

Stimulating urban-regeneration by hosting an Expo

What can Rotterdam learn from previous cases?



Student: Johannes Martijn de Vries

Studentnummer: 372670

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Scriptiebegeleider: Dr. Alexander Otgaar

Erasmus School of Economics

Urban, Port and Transport Economics

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Abstract

Rotterdam is considering to host the Expo 2025. The World Expo is a global event that aims at educating the public, sharing innovation, promoting progress and fostering cooperation. Each edition is hosted in a different city and needs therefore big capital investments in the construction of event facilities. To justify these capital investments many cities use mega-events to stimulate the urban regeneration process in the city.

This article shows that hosting a mega-event can help a city to improve its competitive position in the production of goods and services and that it can help to attract consumption to the city. Possible impacts of mega-events that contribute to this include: An improved city reputation; the introduction of new ideas; an improved social cohesion; the opportunity to fasten new infrastructure or urban renewal projects; the simulation of interregional and transnational cooperation; the possibility for local citizens to gain work experience; and the possibility for the local government to improve their administrative skills. Beside those positive impacts, there are also some impacts of mega-events that harm the regeneration process: Community alienation; An event failure; Capital investments in infrastructure and event buildings that are only necessary for the event; Environmental problems due to the construction for, and the visitors of, the event; Gentrification of the expo-area resulting in expulsion of local enterprises and citizens; Loss of control over the organisation of the mega-event; And the negative consequences of peak-demand on the tourist industry in the city.

Based on a literature study and cases of the Commonwealth Games 2002 held in Manchester and the World Expo 2010 held in Shanghai, some policy recommendations for Rotterdam are made: It is important to manage a positive public opinion about the event; Involve existing regeneration policies in the event; Make a well-trained and well-skilled team to coordinate and facilitate the event-led regeneration; Think about the post-event use of the Expo area in an early planning stage; And consider the threats of peak demand during the event and the process of gentrification because of the event.

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1: Introduction

The city of Rotterdam is considering doing a bid for the World Expo 2025. This is a mega-event which is held every 5 years in a different host-city (BIE, 2015A). Hosting an event on this scale requires a big investment of public money. To spend this responsibly it is crucial to bear the 'legacy' of the event in mind. 'Legacy is all planned and unplanned, positive and negative, tangible and intangible structures created for and by a mega-event that remain longer than the event itself' (Ferrari & Guala, 2015). An important legacy-goal that Rotterdam wants to achieve with the expo is the stimulation of the urban-regeneration process. Based on Roberts' definition (2000), the definition of an 'urban-regeneration process' used in this paper is: A process of lasting improvement in the economic, physical, social and environmental condition of an area that has been subject to change.

The World Expo Rotterdam is planned to be located in the areas 'Vierhavens' and 'RDM-Heijplaat'. The urban regeneration process should especially be stimulated in these two neighborhoods. 'Vierhavens' and 'RDM-Heijplaat' have lost their original function as port-related, industrial area since the port-activities are moving further out of the city towards the sea (Dirks, 2015). At the moment these areas are facing a necessary transition towards a more knowledge-intensive and sustainable port-area in combination with urban development at the riverfronts (City Council Rotterdam, 2011). Figure 1 shows the location of the areas 'Vierhavens' and 'RDM-Heijplaat' in Rotterdam. The figure shows this two areas as part of the bigger regeneration scheme 'Stadshavens' which includes more areas in Rotterdam.

Rotterdam is not the first city that wants to use a mega-event like the World Expo to stimulate the urban regeneration process. Examples of mega-events used for this goal include: the 2002 Commonwealth Games held in Manchester and the 2010 World Expo held in Shanghai. This paper gives a critical analysis of the conditions for using a mega-event to stimulate urban regeneration.

1.1 Research question

The research question answered in this paper is:

- How can Rotterdam use the World Expo 2025 to stimulate the urban regeneration process?

The sub-questions used to answer this question are:

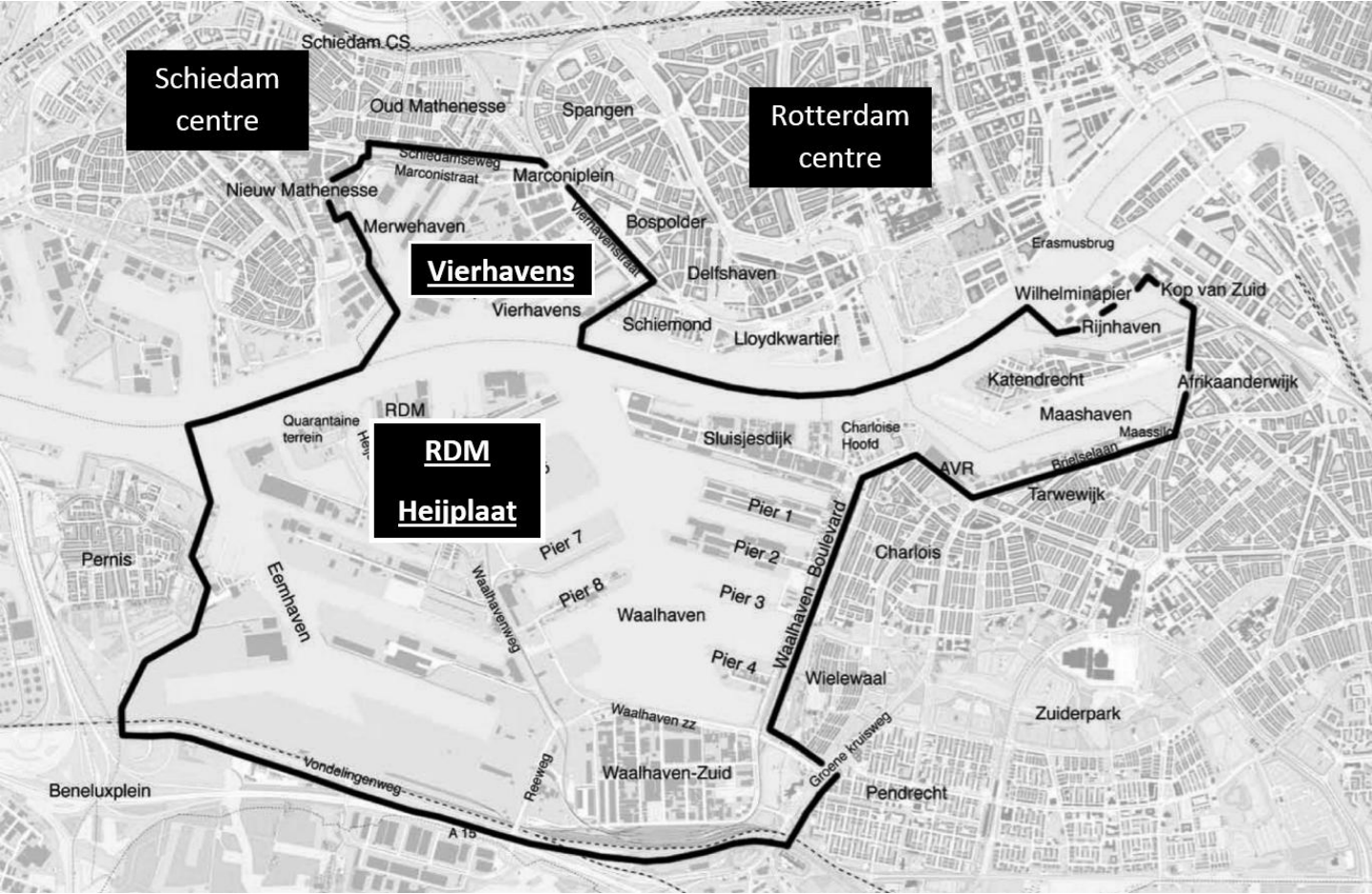
- What are mega-events and why is the World Expo a mega-event?
- How can mega-events stimulate the urban regeneration process?
- What can Rotterdam learn from the event led urban regeneration processes in Manchester and Shanghai?

1.2 Structure

The paper starts with explaining the characteristics of a mega-event and why the World Expo a mega-event is. After that the impacts of hosting a mega-event on the regeneration process are described. To test this theory in practice the case-studies of Manchester and Shanghai follow. At the end of the paper the results of the research will be concluded, discussed and some policy recommendations are made.

