



“It is not about picking the winners in advance, but creating the breeding grounds for the future we cannot always predict”

Interview with Otto Raspe

Interview conducted by Helmut Thoele

What is your perception on the on-going discussion about the relevance of agglomeration policies linked to the attention for metropolitan areas and an economic renewal? How is the Netherlands Environmental Assessment Agency (PBL) involved in the national and international discussion?

We just finished a report with the CPB, The Netherlands Bureau for Economic Policy Analysis, about agglomeration economies and how we understand the mechanisms behind it. We talked about the international research that highlights the importance of agglomeration economies. Firms and people are clustering in cities, since they are 2-10% more productive in cities. This is due to three main mechanisms. It is about input sharing mechanisms, where suppliers can specialise further to make better products and therefore can sell their products better. Labour market pooling and matching mechanisms have a significant influence so the skills of employees are better matched with the demand of firms in cities. The final mechanism is knowledge spill overs. Cities are places where a lot of people meet and share ideas. Cities are the breeding ground of entrepreneurship and innovation. Gradually, agglomeration economies are becoming more important. Especially since our economy is transforming into a knowledge economy, that thrives thanks interactions by human capital. There are no general rules that cities always have the same benefits by equal size. Cities and agglomerations have different growth paths due to the economic structure of a city, the types of activities, the types of jobs they have and the transition in economies. Some cities do not profit much from agglomeration economies because they have a lot of firms at the end of their lifecycles with no gains in productivity or employment growth. On the contrary, some cities are doing very well in renewing their activities. For example, Eindhoven had a very different structure forty years ago. During a severe economic crisis related to the loss of the biggest employer, Phillips, the region reinvented itself as a Brainport. Amsterdam also reinvented itself on creative industries and life

sciences and Rotterdam is really struggling to set the same growth figures. They are lacking behind and are below the average in job growth in The Netherlands. Amsterdam and Eindhoven are good examples and are far above the growth rate of average cities in Europe. It is difficult to say there are golden rules with the impact issues and mechanisms. You cannot say that when you stimulate ‘x’ in every city, you always have certain growth, and there is a big difference in employment growth and productivity growth. Productivity is added value divided by employment, and cities that renew, create a lot of jobs, like Amsterdam. The productivity figures are not growing as much as the employment growth does because otherwise they have to gain a lot of added value, more than job growth. Most new activities have lower productivity rates because creative industries are not as productive as an established knowledge intensive chemical firm, for example, which evolved over fifty years. There is a negative slope between forty years of employment growth in Europe and productivity growth and that is forming a significant theme I’m currently working on.

Do you recognise a growing demand from policy makers and politicians about this topic in relation to the question of the distribution of power between cities, urban agglomerations and nation states in Europe and worldwide?

I have been lecturing on the topic of agglomeration economies for more than fifteen years now. Terms such as agglomeration economies or agglomeration power, were inner circle terms used by academics only in international journals, but now the average policy maker uses these terms as often as a scientist. Policy makers are especially aware of the importance in relation to the competitiveness of their cities and regions. Certain books contribute to that success like *The Triumph of the City* by Edward Glaeser, which summarises why cities work economically so good and why cities are imported for economies. The book *‘If mayors ruled the world’* by

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He studied Economics at Tilburg University. After his graduation he worked as a researcher / consultant at The Netherlands Organisation for Applied Scientific Research (TNO), where he advised on the topics of (spatial) economic development, the impact of spatial investments (impact analysis, cost-benefit analysis), industry studies and (regional) economic benchmarks. Since mid 2002 he works as senior researcher at The Netherlands Environmental Assessment in The Hague.

Here his focus is on the (impact of the rise of the) knowledge economy, innovation and entrepreneurship. Otto successfully defended his dissertation on The Regional Knowledge Economy on December 14th 2009 (Utrecht University). He often gives lectures and publishes on these topics.

