

Coastal Urbanisation and Path Dependency - Towards Sustainability

Introduction

This chapter takes the description of the drivers of coastal urbanisation as measured by the other contributors to this project. Its aim is to discuss some of the reasons the urbanisation takes the form it does and how this is inextricably mixed with, even determined by, the history of the pattern of development and other sources of path dependency.

Path dependency may be the result of:

- 1 cultural and social factors,
- 2 institutional factors
- 3 physical conditions including infrastructure investment

1. Cultural and Social Factors

The first outcomes of the process of coastal urbanisation are those relating to cultural and social factors. The first observation we can make is to say that to a large extent the nature of the recent and current sea change is a consequence of the admiss society in which Australians live. The development that has occurred is the marketing of a dream. Although many have been sold the idea of *The Good Environment* being a place where they can be at peace with the world, away from the indignities of city life enjoying the sea, the sun and the sand, many who have responded to it have not given a moment's thought to the environment until it bites them literally and metaphorically. They have sought to defy or deny the environment, to 'sanitise' it, to reduce its irritants and in the process create urban space that produces great environmental stress.

The cultural and social factors that shape our collective response to the marketed dreams are heavily influenced by our need for engagement with others and our personal need for commitment and obligation to others. We also have a need for security. These continuing basic needs affect our individual and collective response to situations. Understanding these needs helps us make sense of the way the influx of new people in a destination area leads to dramatic changes in the social composition of the area.

The change in areas that were areas where the economic activities were predominantly rural or primary industry focused arise because the expectations of the sea changers differ from the existing residents, where there are any (some coastal urbanization has occurred in areas that were relatively 'untouched'). The existing residents might aspire to some of the aspects of urban living that the newcomers are allegedly fleeing from. The existing residents might actually want a range of urban services that are simply beyond them and they see a larger community as providing the demand to make their provision economical. That is they perceive benefits and opportunities arising from an increase in the scale of development.

The paradox is that sea changers claim that they want the simple, slower paced life yet they also continue to want some urban services or perceived levels of comfort and

convenience that are only available in the big cities from which they have migrated. The sea change destinations are sold as sites of consumption and pleasure. They are projected as locations where couples can enjoy or recapture the pleasures of their youth, where they can find solace in the simple pleasures of nature away from the noise, grit, smell and frustrating congestion of the city and have it to themselves (notice the advertisements for coastal developments that have images of beautiful but empty beaches, clear, clean water and perfect waves). For many the 'pitch' resonates as they struggle to keep up in the city so they respond to the blandishments and relocate to the coast. In the process they make demands for the provision of publicly or privately provided services.

But is not unproblematic. SIt is clear that even if the older generation of sea changers are happy to drop back a peg, their children generally are not.

I know it is not good social science to extrapolate from random samples of one but the comment I have heard many time by sea changers (including some very close to me) runs along the lines " We like it here. It really is paradise but what it needs is a place where you can get a decent cup of coffee". Or they will complain about the lack of a 'decent' delicatessen from which they can buy their prosciutto, chevre, ligurian olives and leatherwood honey.

Existing residents and sea changers alike often fail to acknowledge that the arrival of such services indicates that the place has changed or is about to change in ways they do not desire. Once the development reaches a critical level growth mechanisms may become self-generating and ultimately destroy the social structures and mix that was once found to be attractive and even beguiling. Of course some households are perfectly happy to make the change to the slower, less complicated, less stressed life but the majority seem inevitably to hanker after the perceived comforts of modernity.

We should not be too superior about this. It would be surprising if it was otherwise, given our market economy and the social pressures people are under - whether the cultural influences are peer group pressures, including, in the case of children, of school mates, television, lifestyle magazines and other media. Some of the influences are quite subtle. Once children are of school age they are also encouraged to participate in sports that are often competitive and that take them beyond the narrow confines of their little world. They are the ones least able to resist the 'attractions' of life outside their seaside paradise. They will succumb to the undoubted delights of the hedonism of the sun and surf but also recognize that there is a world beyond their local horizons. And of course the adults are subject to those same pressures. Observe the demand for golf courses as one manifestation of those pressures. Or the desire for 'somewhere to go at night' as another.