Figure 1

Map of area structure vision 'Stadshavens'



Source: Stadshavens Rotterdam

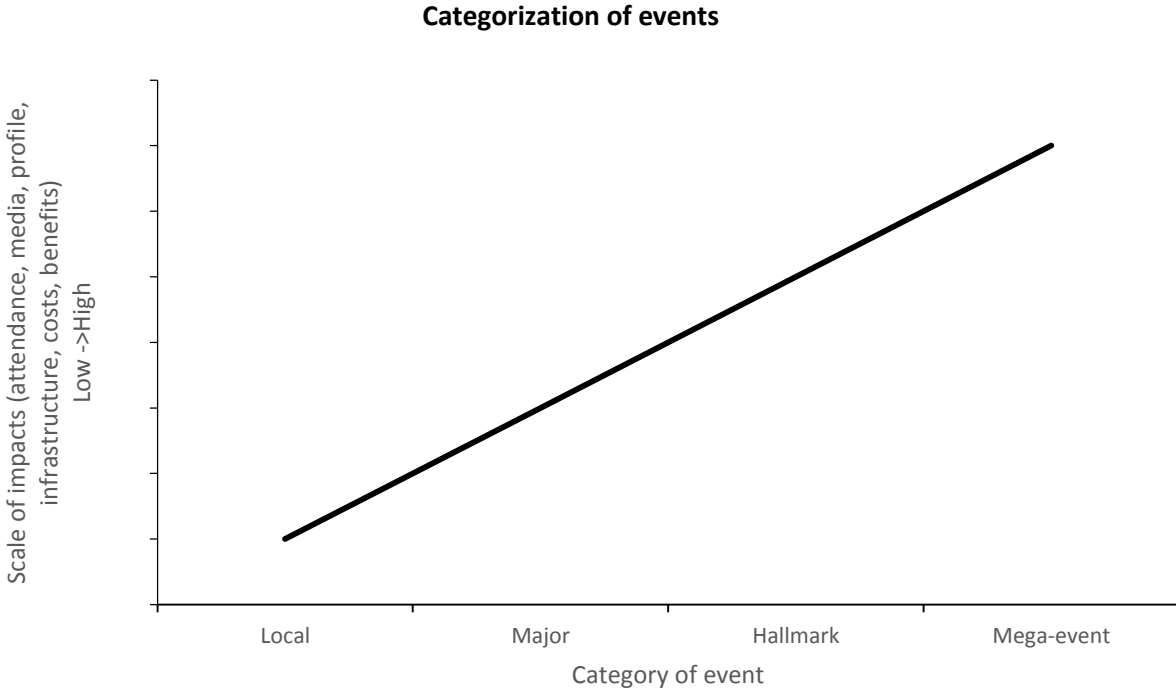
2: Literature Review: Mega-events and Urban Regeneration

2.1 Mega-events

Before investigating the use of the Expo to stimulate the urban regeneration process in Rotterdam, it is important to define the concept of a mega-event and explain why the Expo is a mega-event.

Every person has events in his private and public life, for example celebrating your birthday or celebrating New Year's Eve. Bowdin and McDonnell write in their book that 'a principle applying to all events is they are temporary and that, every such event is unique stemming from the blend of management, program, setting and people' (2006, p. 14). Events can be categorized in many different ways, figure 2 shows a scale of events based on impacts. The bigger an event the bigger the impacts. These impacts can be both positive and negative, so the bigger the event the bigger the risk involved. Think about the amount of private and public money invested in an event increasing with the scale of the event.

Figure 2



Source: (Bowdin & McDonnell, 2006, p. 16)

There are no clear criteria for a mega-event in terms of visitor numbers, money involved or something similar. Therefore Bowdin and McDonnell define mega-events as ‘events that are so large that they affect whole economies and reverberate in the global media. These events are generally developed following competitive bidding’ (2006, p. 18). The criteria that mega-events are generally developed following competitive bidding makes that these events are not located at the same location every year. This is an important difference compared to the hallmark-events which are related to one location such as Carnival in Rio and the Oktoberfest in Munich (Bowdin & McDonnell, 2006). Following Bowdin and McDonnell’s definition world famous mega-events include: The Olympic Games; The World Expo and The FIFA World Cup. Since this research is focused on Rotterdam considering doing a bid for hosting the World Expo the next paragraph gives some information about this particular event.

2.2 The World Expo

The Bureau International des Expositions (BIE), the organization in charge of regulating the bidding, selection and organization of World Expos, uses the following definition of a World Expo:

‘An Expo is a global event that aims at educating the public, sharing innovation, promoting progress and fostering cooperation. It is organized by a host country that invites other countries, companies, international organisations, the private sector, the civil society and the general public to participate. Due to the diversity of its participants, from top decision makers to children, Expos offer a multifaceted event where extraordinary exhibitions, diplomatic encounters, business meetings, public debates and live shows take place at the same time’ (BIE, 2015A).

World Expos are also known as World Exhibitions or World Fairs. The first exhibition was held in the Crystal Palace in London in 1851. London organised this Great Exhibitions to show their merits and achievements as a result of the Industrial Revolution. Several Expo’s followed and the events were functioning as a crystallizing point for industry, culture and social progress. The expo is symbolic for the era after the industrial revolution which is focussed on universality and progress (De Groote, 2005).

The history of the World Expos continues until today and the concept of an expo is therefore influenced by the time. The first editions were located in one building where the participating nations presented their goods and wares, where in latter expos each nations had to build their own pavilion (De Groote, 2005). Also the focus of the expos changed: the expos until World War II were focused on material progress based on technological innovation and on colonial pavilions, where countries could showcase goods and people from their colonies. After World War II the focus shifted more to human progress and international dialogue. Technology was not the purpose, but a mean for human

development. In recent years the focus of the expos shifts again back to technology: technologies that enables a shift to a more sustainable economic development (BIE, 2015B). Rotterdam wants to follow this trend using the main question: How do we realise an economy that is greener, more resilient and fairer (World Expo Rotterdam 2025, 2015A)?

Table 3 gives an overview of the themes, scale and financial balance of the recent World Expo's. This table makes clear that the World Expo is clearly a mega-event, attracting more visitors than any other event in the world. For example, the London 2012 Olympic Games attracted 16 million unique visitors while the 2010 Expo attracted 73 million unique visitors (International Olympic Committee, 2013). The impact of the event is also shown in the massive land use of the event shown in table 3.

Table 3

General Overview of the World Exhibitions since 1970

Year	Place	Theme	Area ha	Participating Countries	Visitors (mil.)	Financial Balance	Significant Buildings	Technical Novelties
1970	Osaka	Progress and Harmony for Mankind	330	77	64.2	+	General Pavilion	Space frame constructions, pneumatic constructions
1992	Seville	The Age of Discovery	215	108	41.8	-	La Cartuja	IT (Information Technology)
2000	Hannover	Human being - Nature - Technology Energetic and space economy	160	155	18.1	-		Virtual Reality
2005	Aichi	Nature's Wisdom	173	121	22.0	+		
2010	Shanghai	Better City, Better Life	528	192	73.0	+	Oriental Crown (Chinese pavilion)	A guide for sustainable development of cities
2015	Milan	Feeding the Planet, Energy for Life	110	145				

Sources: (De Groote, 2005) + (BIE, 2015B) + (Expo Milano 2015, 2015)

Some people including Wainwright (2015) raise the question if an information, technology and culture sharing event as the Expo is not outdated due to the development of modern communication and transportation technologies. An argument for this is that new inventions are first presented on the internet and not at the Expo anymore. On top of that, the culture sharing idea is of less importance since people can visit far-away countries by themselves and experience the culture more realistically. Based on the big losses of the Expos in Seville and Hannover, and the expected loss of the 2015 Expo in Milan Wainwright (2015) argues the host-city does not benefit from the expo and that the event therefore should be ended.

On the other hand there are arguments that the Expo is not outdated, especially not as an information and technology sharing event. McCann (2013) states that advanced industrialized economies increasingly shift into the production of goods and services embodying complex knowledge and information. This kind of industries use much direct face-to-face contact to share tacit knowledge. 'Tacit knowledge is knowledge or information which is incomplete and which is shared on a non-market basis, and can relate to issues such as new products, personnel, technology of market trends' (McCann, 2013, p. 52). The World Expo can be a platform to share this tacit knowledge.

2.3 Urban regeneration

As mentioned earlier in this paper, mega-events can be used to stimulate the urban regeneration process in cities or city areas. This paragraph will describe the concept of urban regeneration.