Benjamin Barber described how cities will be more important than nation states. However, not every city is a winner and not every city has a mayor with the capacity to rule the world. In the Netherlands, we have a lot of mayors who are struggling on how to formulate economic strategies. Eindhoven has a very capable mayor but in the Dutch context he has to make certain strategies with the 23 neighbouring municipalities in de region, for example concerning amenities. He also has coalitions between cities within a 30 minute radius and with necessary links towards the national and international urban networks, on the larger scale.

How do we make and organise good cities and agglomerations which are part of a multi-level network?

So, at least 5 scales are important. Mayors have to constantly level on different scales and there are a lot of policy related questions regarding the most relevant scale for a certain economic development topic and what can we do on different strategic scales. The real question is how we organise a spatial economic system which is not unified by one spatial

scale but all the scales we discussed earlier, which are very dynamic. How do we make and organise good cities and agglomerations which are part of a multi-level network?

This question links to our role as urbanists and designers and one of the reasons to start Beyond Plan B. How do you see architects and urban planners acting in this topic? Dutch firms, for example, are internationally very known and successful with designing buildings, cities and regional plans but they not very present in the spatial-economic discussion in Europe and in the Netherlands.

One of my observations is that many architects are looking solely at the object they are making. They are making a new building or public space, which is not related to the five spatial scales already mentioned. In a city structure, there are administrative boundaries, neighbouring city relations, the link to national economic centres and on a broader scale with international connectivity. Spatial disciplines are acting too separate from economic dynamics. In the logics of the spatial disciplines, it does not seem to matter whether you build a building in Leeuwarden or in Amsterdam. Leeuwarden is not an international competitive region in need of a world trade centre. Too often the same success formula is applied to every region designers are working in. It is about embedding the objects

into the economy of the city it is performing in.

Do you have a favourite example which explores an excellent spatial or infrastructural project that relates very well to an economic strategy?

One of the principles stemming from agglomeration economist literature is proximity. Proximity is not always on one spatial scale or metric measurement. It is about how people can travel to the cities and stay for a period of time. How can they meet other people to exchange ideas? A successful project that helps a city to grow is related to the proximity offered to people so that they have the option to stay for a longer time or live nearby in the agglomeration. There are very attractive and often big cities which are growing and everything comes together.

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There are also smaller cities which have to be really smart to perform at the same level because they are lacking certain key elements and critical mass. Cities like London and Tokyo are doing fine, but what about Brisbane? Brisbane is a city that is very attractive to live in

and is performing economically very well but has to transform to the new economy. There are no golden rules suggesting if you build waterfront, you will always grow. It's about the context you are doing that project in.

While discussing possible paths for economic renewal and growth, discussions are quite focused on infrastructure, amenities, public spaces and universities. Some examples you mentioned were related to the creative economy but what about the possibilities to renew industrial areas, as we often see along the Rhine, through this creative economy? Where do you see possible links between the urban logics of a creative industry and heavy operations in industrial and logistic systems?

The New Geography of Jobs, by Enrico Moretti, describes how creating highly educated innovative jobs in cities will produce a trickle down multiplier in the economy. For people with other skills, there are better jobs in cities that have that multiplier right and Moretti calculates around five jobs per innovative job in the best working multiplier cities. According to Moretti, the world is dividing and there will be three types of (American) cities; cities that have good jobs for everyone, due to the multiplier effect, cities that cannot cope as they are not adjusting to the knowledge economy and the innovation types of jobs needed.

