

INTENSIFICATION, COMPACT CITY DEVELOPMENT and SUSTAINABILITY:

Case studies of Hong Kong (China) and Randstad (the Netherlands)

“people gathered in concentrations of city size and density can be considered a positive good, in the faith that they are desirable because they are the source of immense vitality, and because they do represent, in small geographic compass, a great and exuberant richness of differences and possibilities, many of these differences unique and unpredictable and all the more valuable because they are.”

(Jacobs, 1961, p. 220).

1. INTRODUCTION

What if...?

It is the year 2050 and people have lost all belief in the benefits of planning: “The euthanasia of planning and large-scale action is a fact. In the past decades, the endless archipelago of competing cities, provinces, regions and official bodies, staffed by a cacophony of individuals, snared together only by a tangled jungle of planning procedures has resulted in an extreme pessimism amongst most people” (MVRDV, 2005, p. 180). The goals for sustainability are not met, traffic congestion is rampant due to the lack of investment in public transport, the so-called ‘country-parks’ or ‘metropolitan parks’ are taken over by uncontrolled urban development, and agricultural products are needed to be imported instead of produced locally. City-life is decaying due to sprawled out development and failure to keep (social-cultural) facilities alive within the city. City-children are not able to play outdoors on the street and have completely lost their connection with nature.

Is this what we want? Does the single individual going to set the standard in 2050? Will this be the end of the collective initiative? Are we already too late, is this already happening today? Or are we able to stop these developments and provide a better place to live for ourselves and our children? How can planning play a structural role in this dynamic process?

But what if...?

By 2050, planning has proved its ability to guide developments and horizontal and vertical cooperation within the government, and cooperation with the market, has achieved a livable, healthy and attractive social-economic environment. The ‘country-parks’ or ‘metropolitan parks’ have developed into a peaceful and quiet place to withdraw yourself from the bustling city that are easily reachable by public transport. Public transport is widely available in cities and provides a better and quicker alternative than the car and social interaction have been stimulated through

intensification causing crime-rates to collapse. People have access to all the facilities they want in the cities and also green country parks on walking and cycling distance.

The above 'what-ifs' introduce some concepts that will be tackled in this dissertation. This research will cover notions such as sustainable development, regional planning, compact city, intensification, scale levels and the interrelations between them. The dense living environments of Randstad in the Netherlands and Hong Kong in China will be analyzed to get a clear picture on the advantages and disadvantages of the compact city development. However, this does not mean that the research done and lessons drawn are only applicable for the Randstad and Hong Kong. These findings will be useful and applicable for every ever changing, dynamic metropolitan region, all around the world.

1.1 Purpose of study

The purpose of this study is to analyze two cases on their compact city development and to extract recommendations for future development. Intentionally or unintentionally, compact city development has played, and continues to play, a very important role in the development of the Randstad and Hong Kong. In the Netherlands, decentralized development and the allowance of development in the countryside has been visible over a decade, resulting in a very dispersed and sprawled out expansion of urban living (VROM (Ministry of Housing, Spatial Planning and the Environment), 2009a). In less than a decade, 400 years of planning history has been demolished. The uniqueness of open, flat, diverse and scenic landscape in many parts of the Netherlands is being phased out and re-developed, and without drastic measures, may disappear entirely.

Generally speaking, the Netherlands and Hong Kong are seen as both successful examples of compact urban development. So why is it interesting to analyze these regions on their compact development in relation to sustainability? A simple answer is: because something which is good can be made better. A more complex answer is that societies are ever changing and planning needs to respond, keep up, and evolve. Strategies and policies need to be reviewed and modified in order to suit the local environment and context and insights from abroad can help to bring about this change. This research focuses on the advantages and possibilities of intensification and compact city development and how they contribute to a more sustainable development. This debate has been going on for decades and will continue to go on well into this new millennium.

