
UNLOCKING THE PAST TO RE-ENACT ROTTERDAM'S FUTURE: A PROFESSIONAL'S VIEW ON PLANNING HISTORY

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City of Rotterdam

To implement policy, spatial planners depend on common narratives. This is also the case in Rotterdam. But what sets a port city like Rotterdam apart is that its recent history is influenced by dramatic and traumatic events. The present is therefore locked in by its past and certainly holds back a successful future. Nevertheless, a new perspective for the port is sorely needed, given the vulnerable position of a future without fossil fuels. That's why the OECD argued in 2013 that huge economic benefits could be achieved if the ports and cities worked together more effectively. However, to accept this challenging advice, the question must be answered: "How can Rotterdam strip its historical grown lock-in of a big port with a small city and look for a more synergetic future?" The international Isocarp Congress 2015 provided an opportunity to unlock the past and re-enact Rotterdam's future by bringing together experts from municipalities, port authorities and universities. The intention was to research the impact of international orientated ports embedded in the local social-economic network or "How to develop unprecedented port city synergy?" It became clear that the histories of other port cities could serve as imaginaries for the future of Rotterdam. They show that a successful port can in fact boost an urban economy.

Keywords

Rotterdam, port city synergy, spatial planning, history, metropolitan region

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INTRODUCTION

Historically, port and city had strong symbiotic relationships. These began to erode from the second half of the 20th century on (Bird, 1963). This development was particularly prevalent in Rotterdam. The construction of a major transit port made it possible for Rotterdam to transform from a merchant city into a transit city after 1850 (Van de Laar, 2000). During the planning stage of a railway link from Amsterdam to Paris, the discussion focused solely on the position of the railway bridge, which should by no means affect the German hinterland or port of Rotterdam. The result was a railway viaduct right through the heart of the city, with disastrous consequences (Aarts, Maandag, 2000).

Looking back, the construction of the railway viaduct was the starting signal of a future in which the city increasingly lost its significance, giving rise to the narrative of a port that brought economic prosperity under its own steam. It is only over the past 25 years that serious investments have been made in the city once more, and this has recently led to widespread recognition. This is of great significance for Rotterdam because the way people perceive the city centre affects the way people perceive the entire city and region (Marlet, 2009).

Due to its history, Rotterdam continues to be known as “the big port with the small city” to this very day (Daamen, 2015). This lock-in relationship may become detrimental for the future of this great port, since nowadays cooperation between port and city region is a prerequisite for economic growth (OECD, 2013).

However, to counter the advance of the large transit port independently from the ‘small’ city, it is essential to demonstrate the economic potential of the synergy of the port with the ‘large’ urban region. This is an agglomeration of about three-and-a-half million inhabitants and more than ten thousand companies, all more or less dependent on the logistic capacity of the port, such as the maritime and food cluster. It is necessary to look at alternative histories of other ports to find out what such a synergistic advantage could look like.

To investigate this, the city, together with the port authority of Rotterdam, organised an international workshop, during which experts from the government, port facilities and world of science shared their experiences and research. The aim, however, was not only to come up with a sustainable future for the port city, but also to define an alternative for the disruptive consequences of what is known as ‘the next economy’ (Rifkin, 2013). This interactive research method is aimed at facilitating a move into action. ‘Re-enact the future’ is an active work method that aims to break through the lock-in and facilitate taking action (Termeer & Kessener, 2007). This paper intends to demonstrate the vitality of history by reactivating it for a discussion about the future of the port city of Rotterdam.

UNLOCKING THE PAST

FIRST THE PORT, THEN THE CITY

In the fourteenth century, Rotterdam was a small town on the river Rotte and was home to river fishing, shipbuilding and some trade. Over time the city developed into a true trading port. The construction of a major transit port made it possible for Rotterdam to transform from a merchant city into a transit city after 1850 (Van de Laar, 2000). By the 1860s, Amsterdam started to regain its historical position. At the same time, Rotterdam’s elites had consolidated their city’s role as a transit port (Schijf, 2011). The opening of a new waterway (de Nieuwe Waterweg) in 1872 signalled the start of Rotterdam’s huge growth (Daamen, e.a 2013). Rotterdam wanted to preserve its newly acquired position as a successful port city compared to competitor Amsterdam at any cost. Every effort was made to ensure that a new rail link from Amsterdam to Paris was routed through Rotterdam (Van de Laar, 2000). Even the German hinterland interfered with this issue because they were afraid that the newly

constructed railway bridge would affect the logistics of the port. The final solution was found by constructing a rail route that ran right through the centre of the city. The consequences of this railway viaduct were dramatic. It resulted in the loss of the most representative public spaces and changed what was perceived as a 'delightful' city into an 'ugly' city (Aarts, Maandag, 2000). That's why new plans for urban expansion on the west side of the city were supplemented with ideas for a new centre (Moscoviter, 1993).