By and large sea changers must find a source of income Hugo, Murphy, Burnley and O'Connor all document the size of this demand for employment. Few can drop out into a subsistence economy – indeed, the conditions in most coastal urban developments are not conducive to growing your own food. Some are retired and may live on their pension or superannuation while others may live on a welfare transfers of a variety of kinds. But many do not have such 'external' sources of income and they seek work locally. They

may be forced to travel large distances seeking work and in some areas to the north and south of Brisbane and Sydney we observe significant numbers who now make long daily treks to work in the central and inner areas of those cities as people buy the dream of living on the coast yet having to continue to work in the city. Often they establish small businesses to provide the very services they find wanting. These sea changers may not be under less stress than they were while living in the city.

The arrival of sea changers and their subsequent demand for services may attract the attentions of larger scale developers who see opportunities to profit from further expansion. They market the dream of the paradise which, once they have embarked on their projects to build it, is then lost. The process of urbanisation is then well underway and produces the pressures the sea changers objected to in their previous urban lives.

One of the greatest social demands that sea changers make is for health services of a standard closer to that they enjoyed in the cities they escaped from compared with those typically available in isolated places. State governments are pressured to provide services that are usually uneconomic. Pressure for further growth to justify the service is a not infrequent response. The availability of health services relatively conveniently located may also become a selling point for developers trying to entice more sea changers to an area. And so the cycle is repeated.

There is an inevitability about these kinds of processes that come out of the social values and cultural and economic institutions of our society. They create the growth pressures that lead to the outcomes sea changers seek to avoid by coming to the area in the first place.

We have given little thought to the ways we might respond to the legitimate interests and demands of sea changers but deliver them in different ways. That is we have paid little attention to the ways in which we could respond to the demands of sea changers yet preserve to environment they profess to cherish.

2. Institutional Factors

Another set of constraints that affect the outcome of coastal urbanisation are mechanism like the influence of the pattern of land ownership and subdivision in the destination area and the rights that inhere in the private ownership of land.

Where the land holdings are large, owners may be able to direct incremental growth in a way that maximises their short or long-term benefit. Occasionally a land-owner or small community will see the long term benefit of a carefully planned release of development sites. In earlier periods, more often than not, to meet the short-term demand for allotments on the beach, or close to, it land has been subdivided and built on. This occurred, especially in areas where planning controls were weak. These weak controls and the tyranny of small decisions led to development taking place in the natural erosion zone. One consequence of this is that later developments simply added to those already existing. Frequently, as the area grew in size some dwelling sites were converted to local stores. Later incremental development was then often 'controlled' by the sitting interests.

To the extent that urban planning controls were then implemented they generally confirmed the existing use. But, as we know, a set of good short-term plans does not necessarily make a good long-term plan.

One of the consequences of this process of development is that development occurs too close to the beaches and estuaries making it difficult to develop efficient urban centres. Another is that the development often came to the attention of entrepreneurs such as shopping centre developers who saw opportunities to develop new shopping malls to meet the demands of the sea changers' for more and better quality shopping. They sold the dream of being able to live the relaxed and healthy life at the seaside while keeping in touch with the latest fads and fashions in clothing, food and personal services. In delivering their malls they helped reinforce another kind of commercial path dependency and further enshrine the consumerism that many claimed they were trying to escape when they fled the city. The new malls did give sea changers a wider variety of fresher foods but they did so according to the rules and diktats of national managers hundreds of kilometres away. They might have provided some local low paid jobs – often at the expense of a greater number of jobs in small stores - and the surpluses they generated were transmitted away from the community.

There is another process sea changers are subjected to. Try as they might they cannot completely 'drop out'. And for reasons of self interest they do not.