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There is no multiplier so there are not enough jobs for everyone. As a third typology, there are many cities which are in between and we do not know whether they are going to adjust or what their growth path will be. Moretti states that it is more important where you live than the type of education you have received because there are better jobs in the best cities for everyone. Geography will then change towards a more urban, spiky world. It is important to invest in the knowledge of the mechanisms behind the trickle down effects. Are the old industrial

areas able to renew themselves and reinvent themselves with certain mechanisms? I am afraid that everybody will attempt to apply the same trick, aiming at high end industries or life sciences. We need to rethink on how to transform specific economies first. There are some basic needs like connectivity and knowledge infrastructures, cities with universities succeed more due to knowledge spillovers and entrepreneurial dynamisms. A city needs to be attractive and that's why the nowadays success Eindhoven is currently thinking about a new strategy for the future . They have good ingredients but are they able to attract the international talents of the world? There is a need to be realistic and smarter than the big cities, for example, by aligning with neighbouring cities or with the Rhine Ruhr area as a whole.

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This also tackles political questions and ideas about balancing rich and poor. Would you say that examples from the United States and south-east Asian agglomeration areas show good strategies? Focusing on the area along the Rhine with its cross-border structure of a very polycentric urban field, containing a lot of Eindhovenens, what could be some basic ingredients for a European strategy?

One of the underlying mechanisms is that in polycentric urban areas, you divide the success of the bigger city into the surrounding smaller cities. The peaks are then not as high as in monocentric large agglomerations, but there are also less agglomeration diseconomies like congestion or pollution. Polycentric urban areas often have the advantage of nearby green and leisure possibilities. When you vision the Dutch Randstad as a polycentric city, one imagines the amenities of the coast, the open landscapes between the cities, the woods and the green waterfronts. There are some advantages of polycentric structures and the Rhine area is a coalition of a lot of polycentric structures. The main strategy will not be to create the new metropolis as big as Tokyo in that area to outperform other urban areas but to join the forces to

create borrowed size effects. In Europe there is a specific difficulty with administrative and institutional boundaries between countries and cross-borders and we don't see a lot of functional areas yet. There is some coalition between Eindhoven and Aachen but the interaction of the people who are collaborating or commuting is very low. We have to work on more interaction between our mid-size agglomerations in Europe because we do not have big monocentric cities with the exception of Paris and London.

The Chinese are often categorised to easily build a bullet train network and connecting distances at a speed that could only be dreamed of in Europe. Would you agree that these mid-size cities must be connected better, that this is always a question of infrastructural hardware and widening the parameter of the daily urban system?

It is necessary to have more than just infrastructure in place. In Germany, with high-speed rail infrastructure, the productivity of the commuting people and the adjacent area around the nodes of the network is rising, so there are economic gains relating to new infrastructures that make it easier to commute and to make housing and labour market decisions. You also have to work on the quality of living in the urban areas so it is attractive to live and work in these cities. Europe has an advantage with cities containing a high quality of living that are not too big. Pollution and crime levels are lower so we have a comparative advantage on that level. It should work more as a daily urban system or as a weekly or monthly urban system to live and work in these agglomerations.

The new European commission and the Plan Juncker are focusing on jobs and growth. Do you think that the European Union makes this link between investing in cities, agglomerations and the renewal of the economy? How do you look at this current policy development on that scale?

Yes, they are streamlining their thinking on investing and the thinking of how cities work and produced a smart specialisation policy approach. They made a shift from real equity and equalising all opportunities and growth paths to a more efficient approach, based in efficiencies to invest in what a certain region is good at. Europe is transforming and thinking about how to unleash the growth potentials of what those cities have. In The Netherlands, we are working on it now with our input

towards The Urban Agenda of the Netherlands and the EU. Three different national departments (infrastructure, the interior and economic affairs) are trying to link the economic potentials of cities to a policy agenda. There are many examples internationally where we see cities grow due to policy incentives. Since 2011 in the UK, for example, we have the City Deals and the urban agenda of Europe is following that kind of strategy. My question still remains which we discussed in the beginning; how do we organise good cities?

Do you see possible ways to trigger an innovation in the renewal of European logistic backbones and its amenities like Rotterdam or the Rhine? Transforming the port of Rotterdam into a bio-based port would have a substantial impact and would mean large investments into a new type of infrastructure. Can you imagine successful examples of starting such kind of developments?