When Rotterdam finally became the largest port in Europe around the year 1900, this plan became a reality in the periphery of the historical city. The Coolingsingel was filled in to make way for this new representative city centre that belonged to this great port. The Coolingsingel was meant to become a metropolitan boulevard, like the new boulevards in Paris and Brussels (Aarts, Maandag, 2000). The attempt to complete this new centre was crushed when World War II broke out and the historical city centre was wiped out during the bombing in May 1940.

The trauma of the bombing in particular contributed to the fact that Rotterdam continued to work on its future as a transit city after the end of the war. The motto was 'first the port, then the city', and the city was designed specifically as a worker's city. This time, however, there was a future without a past.

A plan, the so-called 'Basisplan', was drawn up to this end in 1945, a blueprint for the reconstruction of the city: intended to have no or very few inhabitants. It expressed the wish to be modern - in the American definition - as downtown. The most obvious explanation given was that a port city by nature was focusing on the future (Blijstra, 1965).

It was also regarded as logical that the reconstruction of the port took priority over the rebuilding of the city. The consequence was, however, that the port became the biggest in the world in 1962 on the one hand and, on the other, that the inner city still was neglected. The biggest problem, which obstructed further successful development, was the ideology that those with higher incomes were not allowed to live in the inner city. Even after 50 years of reconstruction, this translated into no density, no public good space and no inhabitants and, consequently, a poor cultural life.

Nevertheless in the nineties plans were developed for an extension of the port with the "Tweede Maasvlakte", to keep a leading position in container transshipment in Europe. This investment, mainly financed by the city itself, was motivated by the idea that: "if the port is successful, Rotterdam is successful as well. At the same time there was a lack of other forms of employment in this post-industrial era. The result was the exodus of middle-ranking professionals to other cities (Schrijer, van der Zwan, 2004). There was a turning point however. The historic decision to become a radical modern city began to waver during those years. It became cautiously possible to build houses for higher income groups in the inner city. Later on, it actually became a municipal policy. Plans were made and carried out to develop the neglected old harbours in the city for this typical inner-city audience.

When the railway viaduct was replaced by a tunnel in 1995, it was time to create plans based on the pre-war structure of the city. Rotterdam's cherished identity may have been 'modern', but the fact that their city had an interesting history was a breath of fresh air for most residents. Meanwhile, all plans for the inner city, including an expansion across the river, were explicitly based on housing. More residents living in the inner city was undoubtedly part of the success that gave the city its current fame (Tillie, 2012).

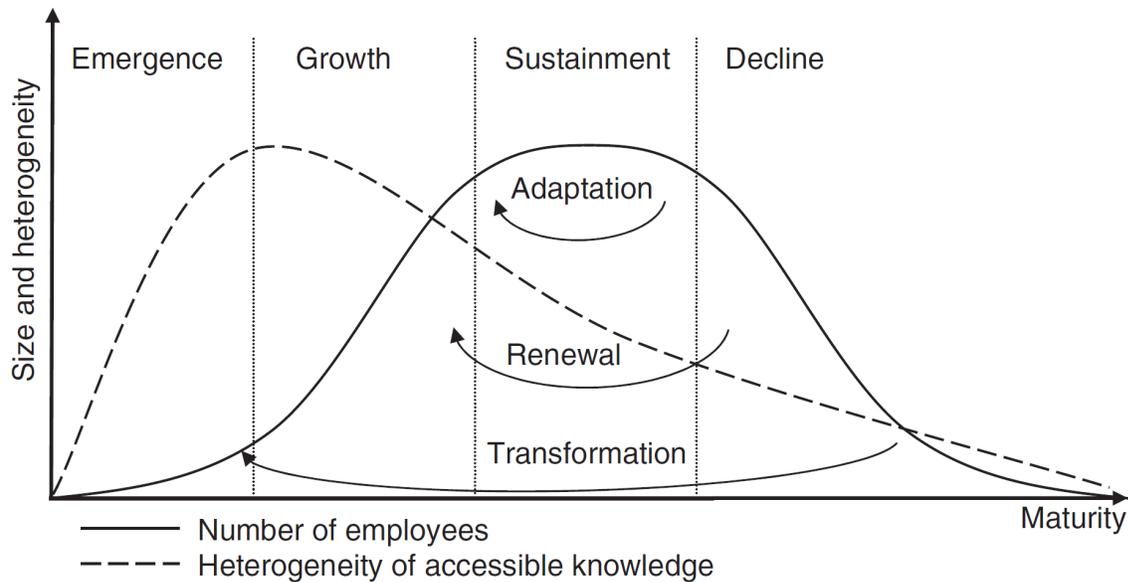


FIGURE 1 Crossovers and life cycle of clusters (Van Oort, 2015)