But what is compact city development? Compact city development is mostly a feeling people have with a certain type of development. What can be compact in one city (e.g. Amsterdam) can be seen as sprawl in another city (e.g. Hong Kong). The level of compactness, and society's acceptance of it, can be measured by debate in the media. In Randstad, there have recently been debates about the 'disappearance of the typical Dutch landscape' caused by 'landscape cluttering'. I would like to cite the words of architect Bakker: "the Netherlands is not full, it looks full" (in: VNO-NCW jaarverslag, 2001). That is exactly where the challenge for the future lies. Can

planning help to get back the 'breathing space' for its citizens? Is it possible to build more houses and also have an increase of quality in planning and design? And if so, how are we going to achieve that?

On the other hand, Hong Kong struggles with the 'compactness' and 'high density development' in the city and the (long-term and short-term) effects on people. There is an enormous push towards more greenery and space for recreation within the city which seems to be generally hindered by development and economic prosperity. In Hong Kong, it seems that the 'breathing space' has been taken up by all kinds of other developments and concerns.

Why Hong Kong and Randstad?

Knowing Randstad quite well and having been studying in Hong Kong for almost two years, I see a lot of similarities between Hong Kong and Randstad. Both cases are struggling with their respective level of 'compactness' and their sustainability debate. It is well understood that there cannot be a set of rigid, strict guidelines be implemented everywhere and anywhere around the world that will guarantee sustainable cities. Sustainability depends on local measures which fit the local context. That being said, lessons can (and should) be learned from other cases and other places around the world. In this research, I consider two cases which are struggling with, from first sight, different problems (the feeling of cluttering versus the feeling of overcrowding) but in essence, this relates back to the same question: how compact can cities be in order to be sustainable?

2. PUTTING IT TOGETHER

The factors contributing to a sustainable living environment in this research are:

FACTOR	PRINCIPLE/ CRITERIA
Land economy	<ul style="list-style-type: none"> • Continuous need for concentration in order to keep the city attractive, livable and viable, while guaranteeing an accessible and open countryside. • Developable land is a valuable resource therefore, intensification and compact development should be demanded by the national government. • Assessment of spatial demands should be made on a regional scale for an integrated vision and plan.
Politics	<ul style="list-style-type: none"> • Government should balance the interests of the rich and the less privileged. • Foster an open and transparent government. • Be flexible enough as a government to adapt to the market and the changing demands of society.
Public transport	<ul style="list-style-type: none"> • Public transport should become the backbone of infrastructure planning. • Continuously improve public transport while building few roads as possible. • Always use Transit-Oriented-Development (TOD) to build large public transport hubs.
Public engagement	<ul style="list-style-type: none"> • Foster an open and transparent public engagement process. • Local authorities should draw on the various forms of local knowledge when making plans.

Table 1: the four factors and principles/ criteria as formulated in this study

2.1 Challenge 1: Land economy

Land is the number one natural resource all humans can enjoy on Earth. Due to geographical constraints, not all land is developable or useful for urban needs. With an increasing global population it is inevitable that pressure is put on the usage of land. It is interesting to see that in the early days of civilization (for example nomads) people were using their land very carefully as they knew that they needed the land for grazing agriculture. Why is it that when humans started to develop and rise on the ladder of social and economical status their behavior changes from being careful to over usage and over consumption? It is because people's demands increase proportionately with their wealth. This is not a cycle which can be (nor should be) stopped but this cycle, if influenced properly, can create a win-win situation for the society as a whole.

In the Netherlands, land has 'speculation-value' which has an important influence on urban and regional planning. Land is developed in places where the most profit can be made (by municipalities and developers) and not necessarily in the most suitable locations for these new developments. Is it wrong to dream about a more efficient use of resources? Would it go against the basics of our democracy if owners and municipalities would disagree to this? Is that because the current situation in the Netherlands, with regards to urban planning, our notion of democracy has evolved into a Not In My Back-Yard (NIMBY) planning, thereby prohibiting the making of decisions that are necessary? We need a vision and implementation tools to help our country to develop into a nation with an efficient allocation of resources, not based on individual priorities but based on the common wellbeing of the region and our country.

In the Fifth Spatial Planning Document (2001, not accepted by Parliament) an efficient instrument was proposed to make sure cities, industries and environments would remain (or become) quality places by fixing their boundaries. It was introduced as the so-called red, green and grey-boundaries. Similarly, Hong Kong can be seen as a result of a policy with an efficient use of land and guaranteeing the quality of these places: pristine hiking and recreational facilities in the country parks, footbridges and facilities in the centers and suburbs of cities, and industrial sites allocated in the different stories of high-rise buildings. In contrast, in the Randstad the Green Heart is neither easily accessible or of a huge environmental quality, in suburbs facilities are decreasing, and industrial sites are sprawled along the highway in accessible and cheap location.