During the '60s, '70s and '80s of the twentieth century many large urban areas faced a consistent outward drift of people and activities. Improvements in production, communications, and transport technology reduced the importance of a central urban location and the households' income rise resulted in an increased preference for more peripheral, but still accessible, locations. On top of that many, mostly Western, cities have faced or are facing a necessary transition from industrial, secondary businesses to more knowledge-based, tertiary businesses (McCann, 2013). As mentioned in the introductions this is the case in Rotterdam's Expo areas Vierhaven and RDM-Heijplaat which are transforming from industrial port areas to areas with more knowledge-based industries and river-front living. The developments described in this paragraph resulted often in urban wastelands, in which land immediately adjacent to the urban center is not developed and derelict. This leads often to problems of deprivation, poverty and crime (McCann, 2013).

To overcome these problems, city councils used local governance to stimulate the urban regeneration process: the process of lasting improvement in the economic, physical, social and environmental condition of these areas that has been subject to change. Note that local 'governance' is a much broader concept than local 'government'. As Harvey states: 'The real power to reorganize urban life so often lies elsewhere or at least within a broader coalition of forces within which urban government and administration have only a facilitative and coordinating role to play' (1989, p. 6). Other social agents that can stimulate urban regeneration include for example: Private companies; local financiers; the local chamber of commerce; educational institutions; and social movements. An example of this is the Rotterdam's Expo 2025 plan which is founded and financed by private parties. In the cases studied in this article it also becomes clear that different social agents with different budgets are involved in the regeneration process.

Many cities have used and are using mega-events to stimulate the urban regeneration process. An important reason why cities use mega-events for this is the fact that it has become more difficult for cities to attract the necessary capital for the regeneration. This is due to the phasing out of the Keynesian welfare system which resulted in smaller budget for local governments (Shin, 2014). This resulted in a competition between cities worldwide for the globalized, foot-loose capital. To compete for this capital, cities become more entrepreneurial and focus more on business interests making localities more amenable to investor's needs (Shin, 2014) (Harvey, 1989). Harvey (1989, pp. 7-10) mentions four elements of this so-called 'urban entrepreneurialism'. In this paper the different impacts of mega-events are explained by looking how they contribute to these four elements:

1. 'The creation or exploitation of particular advantages for the production of goods and services'. Mega-events can develop the competitive advantages of the city to attract investment, businesses and jobs. Examples of corresponding policies include: Investing in the local workforce; giving subsidies to important companies; and building facilities for a certain business cluster.
2. 'Improve the competitive position with respect to the spatial division of consumption'. Cities are competing for tourists and citizens that are willing to consume and are focused on the quality of life, mega-events can contribute to this. Examples of corresponding policies include: Urban renewal projects; hosting cultural festivals; and building convention and shopping centers.
3. 'Exquisite key control and command functions in high finance, government, or information gathering and processing'. This has to do with the development that systems, information and technology are becoming more complex as earlier described in this paper. In order to be competitive as a city, the costs for firms to acquire different kind of knowledge have to be low. Important factors for this include: A good ICT-infrastructure; good connections to other global cities; and having good support services such as law, finance and education firms and organizations.

4. 'Apply for redistributions of surpluses through central governments'. Mega-events can help cities attracting funds or contracts of governmental organizations which have spillover effects. Think about central government funds to redevelop a certain neighborhood or the establishment of an important research institute in your city.

2.4 Impacts of event-led regeneration

This paragraph clarifies how mega-events can stimulate the regeneration process. This is done by explaining some important impacts of mega-events, shown in table 4. Some impacts will be matched with Harvey's 4 elements of urban entrepreneurialism to explain in what manner they stimulate the regeneration process. Besides this, some literature is used to discuss the effectiveness of the impacts on the regeneration process. The cases in the next chapter, will be used to test if the theory described in this paragraph fits with the real-life examples.

Social and cultural Impacts

Hosting a mega-event gives an opportunity for citizens to do volunteer work, expand their cultural perspective and improve their self-esteem. These factors can increase the level of human capital of the city and therefore stimulate a competitive advantage for production (Bowdin & McDonnell, 2006). Note that the impacts of mega-events on human capital are difficult to measure and therefore questionable. Campbell (2011) and Connolly (2013) doubt for example the effect of exposing local communities to art and culture. They state that creativity and entrepreneurship is mainly caused by other factors as prior income levels, prior relevant experience and pre-existing wealth. They conclude that the exposure of art and culture during the mega-event has not a big impact on the regeneration process.

Besides that, hosting a mega-event can also lead to community alienation and social dislocation which is negative for the level of human capital (Bowdin & McDonnell, 2006). It is therefore important to think about strategies to include the local community in the mega-event.

Besides improving the human capital, hosting a mega-event can also introduce new and challenging ideas which can create a competitive advantage for production (Bowdin & McDonnell, 2006). Rotterdam wants to focus the Expo on economic sectors where it is already competitive in, for example food production in deltas (World Expo Rotterdam 2025, 2015B). Hosting the Expo could bring different people, ideas and capital together which leads to a better competitive position for production in this economic sector.

Table 4**The impacts of mega-events**

Sphere of event	Positive impacts	Negative impacts
Social and cultural	<ul style="list-style-type: none"> • Shared experience • Revitalizing traditions • Building community pride • Validation of community groups • Increased community participation • Introducing new and challenging ideas • Expanding cultural perspectives 	<ul style="list-style-type: none"> • Community alienation • Manipulation of community • Negative community image • Bad behavior • Substance abuse • Social dislocation • Loss of amenity
Physical and environmental	<ul style="list-style-type: none"> • Showcasing the environment • Providing models for best practice • Increasing environmental awareness • Infrastructure legacy • Improved transport and communications • Urban transformation and renewal 	<ul style="list-style-type: none"> • Environmental damage • Pollution • Destruction of heritage • Noise disturbance • Traffic congestion
Political	<ul style="list-style-type: none"> • International prestige • Improved profile • Promotion of investment • Social cohesion • Development of administrative skills 	<ul style="list-style-type: none"> • Risk of event failure • Misallocation of funds • Lack of accountability • Propagandizing • Loss of community ownership and control • Legitimation of ideology
Tourism and economic	<ul style="list-style-type: none"> • Destinalional promotion and increased tourist visits • Extended length of stay • Higher yield • Increased tax revenue • Business opportunities • Commercial activity • Job creation 	<ul style="list-style-type: none"> • Community resistance to tourism • Loss of authenticity • Damage to reputation • Exploitation • Inflated prices • Opportunity costs • Financial management • Financial loss

Source: cited from (Bowdin & McDonnell, 2006, p. 38)

On top of that, some social and cultural impacts of mega-events can improve the competitive position of the city in terms of quality of life. The citizens of the city have a shared experience and a reason to be proud, that unites them (Bowdin & McDonnell, 2006). Think about the positive feeling in a country when the national soccer team wins during the World Cup. It is possible that the positive vibe of the mega-event stimulate people to do extra efforts for the community. The community participation increases and some traditions could be revitalized. Possible examples of this include citizens that maintain their streets better or a private initiative to organize an event-themed festival. All these factors can improve the quality of life in a city and therefore attract consumption to the city.

An important social and cultural threat related to hosting a mega-event is the change that the event fails in his expectations (Bowdin & McDonnell, 2006). The shame related to this can decrease the quality of life in the city. An example of this is the Expo 2000 in Hannover which attracted less than half the visitors expected and had a big budget deficit (The Guardian, 2000). Such negative news about a city can have a negative effect on the community participation and the image of the city.

Physical and environmental impacts

One of the main physical consequences of hosting a mega-event is the necessary investment in the infrastructure. The planning and realization of infrastructural projects tends to be fastened as a result of the time pressure of the mega-event, even if the projects are not directly related to the event (Ferrari & Guala, 2015). The investment in infrastructure can stimulate all four elements of regeneration: It can increase the competitive advantage for production; it can increase the quality of live; it can connect the city or the area better with the rest of the world; and there is a chance to receive central government subsidies to finance the infrastructure.