THE LARGEST PORT IN EUROPE

Meanwhile, the port continued to grow. Major investments in Rotterdam went to the port because the city perceived it as being important for employment. Throughout the world, ports have turned into secluded worlds, separated from the urban context, spatially and mentally severed from the city, with their own employment, operators and administration structures (Schubert, 2011).

As the largest port in the world, future plans became increasingly large scale, with Plan 2000+ being a prime example. The plan involved a huge expansion of the port and wanted to turn the centre into a business centre (Aarts, 1987). Until the late 1970s, the city was developed continuously as a worker city for the port, even when employment in the port declined due to increasing automation and mechanisation. The plan for Kop van Zuid – former port area and now extension of the inner city on the south bank - was the first plan to recognise this decrease in employment in the port because it was based on the argument that there was room for alternative employment here (Bout, Pasveer, 1994). The investment in a second Maasvlakte was never really an issue either, even though the money could have been invested in the city (Schrijer, van der Zwan, 2004).

The city's pride in its port did take a hit when in 2004 Rotterdam lost its status as the largest port in the world and became 'merely' the largest port in Europe. A fact is that has little to do with Rotterdam, but more with the rise of Southeast Asian ports. The recent Port Vision (2011) is still dedicated to a prosperous growth in volume, a focus that currently stands in the way of a sustainable future for Rotterdam as port city (Huijs, Troost, 2014).

MUNICIPAL AGENDA PORT

One element of this agenda is that the port of Rotterdam and municipality of Rotterdam are strengthening their links with universities and other schools in the area, actively creating a 'knowledge port'. The municipality, the port authority, branch organisation Deltalinqs and Rotterdam's Erasmus University signed an agreement in 2010 called 'Smart Port', designed to cluster the supply of and demand for specialised port know-how. Research, consultancy and training services for the port are now coordinated within one framework (Daamen e.a., 2013).

Currently, there is a growing demand for the renewal and broadening of the port economy, which is less focused on volumes and more on innovation (Smart Port). That's why strategies are being set up to achieve this as for example (2013; Kuipers & Manshanden, 2014; 2015). This is especially important for Rotterdam because the port is largely based on traditional industries. An important principle is that the knowledge and expertise available in the region should be used to help the traditional port economy move forward (Huijs & Troost, 2014).

However, this means that the exclusive focus on the port remains. The point of the OECD's advice is not just about reinforcing the urban economy with business services and science, but also about embedding into the regional economy, particularly that of the maritime cluster. It is no longer about the being the biggest in terms of volumes, but much more about future employment as a whole.

RE-ENACTING ROTTERDAM'S FUTURE

During a global conference in Rotterdam in 2013, the OECD already suggested that greater synergy between port and city would create a great opportunity for economic growth. This is why Rotterdam wants to learn from other port cities to find out how they can create such synergy. The international Isocarp Congress 2015 was an opportunity to organise a two-day workshop to explore experiences and research involving very different port cities in the world. By bringing together experts from municipalities, port authorities and universities, we could see and discuss alternative routes that different port cities had taken. The idea was that the histories of other important port cities could make it possible to unlock the normal scope and re-enact Rotterdam's future.

THE LEADING MARITIME CAPITALS OF THE WORLD

Erik Jakobsen, Oslo, introduced the audience to the world of ranking and explained how illogical it really is. It is no longer about ranking by size, but about solid specialisations. For instance, Oslo has a successful maritime industry, but no significant port. Even though Rotterdam's port (city) ranks third place (after Singapore and Hong Kong) where ports and logistics are concerned, the city of Rotterdam itself ranks eighth on the list of leading capitals for locating maritime business, behind European cities such as Hamburg, Oslo and London (fig. 2). That is why today's real question for Rotterdam is how to imagine the future of a port city as one entity, as a specific leading capital.

London and Ghent subsequently demonstrated that a successful port can in fact boost an urban (port) economy.