The Randstad should look at a more efficient, quality-impulse usage of land by creating strict boundaries. This will encourage municipalities and developers to first look at locations within the city to renew, prior to giving up new greenfield sites. Initiatives are their and should be encouraged. The province of Zuid-Holland wants to build 80% of the projected 200,000 houses in existing urban areas till 2020 (Architectenweb, 2009). Whereas Hong Kong needs to build 553,000 houses in the period till 2020 and only wants to use 1% more of its land (Planning Department, (2008) section 8.3.3). This will lead to intensification within the city and will lead to a higher density. The desired level of density (and form: high-rise or low-rise) should be

assessed on a regional basis. Meanwhile, creating such a strong land monopoly as in Hong Kong is not desirable. Hong Kong's land monopoly should be eased and the land gained from land sales should come back to the general public. The following extract of Churchill's speech can be applied both to Randstad as well as Hong Kong:

"It is not the man who is bad; it is the law that is bad. It is not the man who is blameworthy for doing what the law allows and what other men do; it is the State which would be blameworthy if it were not to endeavor to reform the law and correct the practice."

A challenging and important task is awaiting the government.

The breathing space near compact cities: country parks

Not only the quality of the urban environment is important when it comes to high density areas, the quality of the rural environment is also very important. Accessible and quality country parks should be maintained in order to allow 'escape' from the city and the breathing space for everyone. The Green Heart in the Randstad is characterized by its rural character which contrasts the urban areas around it. Agriculture, nature and recreation are the primary activities in this area, where residents and urban visitors can enjoy many green spaces. At least, this is the idea in theory but the reality is different. The Green Heart cannot really be seen as a park, its boundaries are not clearly defined and the recreational facilities are not always suitable. On top of that, it is actually too large to be a (metropolitan) park. Because of the housing demand in the Randstad, cities (and villages) are always trying to expand their boundaries by developing new dwelling areas by trying to 'eat off' some of the green space of the Green Heart. But this is not even the biggest problem. The biggest problem is that cities and villages within the Green Heart are expanding which has devastating consequences and increases the feeling of landscape cluttering in this green part of the Randstad. Planners and municipalities are branding the Green Heart as a rural area in the middle of the urban areas but without definite boundaries the quality of recreational place can never be achieved.

In the Randstad 2040 vision, a new approach was advocated calling for the connection of the Green Heart with other important green and blue areas; the Green-Blue Delta. The Green-Blue delta exists of important environmental, cultural and ecological elements in the Dutch landscape all linked together by 'green and blue' corridors. "Agricultural, protected landscapes and parks can be developed in these areas for such things as leisure activities, water storage, the enjoyment of nature, urban agriculture, care functions, and small-scale housing" (VROM, 2008, p. 26).

This 'small-scale housing' is necessary to cover some of the costs necessary to make improvements to the overall Green-Blue Delta but it also leaves a lot of room for interpretation by different stakeholders. As seen from the past decade in the Randstad, this uncertainty in interpretation can lead to landscape cluttering. A more inventive approach should be sought as suggested by OECD (2007, p. 18) "given the pressure on green space in existing urban environments, the Green Heart should be used more imaginatively to provide attractive high-quality housing, such as green

housing, which would also preserve the environment. In addition, its recreational use should be increased and its water storage function strengthened”.

A sharp contrast between urban and rural land provides opportunities for both a quality improvement in the build-up areas as well the quality of the recreational areas. “The main item to avoid cluttering is to enforce both extremes. Make the quiet areas more quiet and the urban more urban. Avoid a none descript in-between” (Smolders). “Spatial integration at the level of the Randstad has been repeatedly dominated by the strong desire to maintain well-defined cities of modest size in a non-urbanized countryside” (Lambregts, 2009, p. 66). Similarly, in Hong Kong, but for different reasons, this strict boundary between urban and rural can be found. For the wellbeing of citizens, this strict divide should not be underestimated.

