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# SHRINKING CITIES

WHAT IF OUR CITIES STARTED TO SHRINK?

# Shrinking Cities

by Jodie Walker

**In this report, Secret Agent will discuss the potential impact of de-urbanisation and shrinking cities.**

**Many cities could face the consequences in the future and some cities of the world are currently dealing with them.**

Urbanisation has been an ongoing trend over the past few decades. It has had a huge impact on shaping our cities into what they are today. It has also influenced property prices.

Urbanisation is fuelled by population growth. This is often a result of people seeking job opportunities or education in cities and obviously happens at different rates depending on which particular city you're talking about.

What is becoming apparent from population measurements and predictions, is that a reversal of urbanisation is taking place in some cases. Just as there are positive feedback loops which propel the growth of a city forward, the opposite is also true.

With limited land available, as well as congested infrastructure and roads, it's plausible that there is an upper limit on how urbanised an area can become. What happens once this limit is reached is not known for sure. There are indications that it can result in the opposite of urbanisation which is de-urbanisation. The world's biggest cities need to prepare to manage this carefully in order to continue to thrive.

## **DE-URBANISATION**

If urbanisation is driven by an increasing population, de-urbanisation is fuelled by a population that is declining.

There are three main reasons that a city's population would shrink:

1. Declining fertility rates
2. Population ageing
3. Reduced migration from rural to urban areas (as well as reduced immigration from overseas)

### 1. Declining fertility rates

The total fertility rate is declining globally. According to the Global Burden of Disease study (GBD, 2017), half of the countries in the world have fertility rates less than the replacement value (the number of births required to balance out death rates). In Australia, the fertility rate has been below replacement value since 1976, however it has fluctuated up and down. In 2001 it was 1.73 babies per woman and in 2008 it reached 1.96 babies per woman, which was a thirty year high. (ABS, 2017)

If the replacement value is less than 2.1, it doesn't mean the population will shrink immediately. Other factors contribute to population figures. It does mean that the country is at risk of a declining population and will have to rely on migration to continue growing or even sustain its population.

Reduced fertility rates have largely been a result of more women choosing to work and better access to contraception worldwide. It has also become increasingly expensive to raise children, especially if both parents want to work. It's simply not an option for some to have more than one child.

### 2. Population ageing

Lower fertility rates along with increased life expectancy results in an ageing population. An ageing population is a factor that contributes to declining fertility rates. If there are more women of non-child bearing age, there will be less births overall in that region.

According to the Australian Institute of Health and Welfare (AIHW, 2018), in 2017, 1 out of every 7 people in the Australian population were aged over 65. This represents 15% of the total population which has increased from only 9% in 1977. This is similar to the percentage of people aged over 65 in the U.S.A. (15%) and the U.K. (18%). (United Nations, 2017)

### 3. Reduced migration from rural to urban areas

International migration has a smaller impact on urbanisation than domestic migration where local residents move from suburban towns into the city and surrounding suburbs. Secret Agent has spoken about this movement numerous times in previous reports and how it has been a contributing factor in the rise of property values in these inner city areas.

“Worldwide, the share of people living in urban areas steadily increased by 0.9 percent a year between 1960 and 2014. Today, 54% of the world's population lives in cities and towns of all sizes, up from 34% in 1960.” (McKinsey Global Institute, 2016)

**Whilst we don't see this changing, limited space in already urbanised cities means that there is less room for rural to city migration to continue to drive growth as strongly as it has been.**