LONDON IS TRADE + AGGLOMERATION

Wouter Jacobs used London as an example, showing that its port boosted the city economy and allowed it to grow into the financial capital of the world. His keynote elaborated on the question: "Why did great cities emerge from ports?" The answer was that self-reinforcing mechanisms of agglomeration, resulting from trade, allowing the initial port cities to dominate despite their initial advantage (e.g. deep-water port) ceased to be important (Fujita & Mori, 1996; Krugman, 1995).

He showed that the port of London gained dominance as an entrepôt of goods. So did its merchant community bringing in wealth and commercialised information to the city. Important was, for example, the Foundation of Lloyd's of London Insurance Market, the Foundation of the Royal Exchange and setting Global Standards in International Maritime Law.

Its port declined, but London pioneered waterfront redevelopment in the early 1980s at Canary Wharf. In 1981, London pioneered the introduction of the Oil Futures Contract, allowing 'hedging and options' on the delivery of oil. In 1984, London pioneered the Freight Forward Agreement (FFA), allowing 'hedging and options' on the supply of ocean transport services.

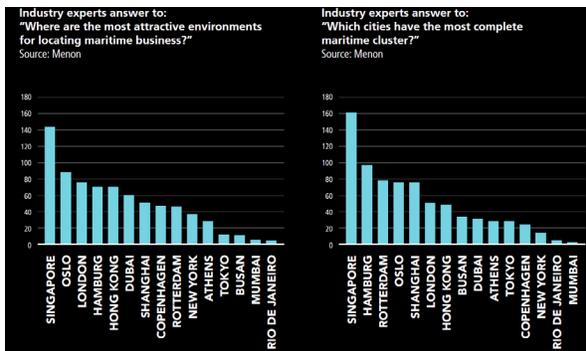


FIGURE 2 Rankings results E.Jakobsen

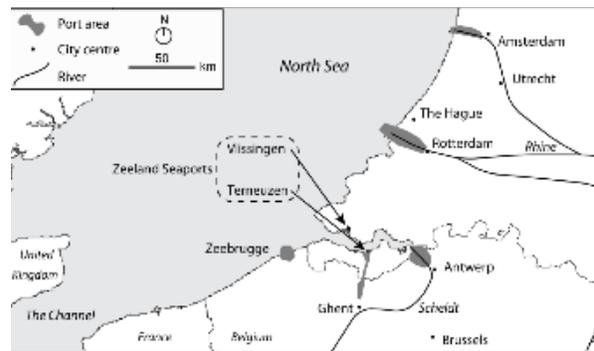


FIGURE 3 The Euro Delta and ARA ports

Smart ports need smart cities and that means that the city should be an incubator of entrepreneurship, as cities are concentrations of human capital, knowledge and innovation. Then crossovers arise between industries, important Agglomeration, Amenities and Accessibility (cf. Koster, 2013) In his presentation, Jacobs underlined that it is all about human capital (Van Oort, 2015).

According to Jacobs, a co-evolutionary approach assumes that change may occur in all interacting populations of organisations, permitting change to be driven by both direct interactions and feedback from the rest of system (Volberda & Lewin, 2003, p. 2114). 'Port and cities' are co-evolving systems and trade is the connector throughout world history.

Cities will always need ports because cities will always depend on trade. For Rotterdam, this means that after a period as a transition port, it should once again focus on the trade of raw materials, new industry and services. This is definitely possible because, in addition to the EUR, Rotterdam also has the much more technically oriented education and research facility TUD in its region. What would the maritime industry be without Delft's university (Jacobs, 2016)?

THE ECONOMIC PORT CITY INTERFACE

Ghent started looking for a connection to the sea as early as the 13th century. Finally, in the 16th century, Ghent was given direct access to the Westerschelde, but it could not be effectively put into use until the 18th century. At the same time, thanks to the arrival of the cotton machine, Ghent became the first continental industrial city for textile. After World War I, the port infrastructure was modernised and it grew to become the fourth largest port in Europe. Due to World War II, everything came to a standstill and in the sixties, the government made a number of investments that led to the introduction of a number of new industries (Van den Berghe, 2016).

In his presentation, Karel Van den Berghe showed how the port in Ghent can facilitate the urban economy, allowing major companies like Volvo and Arcelor Mittal and bio-based economy to thrive.