A problem of using a mega-event as driver for investing in infrastructure, is the risk of investing in projects that are only necessary for the mega-event. Seville constructed new bridges and roads to the 1992 expo-area, which is barely used after the event (Wainwright, 2015). If you consider the opportunity costs of the capital invested, such infrastructure projects have probably a negative influences on the regeneration process. On the other hand, the 1992 Expo stimulated the building of a high-speed train connection between Madrid and Seville (Hooper, 1993). This was subsidized by the national government and improved the accessibility of Seville and therefore the competitive advantage for production and the quality of life. It may even improve the chance for Seville to attract key control and command functions to the city.

Besides the physical changes in the infrastructure, mega-events also give the opportunity to invest in and fasten urban-renewal projects and improve the environment in the city (Bowdin & McDonnell,

2006). In the cases of Manchester and Shanghai we will see that the mega-events are used to renew deprived areas. The mega-event can give attention to the areas and therefore attract central government subsidies. The urban-renewal can make areas more attractive for production and it can increase the quality of life in the area. A danger is that other deprived areas are forgotten, because all the attention and investments go to the event area. This would result in a movement of the problems and will not result in a solution.

Harvey (1989) points out that there is a threat that these big urban renewal and transport projects only benefit the rich firms and consumers who can pay those redeveloped top locations, and are financed by tax money of the whole society including the working middle class and the poor. The case of the 2010 Expo in Shanghai, discussed later in this paper, will show this is indeed possible.

Another argument against hosting a mega-event to stimulate the physical renewal of an area are the higher costs involved as result of the event. Chen, Tu and Su (2014) explain that this is due to the extra temporary function of the event area: In the case of Rotterdam the old harbor and industrial area will first be transformed into an expo area, and after that it will be transformed into the function for post-event use. This two different functions can be difficult to combine. With an Expo it is for example difficult that the buildings have to be spectacular during the Expo and useful after the Expo. Besides that the timespan of the total transformation process can last longer and there are more stakeholders involved: Stakeholders for the temporary event function and stakeholders for the end-use function. These reasons can make the regeneration process less efficient.

Mangan (2008) states that few Olympics have managed a good legacy for the sport facilities, for example the 2000 Olympic stadium of Sydney is barely used after the event. Because of these examples Wainwright (2015) argues that all the physical investments, necessary to stimulate the regeneration process in an area, could be done without the extra expenses of organizing a mega-event. This argument can be criticized by arguing that Wainwright ignores the fact that the construction projects are often fastened significantly because of hosting the event. Besides that, hosting a mega-event has also other social, cultural, political, touristic and economic impacts that are described in this chapter. Wainwright ignores those impacts in his argumentation.

The last thing to point out is the fact that the construction before, and the peak-demand during the event may cause congestion, pollution and noise disturbance (Bowdin & McDonnell, 2006). This has negative consequences for the quality of live in the city area and can therefore result in protests of the local community. It is therefore important to make the local community feel included in the event and explain how they benefit from the event. This can result in an increase in their toleration of these congestion, pollution and noise disturbance.

An argument that relativizes the negative environmental consequences of the infrastructural construction is that these consequences would also have happened if there was no mega-event: Building a new metro line results in negative environmental consequences during the construction, regardless if the construction is linked to a mega-event or not. Only the environmental consequences of the extra visitors during the event and the environmental consequences of the construction only done because of the event, have to be taken into consideration for the cost-benefit analysis of the mega-event.

Political impacts

An important political reason for a city to host a mega-event is the opportunity it gives to connect the city directly with transnational actors. Harvey (1989) and Shin (2014) state that this global connection is increasingly important due to the 'footloose' capital. Bypassing the central government can help cities to be more effective in the global competition for capital. Besides that, the mega-event can improve the reputation of a city which also helps to attract capital to the city. Similar to what is mentioned earlier in this paper, there is a risk of an event failure which can have a bad influence on the reputation of the city.

Another political reason for hosting a mega-event is the increased social cohesion it may cause. An event can unite the citizens of the city which makes it easier to implement policies. Think for example about the general opinion of building a new metro line. The event may be a good argument to convince people of the necessity of it. But even policies that are not related to the event can benefit. The case of Manchester, handled later in this article, shows that an event-themed regeneration may be more effective than an event-led regeneration. With an event-themed regeneration is meant that regeneration projects not directly related to the event are also boosted by theming them to event. By doing this these projects can benefit from the positive vibe and improved social cohesion of the event (Smith & Fox, 2007).

Besides this, hosting a mega-event gives city governments an opportunity to develop their administrative skills. As mentioned earlier, hosting a mega-event requires a good coordination and facilitation of the local government in order to let other social agents do their work. Furthermore in most cases interregional cooperation is stimulated by hosting a mega-event (Ferrari & Guala, 2015). These things can be a valuable learning curve for a city government which can also be used for other regeneration policies after the event.

A negative political impact of hosting a mega-event is the lack of accountability and the loss of community ownership and control related to the mega-event. In almost all mega-events an international organization is involved, with the World Expo this is for example the BIE. These

organizations have often their own rules and authority in the organization of the mega-event. This makes it difficult for cities to regulate and control the consequences of the mega-event. Wainwright (2015) states that these organizations are more oriented on hosting a spectacular event than on the legacy for the city. In Milan this led for example to the construction of gigantic, mostly useless, pavilions while the original plan of the city was to have only simple pavilions that are easy to demolish after the event.

Tourism and economic impacts

A mega-event can stimulate the tourism in the city. A well-known example of this are the 1992 Olympics held in Barcelona. Besides building four Olympic sites in a low-income neighborhood, a declining industrial site and a waterfront area, the city used the games also to develop already proposed programs: the creation of public open spaces; the improvement of public transportation, the opening of the city to the sea, the renovation of the city's cultural infrastructure, the landscaping of squares and the commissioning of new sculptures (Chen, Tu, & Su, 2014). This event-led regeneration is one of the reasons that the number of visitors to the city skyrocket from 1.7 million in 1990 to more than 7.4 million in 2012 (Kassam, 2014). Visitors increase the consumption in the city and therefore create jobs and tax revenue.

Roche (2000) warns for the threat that the tourism demand during the event is bigger than the carrying capacity of the city. This would need investments in, for example, extra hotels. Though, if the post-event use of those hotels is significant lower than during the event, it will lead to financial problems in this sector. Roche states this was the case after the 1992 Expo in Seville.

Besides job creation in the tourism industry the construction needed for the event can generate new employment. The problem with this is that such construction-led regeneration has often failed to have a long-term employment legacy and therefore did not fulfill the social objectives for regeneration (McTier, Glass, & McGregor, 2012). When the event is over, the level of new construction will decline and because of that, the amount of jobs as well. To overcome this issue McTier, Glass and McGregor set out 5 practical learning points to improve the employment legacy of construction-led regeneration (McTier, Glass, & McGregor, 2012). These practical learning points are shown in box 5.

The last economic impact of a mega-event mentioned in this paper, is the risk of inflated prices. This is due to a high demand for space, services and products during the event. This has negative results for the level of consumption in the city and for the citizens' quality of life. Besides that it could also harm local businesses that have to move due to higher rents. Rotterdam wants to host the Expo in an

area where many creative industries are located. If rents get too high due to the Expo, they may move away from that area.

Box 5

Learning points to maximize employment legacy of big construction projects

Establish a targeted employability program

Prepare the local unemployed and low-skilled residents so that they could compete for the jobs created by the property-led regeneration. Look at the different needs of the employers and the available workforce for the construction jobs but also for the end-use jobs.

Adequately resource the intervention

Especially an effective partnership supported by high quality management and staffing is important for a successful intervention in the labor market. It is important to time the start of the partnership effectively and consider the size and the different member’s carefully. The management, often provided by the local authority, should have strong leadership and a clear division of responsibility. Besides that the quality of the staff is more important than the quantity.

Consult on local needs

Interventions in the labor market are more effective if they are developed around the needs of locals and communities. In order to achieve these possible approaches may be used: existing local studies, knowledge and experience; a baseline labor market position statement detailing the needs of potential beneficiaries; consulting locals and community groups.

Secure effective employer engagement

Commitment of construction contractors and the end-use contractors is necessary for a good employment legacy. Important employer engagements activities include: engage employers as early as possible; deliver a professional job brokerage service; and be realistic in their expectations of employers.

Accuracy around job numbers

Be honest about the net job gain as a result of the regeneration so that locals don’t get disappointed. In practice this point is very difficult to measure and therefore to implement.