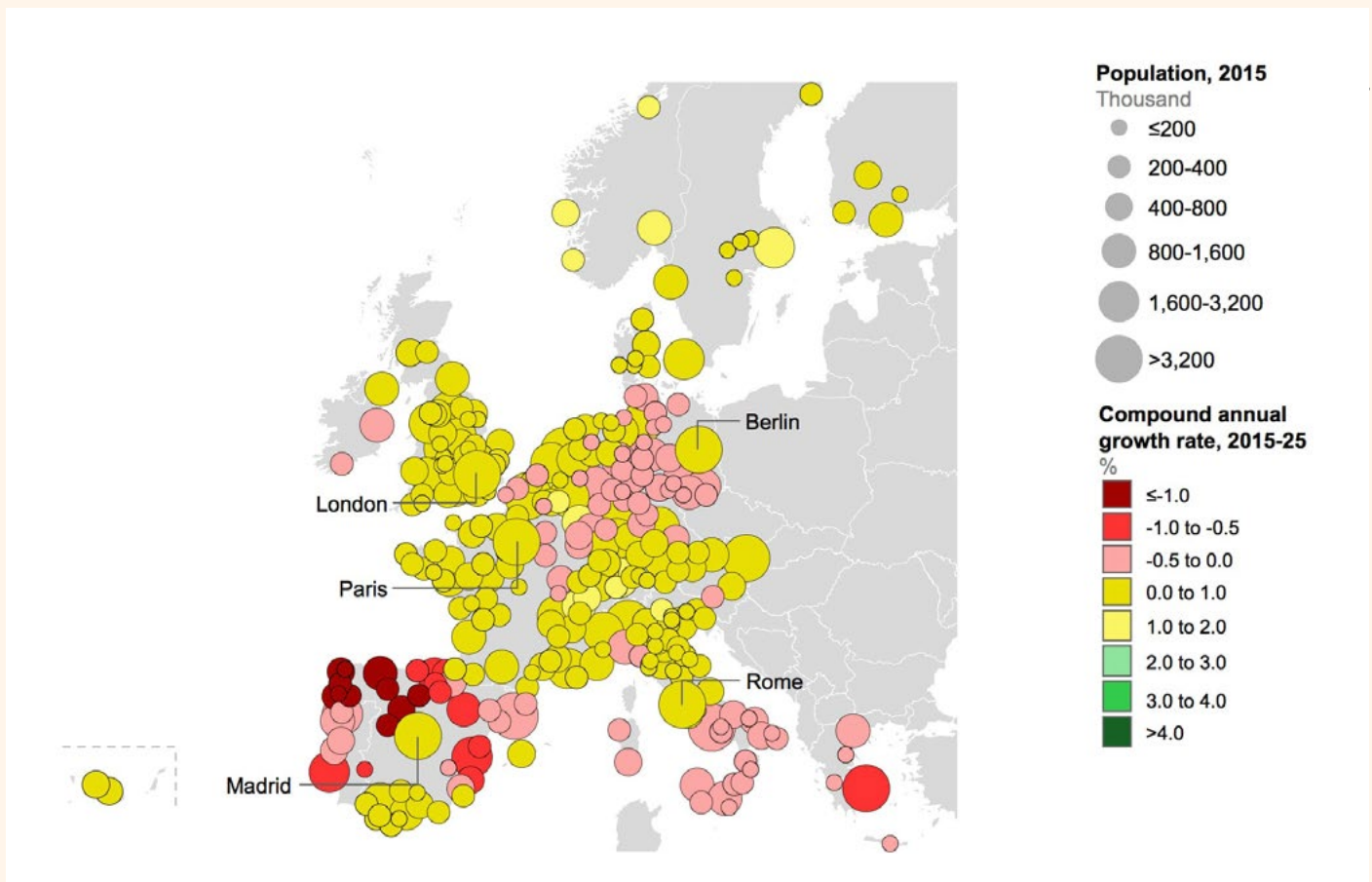
Domestic migration into a city will slow down at different rates depending on the availability of jobs, the time it takes to get to work, congestion, and housing affordability. For example, in Sydney, there was a net internal migration loss of 27300 people in 2017-2018, meaning more people moved away from Sydney to other parts of Australia. For the same time period, there was a 5% increase in net internal migration in Melbourne. (ABS, 2019)

Migration out of a city can happen quickly, especially if an entire industry is tied to that city. This can result in rapid population decline and shrinking of a city. For example, much of Detroit's population growth was due to its manufacturing industry which gave residents a job. When this closed down, many people were left without a job and had no option but to leave the city to find work elsewhere. This resulted in a mass exodus of people leaving Detroit and deterioration of the city.