Recommendations:

- Create scarcity of land to guarantee an efficient and multifunctional usage;
- Develop accessible and quality country-parks; and
- Re-invent (high-rise), high density locations by intensification.

2.2 Challenge 2: Politics

Planning is a political process and till what extent government influences’ planning depends on the government and the system itself.

“Government is good at doing some things and tragically bad at doing others. Government can deal with significant externalities – or it can regulate an economy to the point of ruin. Government can provide essential public goods – or it can squander enormous tax revenues ineffective programs and pet projects. Government can transfer money from the wealthy to the disadvantaged – or it can transfer money from common folk to the politically well-connected. In short, government can be used to create the foundations for a vibrant market economy or to stifle highly productive behavior. The wisdom, of course, lies in telling the difference” (Wheelan, 2002, p. 63).

It would be too extreme to say that Randstad is on one end of the scale and Hong Kong on the other but interesting enough, arguments from previous chapters could suggest that. In Randstad (and the Netherlands) the democratization process has been going on for centuries with in the past five to ten years, many powers delegated to the municipal government. Questions are arising about the effectiveness of this process and if that actually benefits the people. In Hong Kong, on the other hand, a strong movement can be seen towards more democratic reform and transparency of the government.

Regional Planning

The Randstad consists of 147 municipalities and of four provinces. The role of provincial governments is relatively weak whilst that of municipalities is relatively strong. The regional level of planning is particularly appropriate level of planning for the integration of housing, transport, agriculture, recreational and industrial activities.

From planning in the Netherlands we should learn from the lessons from the past. Regional planning has always played an important role because of the water management issues. Water cannot be tackled on a local scale and already in the beginning of the 20th century plans were made which included relationships between housing, urbanization, environment and infrastructure on a regional scale (the so-called 'gewestelijke plannen' (regional plans)). Regional planning is important because it "straddles the national-local gap. It is concerned with the planning for an area with distinctive economic and social characteristics, opportunities and problems – setting it apart from other regions" (Glasson, 1978, p. 23). Especially in the Netherlands a more regional oriented planning system would be desirable. This could be built on the 'daily-urban-systems' of the North Wing and South Wing of the Randstad as an overall 'Randstad province' would not be desirable because of the extra (bureaucratic) layer of government. In Hong Kong, regional planning does not have so much importance because the Hong Kong SAR government already acts like a regional body with the Chinese National Government in Beijing and the local representatives in the Districts.

Openness and transparency

The Randstad has for decades fostered a culture of involving citizens in decision making and has enjoyed openness from the government; however, in Hong Kong this culture has only been evolving over the past decade. In Hong Kong, the government should be more sensitive, responsive and accountable to societal demands and not hide behind regulations, procedures and paperwork. It should face its challenges and rethink its power relationships with developers and the (re)-distribution of wealth over its citizens. It is hard to believe that in 2000, over more than 10% of Hong Kong's citizens lived below the poverty line while Hong Kong has one of the highest GDP in the world. A more equal distribution of wealth should be encouraged. As one of the richest men in the world said: "I'm a great believer that great wealth should go from the richest to the poorest" (quote from Gates in Oslo on June 3, 2009). In the 21st century, the government must focus not only on economical development, but on environmental, cultural and social development of itself and its citizens. "The basic idea is to make development – development that integrates social, economic and environmental considerations – everybody's responsibility" (Ng and Hills, 2000, p. 27).

Recommendations:

- More influence of regional planning authorities;
- Adopt to the local situation; and
- Guarantee a strong government with representatives showing leadership and communication skills.

2.3 Challenge 3: Public transport

Hong Kong is seen in the world as the example of public transport development while Randstad lacks an integrated, unified public transport system. Especially when considering the factor of public transport, Randstad can stand to learn from Hong Kong. In order to build and operate a reliable public transport system, a consistent

patronage is important. Every day in Hong Kong over 11 million trips are made by public transport and Hong Kong's car ownership is among the lowest in the world. To compete internationally, the Randstad should invest in public transport. In the short run, better co-ordination between existing transport systems should be created, for example improvement should be made when it comes to waiting time, travelers' information, tariffs and marketing. For the longer run, plans should be developed that will create more physical connections between the actual systems and an increase in the frequency of the modes of transportation (fast trains for instance). The Randstad should draw lessons from Hong Kong when it comes to density and self-financing. The Netherlands' government should be able to give incentives (maybe even discounts) to public transport carriers. In the long run, emphasis on public transport would benefit the society as a whole (less congestion, less pollution, more social control).