Source: (McTier, Glass, & McGregor, 2012)

3: Case studies

The former chapter showed several arguments why mega-events can be used to stimulate the regeneration process and why they can also harm the regeneration process. The cases in this paragraph will test if these theoretical arguments are valid in practice. As already mentioned the 2002 Commonwealth Games held in Manchester and the 2010 World Expo held in Shanghai are selected as cases. I will first explain the selection of the cases.

An important criteria for selecting the cases was that the event-area had to be located in a so-called 'brown-field' area. This is an already used area, which is the case of the Expo-area in Rotterdam. The opposite of a 'brown-field' area is a 'green-field' area which is an empty area, ready for construction. The Expo-areas in Seville, Hannover and Aichi were cases of a 'green-field' development and therefore not transferable to Rotterdam.

To ensure that the case is transferable to the 2025 Expo another criteria was that the mega-event had to be organized not too much time ago. Since the 1970 Expo in Osaka was the last, official recognized, World Expo organized before the 1992 Expo in Seville, it was not possible to use another Expo as case besides Shanghai.

The last criteria for choosing the cases was a practical one: The availability of enough research and information.

The case of Manchester is selected because of the similarity between the cities of Manchester and Rotterdam. Both cities, with similar population sizes, are facing a necessary transition from industrial production to more knowledge intensive industries. On top of that, Manchester is also a Western-European city which makes the political and legal structures of the cities very similar. As already mentioned, another reason to pick Manchester was the fact that the mega-event was held in an already developed, and derelict, area. A negative aspect for the transferability of the lessons of Manchester to Rotterdam is the fact it concerns a different mega-event. This problem is not insurmountable since the former chapter showed that most impacts of different mega-events are quite similar.

The case of Shanghai is selected because it concerns the same mega-event, and faces therefore similar challenges. Besides that the event area in Shanghai was also an already developed, and derelict, area. The fact that Shanghai is a mega-city in an emerging economy make some lessons of the case difficult to transfer to Rotterdam. For example the investments in new infrastructure are more logical in a fast-growing city than in a city as Rotterdam. Because of that, I will also discuss the transferability of the learned lessons.

To ensure the cohesion of the case studies, the structure of both cases is the same. There will be a short introduction about the event. After that two research questions will be answered: What was the impact of the area's physical redevelopment on the regeneration process? And: What was the impact of the social-economic policies, related to the mega-event, on the regeneration process? These questions will be answered by applying the possible impacts of mega-events explained earlier in the paper.

3.1 Manchester: 2002 Commonwealth Games

The Commonwealth Games are a sporting event involving Athletes from the Commonwealth of Nations. Besides sports, the games also showed British technology, creativity and cultural diversity. This was done by organizing non-sporting activities before and during the event. Examples of these non-sporting activities include: The opening and closing ceremony; event-themed cultural festivals; and hosting business platforms. One of the four mission statements of hosting the mega-event was: 'To leave a lasting legacy of new sporting facilities and social, physical and economic regeneration (particularly around Sportcity in East Manchester)' (2002 Manchester, 2002).

Manchester used the 2002 Commonwealth Games to stimulate the regeneration in East Manchester. The area, which is shown in figure 6, is some 2000 hectares and developed as a result of the industrial revolution in the nineteenth and early decades of the twentieth century. Since 1950 the area lost more than half of its economic base and the population fell from 164,000 in 1951 to 62,000 in 2001 due to deindustrialization. The people who could not afford to leave were left behind in the derelict neighborhoods (New East Manchester, 2007). With the decision in November 1995 to award the 2002 Commonwealth Games to Manchester the urban regeneration process of East Manchester started.

The urban regeneration company New East Manchester Ltd (NEM) was founded in February 2000 to coordinate this (Ward, 2003). The core principles of the NEM are: 'ensuring that the regeneration of the area built in long-term sustainability in every respect – economic, social and environmental; an aspiration to achieve the highest standards of physical redevelopment; and a focus on the retention of the existing population of East Manchester along with the improvement of their social and economic prospects' (New East Manchester, 2007). The organization of the 2002 Commonwealth Games was incorporated in the regeneration scheme of the NEM.

Figure 6



Source: (Ward, 2003)

Physical redevelopment

The physical regeneration process of east-Manchester consisted of big capital investments in the area, done by the local and national government: New sport venues; New infrastructure; Investment in leisure and entertainment; And new houses (New East Manchester, 2007) (2002 Manchester, 2002). The most important physical redevelopment project related to the Games was Sportcity. The different sport stadiums for the Games were built in this area. After the event these stadiums were transformed in training complexes making Manchester the 'Sportcity of England'. As a result of this, many national sport bonds decided to locate their offices in Sportcity. Besides that the training complexes attracted a lot of visitors. These offices and visitors made the area also attractive for other commercial activities (Hutten, Van Bakel, & Dudok, 2012).

Although this may look like a perfect example of event-led regeneration there was also some critique on this process. Ward (2003) criticizes the lack of coordination in all the different regeneration policies. Figure 6 shows indeed that many regeneration policies use different borders for their target area. According to Ward this results in an area which looks fake. 'A creation of the imaginations of local and regional politicians rather than of local communities'. It is reasonable to assume that the different regeneration policies would have worked more efficiently if they used the same target-area.

Hutten, Van Bakel and Dudok (2012) evaluate the physical redevelopment of Sportcity as a good catalyzer of the regeneration process. They emphasize three points in which Sportcity was especially successful. The first point of success was the matching of the event and the post-event use. Earlier in this paper is explained why this is a difficult task. The City Council of Manchester was only willing to host the Games if the post-event use of the area was contractual secured. This resulted for example in the fact that the athletic stadium of the Games was designed to be transformed in a football stadium for Manchester City after the event. The second point of success was the good coordination between the different activities in the area. Sportcity is managed by two employees of the city government. They decide what activities fit in the area and coordinate the cooperation among the different activities. This makes it for example possible that the gigantic parking space of the stadium of Manchester City during the week is used as parking space for the local shops. The last point of success was the cooperation with the local community. Local people were given the chance to use the sport facilities themselves, to do volunteer or paid work in the facilities and to watch famous athletes. This cooperation with the local community results in a stronger connection between the new constructions and the surrounding area.

Social and economic policies

According to Smith and Fox a physical strategy is common for event-led regeneration (2007). They state that Manchester made a noteworthy difference by using the event also to stimulate the social and economic regeneration process effectively. Table 7 shows the seven projects of the social and economic regeneration strategy linked to the Games.

An important remark is that these projects are aimed to stimulate regeneration processes in Manchester and surroundings and not only in East Manchester. Therefore these projects are not part of the NEM, but belong to the 2002 North West Economic and Social SRB Programme. This is an interregional, governmental organization that has as objective to stimulate the social and economic regeneration (2002 Manchester, 2002).

A negative consequence of this involvement of two different regeneration organisations, is the more complex coordination among the different projects. Jones and Stokes (2010) give an example of this coordination problems concerning the Pre-Volunteer Programme (PVP) described in table 7. This program trained people from disadvantaged groups to become a volunteer during the event. In the end less than half of the PVP were accepted as a volunteer by the Games due to limited space and competition with other higher-educated volunteers. The selection of volunteers for the Games was the task of a different organization than that the PVP was. One responsible organization for both

programs would have improved the efficiency of the PVP by making sure that more graduates of the PVP actually were selected as volunteer for the Games.

On the other hand, separating tasks of the event among different organizations can also benefit the regeneration process. Smith and Fox (2007) state that a lot of already existing, regeneration programs in the region Manchester were linked to the Games. These projects were organized by different, already existing organizations. By doing this the projects could benefit from the positive vibe of the event, but also use the already existing experience and knowledge. In addition, the continuity of the projects after the event is better guaranteed when the projects are organized by permanent organizations instead of organizations that are only founded because of the event.

Interviews done among people involved in the event-led regeneration policies in Manchester showed that the social-economic regeneration programs were evaluated the most positive (Smith & Fox, 2007). This is interesting since they covered less than six percent of the total budget of the Games. It is important to emphasize this, because budgets for this kind of projects can be cut easily due to the fact they are not unmissable for organizing the mega-event. But by doing this, the positive effect of the mega-event on the regeneration process could be decreased significantly.

Another point many interviewees emphasized was the importance to continue the social and economic regeneration programs after the event (Smith & Fox, 2007). As described earlier in the paper an event can create a positive vibe in the city. A significant threat is that this vibe disappears when the event is over. The, by the event gained, self-confidence among certain less-advanced communities can for example disappear because of this. Continuing the social and economic regeneration programs after the event can make the event vibe and the results of this more sustainable.