Other factors affecting migration are technological advances and the environment. Environmental issues such as air pollution and noise can make a city less attractive to live in. As these worsen, more people are appreciating the quietness of regional areas. Technological advances complement this in that they have enabled people to work, have meetings and collaborate with colleagues from anywhere in the world. As virtual reality and augmented reality become more mainstream, it seems likely that more and more people will have the opportunity to work from home. There has also been a rise in online businesses and the people who own these can work from anywhere they choose. For people who have that luxury, they may prefer to move away from the city to areas that are less congested and more affordable to live in.

One of the biggest attractions of moving to the city is that it allows you to have a more convenient life. You don't need to drive an hour to get to work and there are shops, restaurants and other amenities at your doorstep.

**However, the attraction of city life is fading for some. Many rural and suburban areas now have cool restaurants popping up. If you can work from home and live in a cheaper house, it might be a better option.**



Map of Western Europe. Cities in Spain and Greece are set to shrink fast. Image from McKinsey Global Institute.

It could be that you don't have a choice if you don't have the correct skills for city work. According to Michael Storper (2019), there is an urban college wage premium. A college educated person earns more in the big city than what they do in suburban regions, even if they have the same skills. Part of the attraction of the city is what you can make in terms of income from having a city job. However, the cost of living in big cities continues to increase. Wages have not increased at the same rate. The pay premium means that skilled people still earn more than what they would with a job outside of the city. This might not be the case forever if the cost of living continues to rise. The pay premium is for a certain percentage of skilled workers, but for the rest of the working population, pays are the same in big cities and suburban regions. They don't have a premium that complements the high cost of living in the big cities. A higher proportion of income goes to housing and these people may have no choice but to live in suburban regions.

### PREDICTIONS FOR TOP CITIES OF THE WORLD

6% of the world's cities have seen their population shrink since the year 2000. In the next 5 years, it is expected that this will rise to 17% of developed cities in the world. (McKinsey Global, 2016)

Change in population growth has perhaps been most profound in Japan which seems to be at the forefront. Japan's

ageing and shrinking population is something they have been dealing with for years. In the mid 1970's the fertility rate dropped below replacement value and hit a low of 1.26 in 2005. (HLWM, 2018) On top of this, the population of women at childbearing age is decreasing each year, and the majority of Japan is already urbanised leaving little room for cities to expand from domestic or international migration.

According to population growth predictions (The Guardian, 2016), it is expected that the annual urban growth rate from 2015-2025 will be between 0-1% for most cities in the U.S.A and Western Europe. It is expected to be between 1-2% in Australian cities.

Overall, different cities even within the same country have very different demographics. As a result, de-urbanisation rates will differ. They will depend largely on the age of the people living in that city and the net migration of local and international people into that city. If the median age of residents is above 40, there is likely to be less births, and more deaths, which unless balanced out by net positive migration, will result in a reduced population. The impacts of de-urbanisation will also differ city by city.

### CONSEQUENCES OF SHRINKING CITIES

When a city's population declines rapidly it creates a positive feedback loop. Less people means less services and

potentially wasted infrastructure. If something isn't used, there is less incentive to want to maintain or improve it, and it slowly deteriorates. This decreases the overall attractiveness of that city as a desirable place to live or work. The economy of that city also declines and crime often rises, leaving the people who remain less confident about their future there.

Sometimes a city that grows too quickly can become a victim of its own success. A good example of this is what happened in Detroit where the population grew rapidly up to the 1950s when it was leading the way in the automobile manufacturing industry. When Japan and Europe came back on the scene following the end of World War 2, Detroit couldn't keep up with the competition and demand began to fall. Manufacturing plants closed down and with limited work opportunities people began to leave the city. The decline in industry and population both resulted in urban decay of the city with increased crime rates and homelessness. (Sugrue, 2004)

**One of the biggest issues with de-urbanisation is the change in consumption from people.**



A banner on a building in downtown Detroit calls for outsourcing to the city.  
Source: <https://www.theguardian.com/world/gallery/2013/jul/19/detroit-goes-bankrupt-in-pictures>  
Photograph: Bill Pugliano/Getty Images

Urbanising cities require more infrastructure and services. When populations start to decline in these cities, issues can arise if they've constructed more infrastructure than what they need. Infrastructure that is still in place needs to be maintained regardless of whether it is being used or not.