In our society, whatever the rights and privileges we enjoy, there is one obligation citizens have that makes them engage with the rest of the community. They are required to enrol to vote and they are required to vote on pain of penalties if they do not. They may, of course, vote 'informal' but the simple requirement to vote makes them objects for others to engage them at a minimum level in local affairs and the act of voting forces them a little further in that direction.

In many areas coastal urbanisation has been contentious. The wishes and aspirations of the largely rural or primary industry populations in regions that have become attractive to sea changers are often in conflict with the aspirations of the newcomers. Pre-existing populations often find that they are being taxed or levied to provide services for sea changers that they themselves have not sought or manage comfortably without.

The rate of growth of the sea changer populations in some areas has been astonishingly rapid disturbing the pre-existing social and political compacts. This has often been seen as a polarising influence setting people against one another. Existing interests have been happy to take advantage of the capital gain they can extract from the sale of land to the new comers but fight the increase in the value of their adjoining land that they wish to continue using in its present use and the consequential increase in their rate burden due to the increase in land values.

These differences have led to tensions that are expressed through the ballot box in local government elections. Occasionally these differences lead to contests between

pro-development groups who see development as a way of increasing the tax base and increasing prospects for growth and anti-development groups who see growth as further despoiling the environment and creating an endless cycle of pressures to increase property based revenues to provide services they do not believe are necessary or desirable. This is an illustration of the path dependency impacts of sea changer growth arising from the nature of our local government system, including the way it is funded.

The differences may also mean that State and Federal elections are contested by politicians representing the two different groups. Sea changers may feel that their views and aspirations are not well represented by the pre-existing political leaders and seek to replace them. Coastal urbanisation has been the site of several contests that have had State and national implications and is why State and Federal leaders pay close attention to electorates that have significant coastal urban populations.

3 Physical Conditions Including Infrastructure Investment

The physical conditions of a location may also affect the form and nature of development.

In many locations the initial attractiveness was related to the fact that there was a safe beach or bay – often on a kind of peninsula created by the mouth of a river or estuary that also offered other recreational attractions. The site became overcrowded and development intensified as the incremental growth focused on the nascent development that was already there. Intense development often occurred within the erosion zone in such a way that it was periodically threatened because the beach sand was transported away – especially in high storm events. A typical response has been to develop expensive publicly funded programs to 'replenish the beach' and or to build defensive structures to alter the local erosion pattern. These actions and responses to their environmental consequences create continuing demands and dependencies on the public realm to manage the situation. It is an illustration of situations where we privatise the gains but socialise the costs of growth.

Another consequence is that a scale pattern of development may occur that seriously compromises the local environment. Let me illustrate.

In many coastal areas the initial development took the form of simple structures from which households collected rain from their roofs for their consumption. Dwellings usually had primitive dry toilet facilities. As development reached a modest scale and as local authorities became aware or concerned about health risks of such a manner of dealing with human wastes, households installed septic toilet systems. These septic systems usually had a transpiration trench to dispose of the effluent. The toilet was flushed using water from the household tank.

Households were extremely conscious of the need to conserve water.

Once development reached a critical size the community sought to have a more reliable reticulated water supply. This was often argued for on health grounds. The supply of

water was usually obtained by damming a river in the hinterland thereby creating stress on the ecosystem from which the water was abstracted. Household consumption of water rose largely because the reticulated services were more reliable than the household tank, water was cheap and there was little immediate reminder of the need to conserve it.

The service was usually uneconomic leading to pressures for an increase in households to make the service more economical.

The consequence of the provision of reticulated water supplies, the increase in household consumption and the increase in numbers connected to the system frequently led to a situation where the massive volume of septic system effluent exceeded the capacity of the soils to absorb it. The effluent from the septic systems often percolated down through sandy soils until it hit a rock layer over which it seeped and eventually drained into the estuaries and bays on which the development occurred.