3.2 Shanghai: 2010 World Expo

The 2010 Shanghai Expo was the first World Expo held in an emerging economy (Deng, Poon, & Chan, 2014). Table 3 shows the gigantic scale of the event which attracted much more visitors and used much more land than prior expos. The theme of the Expo was 'Better city, better life'.

Table 7

The seven projects within the 2002 NW Economic and Social SRB Programme

<p><i>Commonwealth Curriculum Pack</i> A programme which used interest in the Commonwealth Games to motivate children and teachers at school to enhance their information and communications technology skills. This was encouraged through the development of new curriculum materials and a website. These new learning resources also aimed to stimulate learning about the Games and about Commonwealth countries in general</p> <p><i>Games Xchange</i> A project designed to promote and market Manchester and the North West region. This was achieved by providing information about the city/region to local people and visitors through a range of accessible, informative and innovative methods. An event information centre set up as part of this project aimed to train and give employment experience to disadvantaged individuals</p> <p><i>Pre-volunteer Programme (PVP)</i> An opportunity for people from specific disadvantaged groups throughout the NW to undertake accredited training and to gain experience through volunteering at the Commonwealth Games. This training was in addition to the instruction given to conventional volunteers. Those involved were not guaranteed roles at the Games, but the aim was to encourage PVP graduates to apply for positions and, if successful, to give them extra support and guidance</p> <p><i>Healthier Communities</i> This project provided healthier living initiatives throughout the region before, during and after the Commonwealth Games. The project provided assistance to health services in disadvantaged communities, primarily through providing community representatives with new skills, contacts and opportunities to gain further funds. It also aimed to develop more coherent links between sport and health initiatives. More specifically, the project was intended to provide support for the elderly and those with learning difficulties, and to encourage young people to make healthy lifestyle choices</p> <p><i>Prosperity North West</i> This project aimed to ensure that businesses in the region benefited from the Commonwealth Games by forming strategic alliances between regional and Commonwealth organisations. It provided opportunities for local businesses to create durable trade links with Commonwealth countries. More specifically, the project aimed to identify, and disseminate information about, business opportunities relating to the Games. A business club was established and administered in the run-up to Games to assist this endeavour</p> <p><i>Passport 2K</i> This project provided out-of-school activities for young people aged 11–18 across the North West who took part in a range of outdoor activities incorporating sport and the arts. The project combined a series of local activity programmes, with a number of regional events. The latter aimed to enable young people from a range of backgrounds and locations to meet up and participate in activities on a regional basis</p> <p><i>Let's Celebrate</i> This project used celebratory arts including carnivals and <i>mela</i> to build the capacity of South Asian, African and African Caribbean communities and representative organisations in the North West. The idea was to award franchises of varying lengths to new and existing groups who had aspirations to develop their own events. The overarching aim was to promote long-term social cohesion, cultural diversity, local employment and the development of community-led cultural infrastructure</p>
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Source: cited from (Smith & Fox, 2007)

Figure 8 shows the position of the Expo area within Shanghai. The riverfront area used to be industrialized with a mixtures of factories, wharfs and residential blocks. The idea behind regenerating this area was the plan to link the west-side of the river, Puxi, with the east-side, Pudong, in order to let both cities side develop more coherent. There were four reasons for choosing specifically this area (Deng & Poon, 2012):

Facilitating restructuring: Due to environmental problems Shanghai wanted to relocate industries out of the city. The Expo was a good opportunity to enforce this process (Deng & Poon, 2012).

Respecting site contexts: the industrial heritage of this site gave the opportunity to reuse some of the buildings for the expo giving visitors some experience of the historic identity of the area (Deng & Poon, 2012). According to Deng, Poon and Chan this is especially important for fast growing cities within emerging economies (2014). Those cities have lost a lot of cultural heritage, due to the rapid urbanization, replaced by monolithic districts, which are similar to many other cities worldwide. Deng et al. state that the still existing heritage should be preserved as much as possible to improve the city environment (2014).

Improving efficiency: The Expo area is close to the city center which makes it easy for visitors to reach the necessary urban amenities (Deng & Poon, 2012). This reduces transport difficulties during the mega-event.

Expediting transformation: Due to the cross-river location of the area, the area is very attractive for post-event use what speeds up the transformation process.

Physical redevelopment

The physical regeneration process in Shanghai aimed to make the Expo area suitable for mixed use after the event. The planned post-event functions of the area were: (1) convention and exhibition; (2) cultural exchange; (3) retail, trade, and office; and (4) hospitality and entertainment (Deng, 2013). Deng and Poon (2012) praise this accurate risk assessment while determining the plans for the post-use of the expo-area in Shanghai. They argue that a transformation process of a neighborhood takes at least twenty years, the economic optimal function for an area could change during this time. It is therefore better to estimate the risks of every area-function carefully and aim for mixed uses in order to split the risk among different functions.

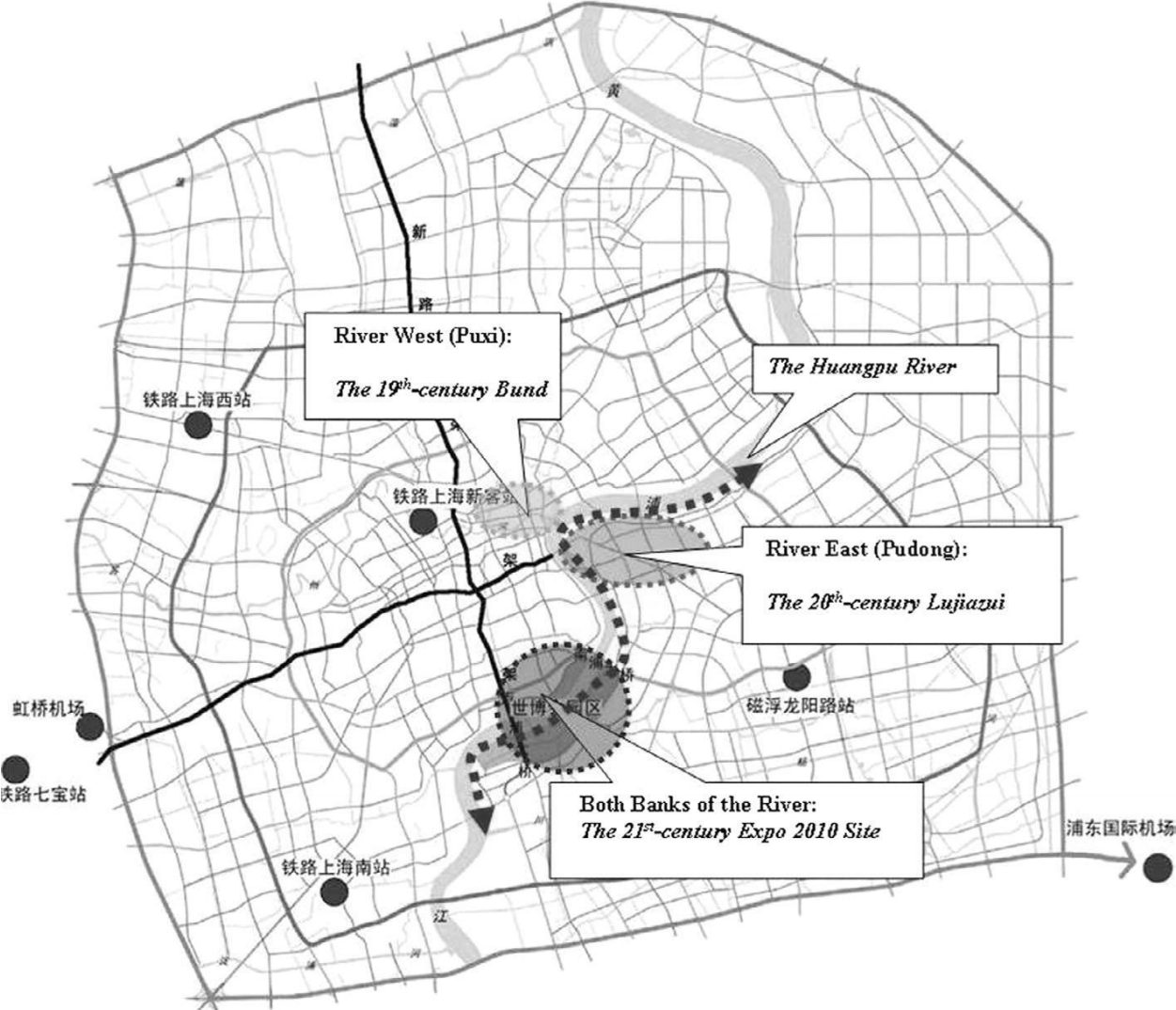
In the physical regeneration plan of Shanghai was chosen to build four Mega-Event Flagships (MEFs): The China Pavilion; The Theme Pavilion; The Expo Center; and the Performing and Arts Center. After the Expo the China Pavilion turned into a Chinese arts museum, the Theme Pavilion and the Expo Center turned into a big convention and exhibition center and the Performing and Arts Center turned into a mega-capacity cultural and lifestyle destination (Deng, 2013). According to Deng (2013) this