For example, Leipzig in Germany, expanded their water infrastructure to increase piped water and waste water facilities by 50%. During the 1990's they went through a period of de-urbanisation. Water use drastically declined from 700,000 m<sup>3</sup> to 165,000 m<sup>3</sup> per day because demand by industry and people declined. (Biswass et al, 2018) The supply network became too large for the demand. Consequently, if not maintained, water pools in the pipes rather than being forced to flow, allowing sedimentation to occur as well as bacterial growth and microbial contamination. The maintenance is costly and provides an issue that the city deals with to this day.

If a city stops growing due to decreased migration or fertility rates, the demographics of that city will change. This has effects on the education system and labour force.

In terms of the education system, a high number of students are required for a school to be worthwhile running. A school is only attractive if it can provide a range of subjects and co-curricular activities to prospective students. In cities with declining birth rates, schools are impacted in waves. First it is primary schools, and then secondary schools and colleges.

**Singapore is a good example of a prosperous city dealing with this issue. A number of schools are having to be closed or merged with other schools due to a declining number of students.**

College intake is expected to be 20% lower in 2019 than what it was in 2010. In 2017, the number of colleges was reduced from 23 to 19 and, 7 pairs of secondary schools and 4 pairs of primary schools were merged. (Davie, 2017) This doesn't leave future parents with a lot of confidence in the city as a place to send their children to school.

A reduced labour force is something Japan is dealing with. An ageing population, declining birth rates and increased life expectancy means there are less people at working age. Further, there are more people requiring care from services such as hospitals and nursing homes. Job vacancies are on the rise as a result. (SB, 2018)

**BENEFITS OF SHRINKING CITIES**

One of the main benefits of a shrinking city is that it can make the area a better place to live for people who choose to remain. As a result of less people, there will be less congestion on the roads and public transport. The air quality may also improve. However, there is a point at which a city can shrink too much and the consequences outweigh these benefits. For example, if the frequency of trains is reduced since less people are using them, they will become less convenient.

Another benefit is for rural areas which may see increased growth in their local economy due to de-urbanisation. People have to go somewhere. There is an opportunity for many outer suburbs or country regions to increase migration to their areas.

Many of these places are already tourist towns that attract people in for visits. Once people get a feel for the area, it can be an easy decision to move there, especially if they value a quieter life with less traffic. Lower property prices in rural areas also increase the appeal for many.

As the population stabilises or even declines in a city, it could also mean that housing costs begin to stabilise. If supply becomes greater than demand it could result in higher vacancy rates and lower sale prices. This will depend on the particular city and how many types of people find it appealing. The housing market of a city which is close to a medical precinct or university campus as well as home to a number of jobs, might not be as affected as one that does not have all those features.

De-urbanisation will force a city to continue to improve and evolve with the times. Competition amongst cities to retain and attract new residents can be a benefit if handled correctly but it can also be a challenge. De-urbanisation, once it sets in, can be hard to stop as the positive feedback loops on the way down continue to reverberate.

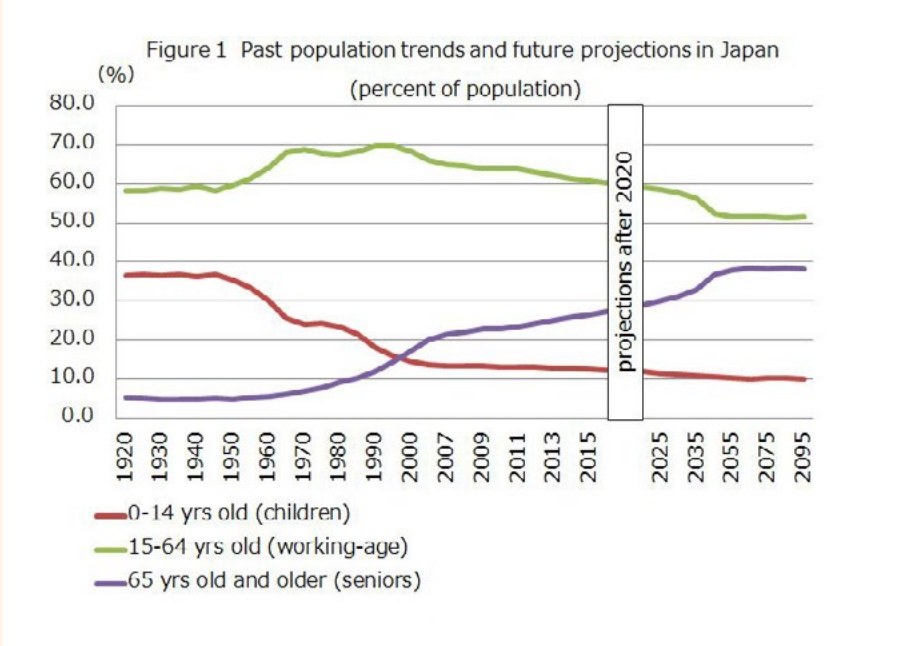
**FUTURE CHALLENGES FOR SHRINKING CITIES**