As a short-term solution, and in a society that favors the car so much, a combination of measures is required. Building new roads also assists in resolving congestion problems and the current priority area for such construction of new roads is in the Randstad. The more radical step of road pricing has been under discussion for a long time, but a decision to implement this has only recently been taken by the current government and actual implementation is only expected in 2012.

Recommendation:

- Give priority to public transport over road development

2.4 Challenge 4: Public engagement

"Public engagement is directly related to the democratic system" (Smolders). As much as Hong Kong tries to promote itself as a free and open society within Chinese borders, when compared to Randstad the process of public engagement is still in its early stages. Public engagement in planning is part of people's right to participate in decisions that affect their lives. The government should facilitate this process and should be open to new and different ideas.

In both visions/ strategies, Randstad 2040 and HK2030, a unique involvement of citizens' views on the future development is carried out. Randstad used a more 'open' approach, involving people from the outset when drawing up the Randstad 2040 Vision, (as inspiration for new ideas, or as a backing for existing lines of thought); while Hong Kong used a more responsive approach with evaluation sessions and room for comment. This type of public engagement should definitely be encouraged in Hong Kong and is the first step towards a truly open, transparent engagement process where the government is open for new ideas and will be held accountable for the decisions they make. Public engagement should not be seen as a separate line of planning for community groups and NGO's but should be seen as an integral part of governance and is the only way to become as democratic as Hong Kong wants to be. It goes without saying that it is impossible to incorporate all suggestions into planning and in order to receive as a government the confidence and trust of citizens, it is

inevitable to explain exactly on which grounds decisions are made and why certain suggestions are not used.

Hajer and Zonneveld call for a “more societal process of plan making in which governments would see to involve stakeholders right from the outset”. They also call for a “planning system that is one which allows the planning process to benefit from the knowledge brought in by other stakeholders and is based on institutional practices that seek to integrate differing interests and perspectives in a policy design process” (2000, p.352).

Recommendations:

- Encourage community engagement in different stages of the process;
- Be flexible and creative in planning; and
- Foster a government that recognize the importance of balancing interests among society.

2.5 The interrelations

All of the above factors are related to each other and that is exactly where sustainability stands for; the interrelations between different aspects of life that together contribute to a more sustainable world, now and in the future. Therefore, to prefer to build high-rise buildings in order to increase density but without giving preference to excellent (transport) facilities is not the way to go. It is also not the way to go by top-down planning and blueprint drawings. Public engagement and flexibility on the part of planners are extremely important elements in the process.

A first important step towards sustainability should be to value the unique characteristics of the given area. In the Randstad that means its morphology as a polycentric metropolitan area, which gives the opportunity to benefit from the proximity of its several different cities and their natural landscapes. In Hong Kong this means a greater appreciation for its outstanding cityscape with the excellent recreational and transport facilities. To guarantee the protection of these characteristics, careful consideration should be given to usage of land. One way to ensure an efficient use of land is by creating boundaries for red (urban), green (environment) and grey (industry) zones. Assessment of spatial demands should be made on a level where the daily-urban-system is the most appropriate; mostly a regional or city-region scale level. Intensification will give an incentive to municipalities and developers to redevelop brownfield sites instead of greenfield sites. This in turn leads to a higher density which is needed to encourage the development of reliable public transport and maintain facilities in neighborhoods. Especially in Randstad, with its stagnating population and a growing elderly population, it is important to have (health) facilities in close proximity to people’s homes. But intensification demands a transparent, open and honest engagement process with the community to ensure everyone (from the existing inhabitants to the new ones) benefits from this development. An integrated city and regional plan is the basis for a good distribution of resources. In order to create such a plan, regional cooperation is important and an active and strong government is a prerequisite.