choice for four, smaller, mixed used MEFs spreads the risks among different post-event functions. Besides that, the interaction of the four buildings after the event, can help to stimulate the regeneration process in the area between the buildings. Think for example about visitors that walk from one MEF to another MEF. During this walk they may need to eat or drink something, so this area becomes more attractive for building a restaurant. This stimulates the regeneration process.

Note that the four ‘smaller’ MEFs in Shanghai were still big and iconic buildings (Deng, 2013). If the scale of the event is smaller it may be difficult to make a couple of smaller MEFs instead of one big MEF. This is due to the characteristic of an MEF that is has to be iconic, so splitting up the MEFs into smaller buildings results in the threat that not a single MEF is iconic anymore.

Figure 8

The Huangpu Riverfronts Trilogy

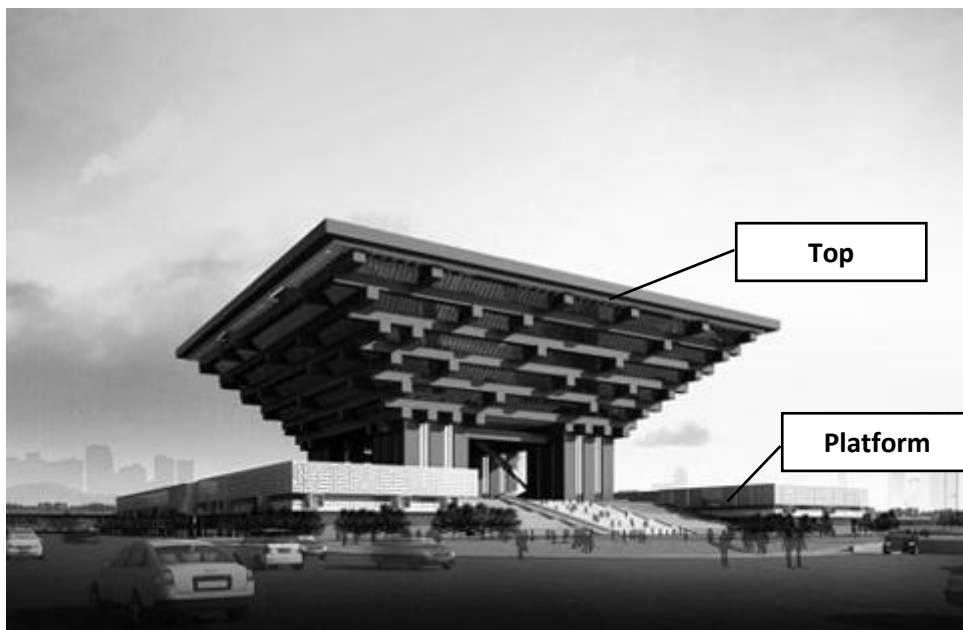


Source: (Deng & Poon, 2012)

Though a MEF has to be iconic, it is also important to be useful for the post-event function. To solve this problem Shanghai decided to split the Chinese Pavilion in two parts (Deng, 2013). This can be seen in figure 9: The red top is very iconic, but may be difficult to use after the event. But the platform has a simple shape and is easily usable as an exhibition center after the event.

Figure 9

Chinese pavilion Expo 2010

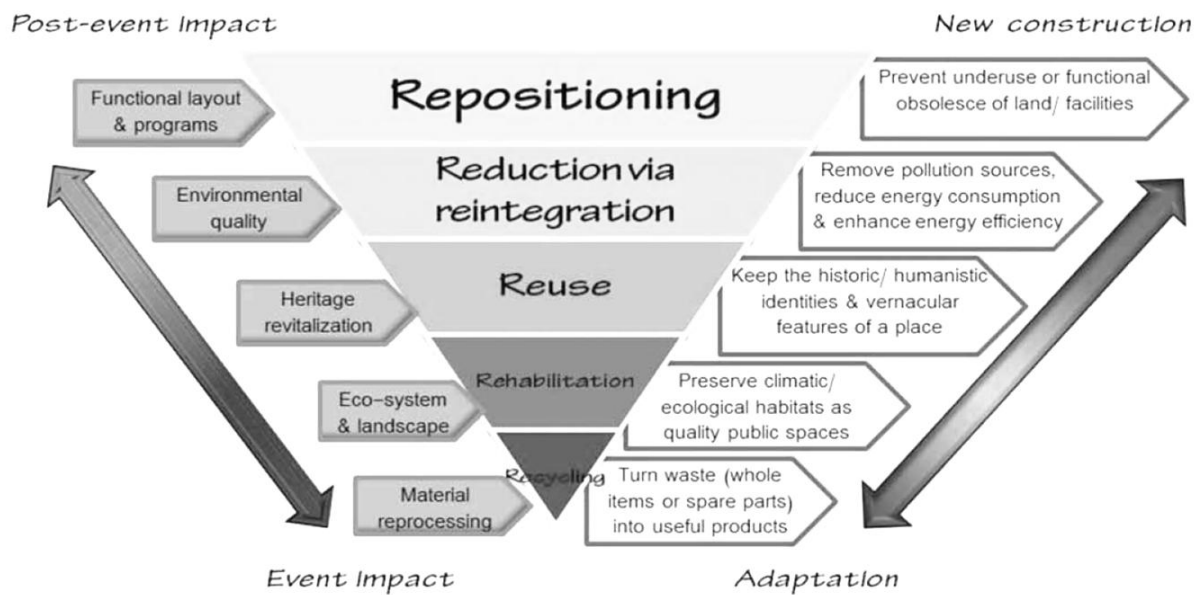


Deng Poon and Chan (2014) criticize that the physical redevelopment of the Expo-area In Shanghai is focused on tourists and high-end residents and businesses. This is an example of Harvey's concern that inequality is increased because of the regeneration strategies of local governments (1989): state subsidies are used to create fancy areas for the elite while local citizens and governments are moved to other places. By using this strategy it is also questionable if the environment benefits from the closure of the old industries in the expo-area: the chance exists that they reopen in a cheaper area.

The last thing I want to point out in this paragraph is a model created by Deng Poon and Chan (2014). This model for functional and environmental planning for mega-event led renewals, is based on their research on the redevelopment led by the 2010 Expo in Shanghai. The model is shown in figure 10 and can be interesting for Rotterdam to use, further explanation of this model is written in their paper.

Figure 10

5R Strategy hierarchy of a Mega Event Led Urban Redevelopment



Source: (Deng, Poon, & Chan, 2014)

Social and economic policies

Deng, Poon and Chan (2014) state that there was an absence of community participation in the Expo-led regeneration in Shanghai. The post-use of the area is focused on tourists and high-end residents, given the unique riverfront location and potential economic returns. Besides that, there is a clear focus on flagship projects like accommodating big enterprises. All these developments increased the process of gentrification, relocating the local residents and businesses to urban peripheries. An example of this is the fact that 18.000 families were evicted from their home to redevelop the Expo area in Shanghai (Amnesty International, 2010).

In contrast to Deng, Poon and Chan, Lamberti et al (2010) state that there was a relative high level of community participation during the Expo in Shanghai. They emphasize two areas of community participation during the Expo in Shanghai: The involvement of a wider group of stakeholders in the decision-making; and the internal promotions to prepare the public for the event.