Cities have had it easy up to now. They have been desirable thanks to the convenience they offered people who wanted to be close to work or lifestyle. In the future, cities will have to work to continue to appeal to people as a destination to live. Retaining residents might not be a problem if wages continue to be higher in the city. So long as they get paid more, many people will choose to remain in urban areas over rural ones.

However, the percentage of retirees and elderly people in cities is rising and they will be looking for amenities other than work to keep them in the city. This means cities will be forced to remain an attractive place to live without the reliance of simply being a place where jobs are.

**Cities who relied on a dying industry to bring in people will not survive unless they can reinvent themselves. They will need to appeal to new demographics such as the elderly or students.**

For example, the city of Sheffield, U.K., has regenerated itself as a creative hub for students, artists and those in modern tech industries. In the past, Sheffield grew thanks to its steel



Past population trends and future projections in Japan.

Source: Statistical Handbook of Japan 2018 Statistics Bureau, Ministry of Internal Affairs and Communications

Graph and translation by JFS (japanfs.org)

manufacturing industry. When this was halted in the 1970s, the city could have declined rapidly but instead transformed itself to appeal to new demographics. (Aggour, 2016)

Bringing in residents will be one of the biggest challenges of the future city. There will be increased competition amongst one city to another. In order to remain attractive they will have to stay on top of issues such as air quality, climate change, safety, congestion, and limited working opportunities for those unqualified for the new economy. They will also need to control housing costs so that those who choose to remain or who want to move in, can afford to either buy or rent there.

Ageing populations bring in another challenge. In countries such as Australia, Belgium and Canada, a proportion of the healthcare system is funded by tax revenue. (Dixit, 2018) As more people require healthcare as they age, more money will need to be invested into services to keep up with demand. A growing elderly population will coincide with a decreased population of people at working ages. This means less people paying tax. Cities will need to come up with solutions on how to best manage this.

#### WILL ALL CITIES SHRINK?

Cities all go through cycles of growth and decline as they evolve. As mentioned, urbanisation will likely plateau at some point due to the lack of space in already urbanised cities. Australian cities still have room for growth and so haven't seen any signs of a plateau just yet. According to the ABS (2019), growth in Australian cities increased overall by 1.9% between 2017 and 2018.

De-urbanisation will happen at different rates in different regions of the world. In most cases it won't happen overnight unless the situation is extreme such as in Chernobyl or Fukushima. A lot of it will come down to whether or not that city is dynamic and able to adjust to change.

"For now, cities in most developing economies can continue to count on urbanisation to help bolster their population growth, but eventually urbanisation comes to a natural end once a large majority of citizens live in cities." (McKinsey Global Institute, 2016)

Growth may plateau due to a city reaching its capacity for urbanisation, however it doesn't mean growth will decline. If migration out of cities remains low then growth will simply plateau. If it becomes more popular to live outside cities, and given that the right infrastructure is set up in these areas, it could go the opposite way and the city will shrink. It also depends on the availability of jobs and accommodation. Some cities may have to increase their immigration rates to prevent

de-urbanisation. This could alter the composition of people living in that city without changing the actual number of people. It seems to be one of the best solutions to deal with ageing populations and declining numbers of people in the workforce.