The port of Ghent generated direct value added and the direct employment (27,200 FTE in 2012) (Mathys, 2014). The share of value added per different sector shows that in contrary to the other ARA ports - Amsterdam-Rotterdam-Antwerp region - (Fig. 2), most is generated by the industrial sector (De Vlaamse Havencommissie, 2014). Moreover, maritime transport activities are minimally developed. Relatively, the industrial sector of the port of Zeeland is more important than Ghent. However, this is contributed by only one chemical plant: DOW (Ministerie van infrastructuur en Milieu, 2014; Zeeland Seaports, 2014). Ghent has a more diverse industrial profile, of which the largest subsectors are the metalworking and car manufacturing subsectors.

The subsector analysis of the port of Ghent shows that the car manufacturing, metalworking and chemicals subsector are important, with a total share of value added of 69%. However, when examined more in detail, especially the metalworking and car manufacturing firms are the most important, this based on the variables 'value added', 'employment' and 'investment' (Mathys, 2014). Ghent generates a relative high direct value added, although there are only minor maritime transport activities. The share of value added per sector shows that more than half of the total value added is generated by the industrial sector.

According to Van de Berghe, the port of Ghent has a different profile than the ports in the ARA region. Most of its activities are still industrial and no major maritime activities are present.

LESSONS LEARNED

What we learned was that other port cities are not just bigger or smaller but different (Jacobsen, Jacobs and Van de Berghe). Some have developed a very successful city-orientated economy out of their sometimes glorious port city past (Jacobs). So it shows us that Rotterdam is not one of many ports but a specific transition port, very much focused on the port activities itself. Even though Rotterdam could follow a different course, as London and Ghent have done.

Nevertheless the impact of the economic interface between harbour and city is crucial in the past and in the future (Jacobsen, Jacobs and Van de Berghe). Here it becomes clear that hosting innovation hubs as an interface between port and city can be successful (Aarts, Daamen, de Vries, Huijs, 2013).

In principle, cities with a port are well positioned to grow into trade centres. But they do have to be open to new tools and allow new actors to appear and new coalitions to be formed. Successful cities needed and still need a harbour for trade. In London, they are actually building another transition port to complement the urban economy. History has shown that taking full advantage of the transition and trade capacities of a port city should result in economic prosperity (Jacobs, 2016).

The port of Ghent shows that a port can be a stimulus for divers branches of industry in the regions. The example of Ghent makes us aware that also Rotterdam is a specific port (Van der Berghe, 2016). In Rotterdam's case, this means that the focus should be on trade, on reintroducing the concept of a mercantile city (Jacobs, Huijs, 2015). Ergo "to re-enact in the future" this speciality could be seen as an advantage for its development into a synergistical port city.

CONCLUSION

Historically, port and city had strong symbiotic relationships. To increase the competitiveness of port cities, the OECD (2013) called to re-establish the links, or interfaces, between ports and cities. It is most likely that a high concentration of crossovers between port and urban actors leads to a higher level of sustainability and higher local capitation of the created value added and employment rate.

Based on this knowledge, it becomes possible to gain a better perspective of past decisions and to compare other port cities to the current situation in Rotterdam. During the workshop, research and practice of various port cities demonstrated the importance of a port for the emergence and development of a city as was previously argued extensively in *Port Cities* (Hein, 2011). Wouter Jacobs's presentation demonstrated that trade is the connector throughout world history. The examples of London and Ghent made us aware of the possible alternatives and showed us how the city and the port of Rotterdam have taken radically different routes.

Rotterdam has now started working on the transition of the port economy. Nevertheless, Rotterdam is still considered to be a large port with a small city, even though it is a significant urban area with more than three million inhabitants and around ten thousand companies and two important universities. Nowadays, around 250,000 people work in the port-related marine economy, with only 85,000 actually working in the actual port (Havenmonitor, 2016). It is therefore no longer about the unilateral future of the port, but about the collective future of the port city.

The fact that history is always 'there' may be a strange thought for some, but this similarity between history, present and future can also help us see history as both present and future. It may at least help Rotterdam break through its lock-in and help it think and act in terms of alternative futures. However, in order to realise a future-proof port and solid urban economy, a change of mentality is absolutely essential. It is not just about unlocking the past, but also about acting upon it (enact). History can only be written by taking action. And this is why the workshop was held - because writing is not enough and it is time to act! The purpose of 're-enact the future' is to actively create widespread public awareness of the discussion. That will require a sustained effort by all actors. That's why an interactive congress, AIVP, will again be held at the end of this year. This paper takes this discussion further.

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Image Sources

Figure 1. Isocarp 2015 workshop Presentation W.Jacobs (Van Oort, 2015)

Figure 2. Isocarp 2015 workshop Presentation E.Jakobsen

Figure 3. Isocarp 2015 workshop Presentation, Karel Van den Berghe