emerged about 20 years ago, with *Skype* for example beginning in 2003 but remaining a niche forum for remote meeting until about 2013. By the time the pandemic began, this and similar systems such as *Zoom* had evolved to the point where virtual meetings were easy and robust and of a quality that was good enough to replace traditional face to face interactions emerged. The other piece of the jigsaw in a world of remote communications, was the provision of network infrastructure that in most industrialised countries enabled most populations to access the internet at very low cost with small computers from desktops to smart phones which had become widely available as portable devices.

Once the pandemic ended, it was assumed that most people would return to their previous patterns of behaviour with respect to their work, schooling, shopping and so on but enough time has now passed since the 'official' end of the pandemic (dated by the UK governments between the end of February and early March 2022, Wikipedia, 2023) for us to now realise

that previous patterns have not quite been restored. The evidence about new patterns of mobility so far is still anecdotal, taken largely from Mobile Apps, and one-off local surveys for not enough time has elapsed for the various official censuses to have resumed on their previous cycles. In fact the UK Population Census did take place on April 6th 2021 but this was in the heart of lockdown and the Office of National Statistics are still getting to grips with the responses particularly to questions pertaining to data such as the journey to work. Early work is somewhat inconclusive with respect to this data (Smith, 2022). In London, Swinney (2023) at the Centre for Cities has monitored the return to work with various sample surveys that show that the return in central London is such that 50% of workers are now only coming into the office 3 days a week, down from just over 4 days before the pandemic. The actual numbers are approximate in that in the 5 day working week different proportions of workers work different numbers of days within this envelop of 5 days. In the report, Swinney (2023) says "Two days in the office is the most popular working pattern, but half of workers are in at least three days per week". This hybrid mode of working appears to be the new normal, but it is contingent on the fact that the impact of the pandemic and its ending is still working itself out. In some respects, it might well be that the pandemic has simply forced the pattern for working from home to become established and this was already in prospect using new conference and internet software such as Zoom. In short, the long awaited 'working from home' predicted many years ago almost before the internet was even thought about, by people like Alvin Toffler (1979), is coming to pass.

There is substantial anecdotal evidence that a sea change in where and when we work is happening, at least in the biggest cities. You can sense this if you live in the right places in a big city centre like London simply by observing the traffic on the road system, by the numbers of people frequenting coffee shops and restaurants and pubs, particularly on the 'dead days' of Mondays and Fridays when people now take a very long weekend. The passengers numbers on buses and trains – public transport – have declined dramatically with respect to travel to the densest parts of the city. Transport for London report that by May 2023, passengers on the tube throughout Greater London were back to nearly 90 % of early 2020 levels but in the centre these had only recovered to about 75% of these pre-pandemic volumes (TfL, 2023).

At the most impressionist level in terms of physical form and building occupancy, if you walk through the City of London (the financial quarter), the rate of vacant space in offices is clearly visible. In fact it is more noticeable in retailing but currently nearly 10% of offices are vacant whereas for the five years before the pandemic, the vacancy rate hovered around 6% (Statista, 2023). In fact the Local Data Company (2023) report that in the City of London, vacant space is 15% of the stock. There is little doubt that this is not going to change substantially until the economy comes back to pre-pandemic levels of growth but factored into all this are changed behaviour patterns in terms of working from home which are complemented by a massive shift to online retailing. The area I know best in London is around St Pauls. If you walk from the Museum of London at the end of London Wall to the cathedral virtually every building now 'appears' vacant, some even being vacancy before the pandemic began. Paternoster Square in front of the cathedral has lost all its retail and all the offices bounding the square appear empty. Substantial refitting is currently underway and some has been completed but commercial uses have not yet returned. It is hard and costly to turn these buildings into residential homes and thus the future is very unclear when it comes to what large CBDs will look like in 10 years' time if the current economic malaise is not dissipated.

Much of the same if not deeper in impact seems the case in Manhattan where some 17% of office space is vacant rising to 25% in the Wall Street area (Haag, 2023) and some commentators have suggested that vacancies of 20% or more will persist to 2028 or beyond. One suspects that many big cities around the world are facing the same problems. Karen Chappell (2023) at the School of Cities in the University of Toronto has produced an index of recovery for 62 cities in North America based on cell phone data by volume at points of interest defining city centres. She shows cities that have found it hard to recover with places like Boston MA, Chicago IL, Detroit, MI, and San Francisco CA reaching less than 50% of their pre-pandemic footfall but with places like San Diego CA, Tampa FL, and New York NY hitting 80%. What is quite clear is a new normal seems to be emerging which is reflecting this shift to not just working from home but doing many other things from home, and anywhere else, for that matter, online. This is the force towards a totally mobile society where many activities are footloose, with a liquidity that has never been possible hitherto.

This fall in patronage of locations where there is increasing demand towards the most accessible places in the city such as city centres, represents a kind of hollowing out of the central city (Heathcote, 2023). In fact highly centralised cities with hardly anyone living in their centres but thousands working in their core have become dominant in the last half century. The post pandemic move to working from home is upsetting this model for the first time. When any one can work from anywhere, distance will no longer act as the same arbiter of location than it has hitherto. In the cliché advertisement by AT and T in early 1990s America, the firm said: “Have you ever borrowed a book... from thousands of miles away?, Crossed the country... without stopping for directions? Or sent someone a fax ... from the beach? ... You will. And the company that will bring it to you?” The post-pandemic city is enshrined in this image of the future which has already come to pass and defines our present: it is in fact the “hollowed out” city.

What will this be like? It may well be not so different physically from our current fascination with high rise towers in the most accessible places. In fact, long term speculation on the form of the city in an internet-enabled world has been muted so far with most commentators suggesting that there will be a gradual transition to city forms where work is a much more a patchwork quilt of different land uses. In short, then the clustering of like activities – agglomeration economies – inside the city and between them may well loosen. In fact much will depend on what we value as to where we locate and it is entirely possible that current trends in the inner city and downtown living will continue and reinforce the current pattern of the rich dominating central locations and the poorer groups living on the edge, The post pandemic city is likely to be a city for the rich where the poor are squeezed out to the edge, much as some other modern day cities such as Paris. Some would say most big cities in the industrialised world have reached this point already. Like all predictions before, it is an enormous challenge to explain what is happening and an even bigger one to speculate on the morphology of the internet-enabled future city in the longer term.

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