#### WHAT DOES IT MEAN FOR PROPERTY VALUE?

Urbanisation has resulted in an increased demand for property in the city. This has caused prices and rents to sky rocket over the past decade. High property values can be a contributing factor to de-urbanisation. Expensive cities such as Manhattan attract wealthy people simply because they are the ones who can afford to live there. As poorer people are forced to leave, less people remain but they generally desire more space. In this way, de-urbanisation may not impact property prices since demand is still the same despite there being less people. In other cases, property value may also stabilise or even decrease. It will really depend on the capacity, attractiveness, demographics and economy of each particular city.

**Both home buyers and investors will need to be careful when choosing to purchase in a city that already has high property prices and also has a high potential to de-urbanise. It could be catastrophic for the investment.**

For example, many people bought into the property market in Australian cities which grew rapidly as a result of the mining boom. When this went bust, so did property values and those people never would have recovered their investment.

#### CONCLUSION

Despite the many benefits cities have to offer, they are not stable. Their growth and prosperity is not guaranteed. There are many examples historically of cities which have peaked and then had an exodus happen and then grew again. The situation now faced by cities is unique in that the population of them is changing. In many cases their populations are ageing and fertility rates are falling.

Demographic changes of the world's cities will impact more than just congestion and property values. When a city's population shrinks, this has vast consequences on the economy, as well as the local infrastructure, businesses and amenities. In order for big cities to remain an attractive place to live, they'll need to continue to have high paid employment, strong educational institutions and ensure climate change issues are dealt with.

As the easy growth of cities stalls due to decreased migration of rural populations, cities across the world will compete with each other to attract the brightest minds. This might mean that the super star cities continue to prosper and expand at the expense of slightly less dynamic world cities.

There are of course other issues that haven't been mentioned in this report such as the increased agitation between cities and surrounding towns. This is manifesting into a new style of political leadership. It's certainly a fascinating time for cities and the whole raft of issues that they are confronted with. ♦

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#### REFERENCES

ABS, 2017, <<https://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/3301.oMain%20Features42017?opendocument&tabname=Summary&prodno=3301.o&issue=2017&num=&view=>>>

ABS, 2019, <<https://www.abs.gov.au/ausstats/abs@.nsf/o/B7616AB91C66CDCFCA25827800183B7B?Opendocument>>

HWLM, 2018, <<https://www.japantimes.co.jp/opinion/2019/01/10/editorials/face-challenges-shrinking-aging-population/#.XXfOypNKjfy>>

Aggour, 2016. <<https://www.progrss.com/places/20161130/sheffield-city-steel-shapes-creative-future/>>

Biswass et al, 2018, <<https://www.weforum.org/agenda/2018/03/managing-shrinking-cities-in-an-expanding-world>>

Davie, 2017, <<https://www.straitstimes.com/singapore/education/school-mergers-reflect-falling-birth-rates>>

Dixit et al, 2018, A review of the Australian healthcare system: A policy perspective, SAGE open med.

McKinsey Global Institute, 2016. URBAN WORLD: MEETING THE DEMOGRAPHIC CHALLENGE.

GBD, 2018, Population and fertility by age and sex for 195 countries and territories, 1950–2017: a systematic analysis for the Global Burden of Disease Study 2017, The Lancet.

SB, 2018, <<https://www.economist.com/the-economist-explains/2018/11/26/the-challenges-of-japans-demography>>

Storper, 2019, Michael Storer 48hills Part One, <<https://www.youtube.com/watch?v=icyFS4LKorI>>

Surgue, 2004, From Motor City to Motor Metropolis: How the Automobile Industry Reshaped Urban America, Automobile in American Life and Society. University of Michigan.

The Guardian, 2016, <<https://www.theguardian.com/cities/gallery/2016/nov/02/global-population-decline-cities-mapped>>


United Nations, 2017, United Nations, Department of Economics and Social Affairs, Population Division (2017) World Population Prospects: The 2017 Revision.



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REIV ([reiv.com.au/property-data/auction-results](http://reiv.com.au/property-data/auction-results)),  
The Department of Human Resources, Google Maps,  
Land Victoria ([land.vic.gov.au](http://land.vic.gov.au)), [realestateview.com.au](http://realestateview.com.au),  
[realestate.com.au](http://realestate.com.au), [domain.com.au](http://domain.com.au), Fairfax, Residex, various  
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