The involvement of a wider group of stakeholders consisted of: Travel agencies involved in preparing the itineraries for visitors of the Expo; involving many stakeholders while planning the interventions in the tourism infrastructure; and promoting tourism development planning. This last point was done by organizing competitions aimed at awarding the people with the best ideas for the World Expo (Lamberti, Noci, Guo, & Zhu, 2010). Especially the last point can stimulate the involvement of local

communities in the mega-event, which is important for the regeneration process as explained in the former chapter.

The internal promotions to prepare the public for the event were aimed to increase the knowledge and the overall Expo culture. Besides that, local citizens were financially stimulated to hosts visitors of the Expo in their houses. This was done to respond to the peak-demand of visitors for the Expo, without creating an overcapacity of tourism facilities (Lamberti, Noci, Guo, & Zhu, 2010). This solution helps to overcome the problem of a limited carrying capacity explained in the former chapter. Besides that it increases the community involvement.

The community involvement had worked out well considering the results of a research done among Shanghai residents in March 2009 (Yang, Zeng, & Gu, 2010). 48% of the respondents greatly believed that the balance of the 2010 EXPO is positive, 46% had mixed opinions about the impacts of the Expo and 6% did not believe that residents' lives will improve as a result of the Expo. Note that this research is done one year before the event, so these opinions may be different after the event. Unfortunately there is no research available of the opinions after the event.

3.3 Lessons case studies

There are several lessons Rotterdam can learn from the cases of Manchester and Shanghai.

The first lesson, which applies to both cases, is that it is important to have a clear vision for the function of the area after the mega-event. In both cases the construction plans for the mega-event were extensively discussed with the post-event stakeholders. This ensures a good transformation from the event-use to the end-use of the area. It prevents that mega-event flagships are unused after the event. Rotterdam already has a long-term regeneration plan for the Expo-area which can be used for implementing this lesson.

Another lesson learned from the cases is the importance of incorporating the event-area into the surrounding area. In Shanghai this was stimulated by making four smaller mega-event flagships instead of one big flagship. This stimulated the use of the area between the different flagships. In Manchester the event-area was incorporated into the surrounding area by involving the local communities in Sportcity. This made sure that they visited the area often and that Sportcity became part of East Manchester.

It is questionable if Rotterdam can built a couple of iconic MEFs considering the demand for such buildings in the expo-area in Rotterdam. The expo-area is planned as an area for enterprises focused on innovation, creation, manufacturing and research. Many of these enterprises are start-ups which

cannot afford the high rents related to a MEF. It is probably better to focus on one iconic MEF and try to incorporate this building in the surrounding area by involving local communities or businesses instead of spending a lot of money on building more MEFs. If iconic pavilions are given away for free they can be preserved, if there is a clear post-event function.

The case of Manchester showed that the mega-event can also benefit social and economic regeneration programs that are not directly related to the mega-event. Since Rotterdam has many social projects in the different neighborhoods of Rotterdam it is worth involving those in the event. To maximize the effects, a flexible and well-trained team is needed to coordinate and unite the different physical, social and economic regeneration projects. It can be effective to reserve budget for the different projects to continue after the event. This prevents a sudden stop of the event-vibe when the event is finished.

The case of Shanghai is a good example of Rotterdam for combining the spectacular architecture of a World Expo with useful architecture for the post-event use while preserving the historical heritage of the area. Besides that it shows the risk of gentrification of the event area, which could in the case of Rotterdam harm the regeneration process in the longer term.

Another transferable lesson from Shanghai is the solution Shanghai used to increase the peak-capacity for visitors. Rotterdam is expecting 50 million visitors during the Expo, which is an extreme peak if you consider that the number of hotel stays was 1.5 million in 2014 (Rotterdam Partners, 2015). In the current plans Rotterdam wants to encourage visitors to stay in Amsterdam and other Dutch cities (Dirks, 2015). Shanghai stimulated local citizens to rent rooms to visitors, which is a good solution since it generates more profit within the city and the community involvement is stimulated.

4: Conclusions and discussion

Mega-events affect whole economies and reverberate in the global media. These events are generally developed following competitive bidding. The World Expo is a mega-event that aims at educating the public, sharing innovation, promoting progress and fostering cooperation. Each edition is hosted in a different city and needs therefore big capital investments in the construction of event facilities. To justify these capital investments many cities use mega-events to stimulate the urban regeneration process in the city.

Mega-events can stimulate, but also harm the urban regeneration process depending on the circumstances. Under certain conditions the mega-event can help to improve the city's competitive position in the production of goods and services and it can help to attract consumption to the city. Possible impacts of mega-events that contribute to this include: An improved city reputation; The introduction of new ideas; An improved social cohesion; The opportunity to fasten new infrastructure or urban renewal projects; The simulation of interregional and transnational cooperation; The possibility for local citizens to gain work experience; And the possibility for the local government to improve their administrative skills.

Possible impacts of mega-events that harm the regeneration-process include: Community alienation; an event failure which leads to a reputation and self-confidence loss; Capital investments in infrastructure and buildings that are only necessary for the mega-event; Environmental problems due to the construction for, and the visitors of, the event; Gentrification of the expo-area resulting in expulsion of local enterprises and citizens; Loss of control over the organisation of the mega-event; And the negative consequences of peak-demand on the tourist industry in the city.

The cases of Manchester and Shanghai contain some valuable lessons for Rotterdam: The first lesson is that it may be advisable to focus on one iconic Mega-Event Flagship since there is probably not much demand for such high-rent buildings in the expo-area after the event. If iconic pavilions are given away for free and there is a clear post-event use they can be preserved, since the rents will not be high in that case. Another lesson is that Rotterdam should prevent gentrification in the Expo area in order to maintain the current regeneration strategy for the event areas. Besides that it is important to involve the local community in the Expo-area in order to link the area with the surroundings. In addition Rotterdam can use the event-vibe to stimulate the urban regeneration projects in the whole city and surroundings, this requires a good coordination and collaboration among the projects. The last lesson I want to describe is that stimulating local citizens to rent rooms to visitors during the event can be a good solution for the expected peak-demand during the event.

Based on the theory behind these impacts and based on the cases of Manchester and Shanghai, I have made some policy recommendations for Rotterdam and for cities in general to improve the use of mega-events to stimulate the urban regeneration process.

Many impacts of hosting a mega-event are related to the positive vibe of the event which improves the reputation of a city; makes it easier to implement policies and investments; stimulates the social cohesion; and gives citizens self-esteem. It is therefore important for Rotterdam to manage the public opinion about the event. This can be done by setting realistic targets and including the local communities in the planning and realization of the event. To overcome the risk of a sudden stop in the positive event-vibe when the event ends, it is advisable to save some budget to continue the social-economic projects after the event.

The case of Manchester showed that the use of the knowledge and continuity of already existing projects and organisations can be beneficial for the regeneration process. This requires a good facilitation and coordination from the city government. Because of this, the employees responsible should be well trained and skilled. To stimulate the continuity it could be smart to maintain the team some years after the event.

In planning the development of the Expo area it is important to ensure a good transformation from the event-use to the end-use function of the area. Both Manchester and Shanghai have managed this transformation well by involving the end users in the planning of the event-area. The case of Shanghai is a good example of Rotterdam for combining the spectacular architecture of a World Expo with useful architecture for the post-event use while preserving the historical heritage of the area.

As last point of recommendation I want mention two threats which are of specific relevance for Rotterdam. The first thing to consider is the peak demand in visitors. Rotterdam is not used to extremely high amounts of visitors, so the carrying capacity will probably not be sufficient for hosting the mega-event. Investments in this sector are needed, but it is also advisable to consider cooperation with other cities in the Netherlands to spread the peak demand. This overcomes financial problems in the sector when the event and peak demand is over. Another solution for this problem is stimulating local citizens to rent rooms to visitors, this also increases the community involvement.

The other threat I want to mention is the risk of gentrification in the expo areas. This happened in the Shanghai Expo area. Gentrification has not to be a negative thing, but there are a lot of creative enterprises located in the Expo area of Rotterdam. If rising rents force them to move out, the long

term regeneration process could be harmed. Further research for strategies to overcome this problem is needed.

As have become clear in this paper, the different impacts and costs of a mega-event are extremely complex and broad. Because of this, it is beyond the scope of this research to give Rotterdam an advice for the decision to bid for the Expo 2025. A more quantitative research can help to give a better overview of all the costs and revenues involved. Though it may be difficult to find objective cost-benefit data of mega-events since the statistics of past events are often maintained by the local governments. They may show the results of their own policies more positive than the reality is.

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