Bio-based economies initiate from ingredients that stem from chemistry, agro and food industries and they combine into different knowledge bases. You need to have these components to really transform and be innovative in new bio-based products and processes. When you have a missing link, you need to collaborate with other regions who have a strong knowledge base in a certain element you need, so it's not only about physical infrastructures as such.

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The harbour of Rotterdam is one of the key elements for the transformation. Cities offer the interaction possibilities of all kinds of technologies, knowledge bases and entrepreneurial activities. However, not every city is a winner. I like the initiative of Start Up Delta in The Netherlands. There are lot of examples of big Firms who say 'we need an ecosystem with fast growing smart firms around us to join the forces of innovation.' New firms need a breeding ground to interact in a building or public space.

Would you say that governments have a role to act strategically with concrete instruments and funding for critical phases of the economy or would you say this is more a question for the market?

When you fully rely on that the market will solve the problem, then the market also depends on the established order, which does not want to really evolve in new products because they have massive investments in R&D, in specific areas that needs to be earned back. Sometimes, the established order does not want to be innovative, so the innovation comes from new, smaller growing firms. The ecosystem of innovation should target how we can help these firms who want to be innovative because they are competing with other technologies that are already in the market.

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Governments should favour new technologies that smaller firms are promoting to invest in fundamental research. The government can put technologies in clouds, be launching customers themselves and on a spatial scale, invest in physical areas where innovation comes together and connecting more of them together. Governments should not continuously support certain winning strategies, picking the winners, as you have to facilitate the challengers, which compete with the older established firms. This works by letting innovation really become innovative, in allowing time for loans to be repaid and good ideas to evolve.

You mentioned the term ecosystem relating to the question of scale and the reality that the European Union is very reluctant on spatial strategies. On the scale of the Rhine and diverse typologies of cities and city networks, could you imagine the right scales for different typologies of areas which are open for connecting strategies on the scale of the whole system?

Cities then need to be complementary to each other. If a mid-sized city specialises in a certain economic structure or technology and a neighbouring city has a lot of specialisations, then joined together, they have the related variety of the elements you need to explore innovation. I'm not sure if these complementarities have been applied on the level of the Rhine. Elements need to be combined to jointly make innovations. Is it the high tech industries in Eindhoven combined with the financial clusters of Frankfurt? I really do not know whether that will be the combination. We have to find the right

combinations. Then we can map them on the Rhine scale and can bring in the human scale with possibilities of commuting, visiting or interacting. Last but not least we can make strategies of combinations.

Would it be clever to concentrate European amenities (like stock exchanges, banks and infrastructures) on the strongest points or is it for discussion about ecosystems and borrowed size effect and so on? Is this diverse structure an advantage?

It tends to be that the diverse structure is an advantage but I also believe on a certain level of mass and density, you need to be internationally competitive. Amsterdam should build on another model than settling as a smaller London. It's quite a difficult question to focus on something other than your main specialisation. Cities need to rethink their earning models, based on the specialisations they need to be innovative in and what technologies are needed to combine to have a breeding ground for new innovations. It is not about picking the winners in advance, but creating the breeding grounds for the future we cannot always predict.

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When referencing a famous example, the Silicon Valley, the U.S. has a constant, high investment on new technologies such as the weapons industry and it seems to be a very strong asset when small enterprises know there will be a constant stream of governmental and private investments. Does Europe need a clear vision of where we want to invest in the next 10 to 20 years to foster the eco-logistics of renewing the economy?

Financing new activities is crucial, which is a positive in the Silicon Valley but is lacking in many areas of The Netherlands and Europe. Investment strategies can be important but governments should also invest and the question is do they invest according to the lines of picking winners or backing challengers. The backing challengers is more of a perspective on creating breeding grounds of all kinds of innovations that has not been pinpointed. The key ingredients of The Silicon Valley is about proximity, innovation and financing the system and it is there, I think, that The Silicon Valley became as great as it is now due to government investments and interventions.