This effluent was rich in nutrients that frequently had a damaging effect on the environment.

In many instances communities then developed a septic sewerage system in which households had a collecting tank for the effluent that was periodically pumped out. The effluent was transported to a location where it could be disposed of - sometimes on farmland. By now the demands of sea changers were for a 'more modern system of waste disposal' so communities then often campaigned to have a sewerage system installed.

The scale of the system was usually small and expensive. Pressures were then mounted on local authorities to release more land for development to generate more revenue for the sewerage system. Developers also argued that now that there was a reticulated water supply and a piped sewerage system there were few impediments to development. In some cases local authorities prevented development unless the developers contributed to the cost of the sewerage scheme.

Now that there was no 'physical control' in place per capita and household water consumption rose dramatically, placing pressure on the water supply and leading to demands for increased dam storage. This further increased the stress on the ecosystem from which the water was abstracted.

The increase in volume of sewage now created serious disposal problems. To lessen the impact on the environment whose attractions had brought people to the area initially, local authorities were forced to treat the sewage. This was expensive and still left them with the problem of what to do with the effluent. In some cases local authorities have resorted to ex-filtration onto dune systems but these are unsatisfactory because the nutrients in the effluent may still find their way through the dunes to the estuaries and bays damaging their ecosystems.

At each step in the development after the initial reliance on collecting rain water for household use the approach has been to ignore the rain-water and treat it as a 'storm

water runoff problem'. In some jurisdictions the problem was magnified because household rain-water tanks were made illegal.

The consequence of this approach to development is not only the increased environmental stresses created at each stage but the pressures local communities and their authorities feel under to encourage growth to try to reduce the cost of the services. It becomes a vicious circle and ultimately destroys the attractions of the area.

This cautionary tale occurs because of the path dependency created by adherence to a particular approach to the provision of water supply and sewerage services.

The approach that has been taken is basically one developed in the nineteenth century. It has been little changed since. It essentially means that in this driest urbanised nation we have the world's highest per capita use of water that we use once and then discard, creating massive environmental problems for ourselves. A large part of the reason for this situation is that water supply has been gradually changed from being a service supplied for health reasons – at its public health benefits were outstanding – to being one provided by agencies that are more concerned about their 'bottom line' performance. They need the increased sale of water to justify the economics of the big pipe in big pipe out approach to meeting demands for supply of water. A similar philosophy applies to the provision of sewerage services.

An alternative approach relying more on the notion of water independent development would create less stress on the environment. Such an approach would give greater emphasis to the local collection of water, ensuring it was of high quality and of local recycling to reduce the environmental stress from human waste disposal. It would also produce less of a development imperative and result in less pressure on local authorities.

We have seen similar impacts arising from the way in which energy is supplied to new coastal urbanisation and the way waste disposal is managed.

Another source of path dependency that affects the form or nature of the coastal urbanisation arises from the building codes and conventions of design.

Where there are strong coastal zone protection measures in place planning and subdivision controls have usually been able to minimise these impacts. Unfortunately, early development initiatives have often 'done the damage' and created the development path before local authorities and state planning agencies have recognised the emerging threat to the environment.

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While there is a strong element of path dependency in coastal urbanisation I do not imply that all initial developments will inevitably grow into major centres – that clearly is not the case. However, our relatively weak controls have led to despoliation of many stretches of the coast.

These illustrations are offered to suggest that coastal urbanisation, like other forms of urbanisation, requires us to continually review and rethink both the nature of the urbanisation we wish to see, the way we facilitate it and the way we provide the services residents demand. The importance of this is that coastal urbanisation is on the boundary between separate but high interdependent ecological systems.

We need to take a fresh look at the ways in which we accommodate people, the way we distribute them across the nation, if we want to ensure that the coastal urbanisation does not compromise the very characteristics we desire in establishing such locations in the first place. In the process we would develop more sustainable urban centres. This would be a major step in pursuing a strategy of transition to sustainability.