3. CONCLUSION

It is important to recognize that Randstad and Hong Kong should be viewed as successful examples in (compact) planning, especially on a global scale. In both regions slums are almost nonexistent, people are able to use public transport extensively and a general wealth is (by and large) guaranteed. But from my observations this status quo is in danger and improvements should be made to guarantee the ongoing wellbeing of its citizens. This study has been done as a demonstration project of two different regions renowned for their planning, with the aim of being exposed to both local and general lessons. Most of the strategies and resulting actions are equally relevant to other cities of a similar size elsewhere in the developed world.

This research has shown that that intensification within cities and in general compact city development has multiple benefits for the sustainability of regions and the people making use of it. The extent of how 'intense' a city can or should be various from location to location. Important elements as history, culture, politics and demographics should be considered and applied into the location situation. I believe in lively, attractive, intensified, compact cities surrounded by quality countryside as we find in Randstad and Hong Kong. I also believe that qualities should not be taken for granted and continuous reassessment and regeneration is necessary to provide the most sustainable living environment for citizens.

"Big cities and countrysides can get along well together. Big cities need real countryside close by. And countryside – from man's point of view – needs big cities, with all their diverse opportunities and productivity, so human beings can be in a position to appreciate the rest of the natural world instead of to curse it. Dull, inert cities, it is true, do contain the seeds of their own destruction and little else. But lively, diverse, intense cities contain the seeds of their own regeneration, with energy enough to carry over for problems and needs outside themselves" (Jacobs, 1961, p. 447).



Figure 1: Hong Kong, compact development surrounded by a green countryside



Figure 2: Randstad, compact development surrounded by a green countryside
(source: VROM)

BIBLIOGRAPHY

Architectenweb (2009) *Zuid-Holland wil ruimte en natuur beschermen*, (South-Holland wants to protect space and nature) see:

http://www.architectenweb.nl/aweb/redactie/redactie_detail.asp?iNID=19934 (in Dutch)

Glasson, J. (1978) *An introduction to Regional Planning*, UCL Press

Gates, B. (2009) "I'm a great believer that great wealth should go from the richest to the poorest," see also: <http://www.reuters.com/article/lifestyleMolt/idUSTRE55253F20090603>

Hajer, M. and Zonneveld, W. (2000) "Spatial Planning in the Network Society – Rethinking the Principles of Planning in the Netherlands", *European Planning Studies* 8, p. 337-355

Jacobs, J. (1961) *The Death and Life of Great American Cities*, Vintage Books (edition 1992) New York

Lambregts, B. W. (2009) *The Polycentric Metropolis Unpacked, Concepts, Trends and Policy in the Randstad Holland*, Amsterdam institute for Metropolitan and International Development Studies

MVRDV (2005) *KM3, Excursions on Capacities*, Actar

Ng, M. K. and Hills, P. (2000) *Hong Kong: World City or Great City of the World?* University of Hong Kong, Hong Kong

OECD (Organisation for Economic Co-operation and Development) (2007) *Territorial reviews, Randstad Holland, Netherlands*, OECD Publishing, Paris

Planning Department Hong Kong (2008) *Hong Kong 2030, Planning Vision and Strategy*, see: http://www.pland.gov.hk/p_study/comp_s/hk2030/eng/con_digest/Stage3Report/PDF/Section1.pdf

VNO-NCW (2001) translated quote from Bakker, R. see: <http://www.vno-ncw.nl/informatie/jv2001/werk2001-1a.htm>

VROM (Ministry of Housing, Spatial Planning and the Environment) (2001), *Fifth National Policy Document on Spatial Planning 2000/2020 (summary)*. The Hague: Ministry of Housing, Spatial Planning and the Environment.

VROM (Ministry of Housing, Spatial Planning and the Environment) (2009a) *Landscape Cluttering*, see: <http://international.vrom.nl/pagina.html?id=37396>

VROM (Ministry of Housing, Spatial Planning and the Environment) (2008) *Randstad 2040, Summary of the Structural Vision*, see: <http://international.vrom.nl/pagina.html?id=37398>

Wheelan, C (2002) *Naked Economics, undressing the dismal science*, W. W. Norton & Company, New York