Paper to be presented at the 10th Anniversary EURA Conference 'The Vital City', 12-14 September 2007, Glasgow

Path dependency and factors of change in the post-industrial urban economy

Jan Jacob Trip

Delft University of Technology, OTB Research Institute for Housing, Urban and Mobility Studies, Delft, the Netherlands. E-mail: J.J.Trip@Tudelft.nl

Abstract

This paper explores the proposition that most factors of urban competitiveness and vitality are to a large extent subject to path dependency, and that certain new developments and concepts may serve as factors of change, providing the opportunity to interrupt an unfavourable development trajectory. It focuses particularly on the role of path dependency in the transition from an industrial to a post-industrial economy. This brings about questions such as which conditions define the effect of a factor of change, and whether it is possible to distinguish any common conditions for this. To explore these questions, the paper discusses two different potential factors of change. The first is the high-speed train and its effect on urban-economic development, notably in the case of Euralille. The second is the creative economy, one of the most talked-of and controversial issues in the current urban-economic discourse.

1 Introduction

The starting point of this paper is the observation most essential factors of urban competitiveness are relatively stable, particularly in the medium and longer term. A city's position in major transport and communication networks or its economic structure are unlikely to change overnight, and the same is true for agglomeration effects due to, for instance, the existence of a cluster of related, specialized industries. We may say that factors such as these represent something of a *longue durée* in urban-economic development. Their relative stability is partly caused by the path dependency that characterizes many urban-economic processes. This also implies, however, that whereas a development path may be advantageous for a long time, it may turn into a dead end when external conditions become less favourable, for example in a period of industrial decline.

In contrast to these relatively stable processes are a variety of more dynamic phenomena, such as new technological developments or new approaches in urban economics. Some are here to stay and affect policy as effective factors of change; some are nine day's wonders without real consequences, never to be heard of again. Many are based on one or a few extreme or unique cases of a specific phenomenon, or a case where it first developed (Brenner, 2003:208). Paris, Chicago, Los Angeles, Silicon Valley and Las Vegas, for instance, all served as role models for the, at that time, contemporary city (Nijman, 2000:135; Beauregard, 2003:184-5; Harris, 2006:3). These models are often far

from average, but are nevertheless assumed to be paradigmatic. They may become realities on their own, apart from the context in which they first developed. When a lot of fuss and boosterism goes along with this, as it occasionally does, it comes close to what we might call a hype. This is the more so as the turn-over time of such concepts and theories seems to become ever faster (Foster *et al.*, 2007:309-10). Besides these urban development concepts, a wide variety of more concrete technological innovations, mega projects and promotional events such as the Olympic Games (Barcelona), a high-speed train station (Lille), a designer museum (Bilbao) or an appointment as the European Capital of Culture (Glasgow, Lille) also may give a boost to a city's economy. But in these cases too, the success stories can often be traced back to one or a few initial examples that have become sources of inspiration for other cities.

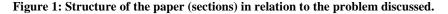
However, that something is a success in one city does not necessarily mean it will be a success in all cities. As Beauregard (2003:190) concludes, the theories that result from paradigmatic cases are often not appropriate to explain the development of cities on a more general level. Particularly with those concepts that are based on a very specific example, the use of such a concept to quite another city is questionable. Nevertheless, often when a concept is successful, many cities adopt it rather uncritically. This raises the question to which extent these concepts, that may be successful in first mover cities, are transferable to other cities and can effectively stimulate the urban economy.

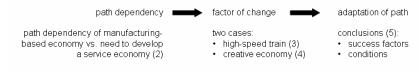
In view of the above, in this paper I explore the proposition that most factors of urban competitiveness and vitality to a large extent subject to path dependency, and that certain new developments and concepts may serve as what I will call factors of change, which could provide the opportunity to interrupt an unfavourable development trajectory. With respect to the latter, I focus particularly on the role of path dependency in the transition from an industrial to a post-industrial economy. This brings about questions such as which conditions define the effect of a factor of change, and whether it is possible to distinguish any common conditions for this. However, this necessarily entails only a limited, explorative analysis, since covering the issue completely and in depth would go far beyond the limits of this paper.

Looking at the issue from a broad perspective, I focus on two cases of factors of change affecting path-dependent urban-economic development, based on more elaborate case studies published in Trip (2007a). The first is the high-speed train and its effect on urban-economic development, notably in the case of Euralille. The second, and largest, case is the creative economy, one of the main issues in the current urban-economic discourse, and considered by critics to be one of the greatest hypes also. The concept seems the perfect solution for cities that are stuck in an unfavourable development path. But is it?

These cases are of a quite different nature and at first sight they seem hardly comparable. However, they are very much so with regard to the aspect I consider here: their potential role as factors of change that affect path-dependent urban-economic development. Moreover, in both cases effects on different spatial scales may distinguished; but while the effects of the high-speed train can now at least partly be studied in an ex-post way, the ideas behind the creative economy have only recently been incorporated in many cities' urban-economic policy and are just now becoming manifest in policy measures.

Figure 1 shows the structure of the paper in relation to the research question. First, Section 2 discusses the phenomenon of path dependency and, more in particular, its role in urban-economic development in a period of post-industrial economic transition. After that, it considers the way various factors of change may affect the supposedly path-dependent development of an urban economy. Section 3 focuses on the high-speed train as a factor of change, and Section 4 discusses more in depth the creative economy. A discussion on the results of the analysis and their possible implications concludes the paper.





2 Path dependency and factors of change

Path dependency

Path dependency describes the process by which an event in the past induces a chain of subsequent events according to an almost deterministic pattern. In general, the concept implies that 'events occurring at an earlier point in time will affect events occurring at a later point in time' (Djelic and Quack, 2007:161). In a more strict sense, path dependency requires that the initial event is contingent and not itself traceable to previous events, and that it induces a causal chain of events (Mahoney, 2000:510-1). Martin and Sunley (2006:402) state that in fact it is probabilistic, as at each state the continuation of the path is most probable, but not certain. The possible choices on any moment — although not completely random — are constrained by preceding events, and therefore can only be the result of bounded rationality. This means that path dependency is likely to lead to suboptimal situations (Pierson, 2000:252; Kay, 2005:553; Howlett and Rayner, 2006:6).

Most often, path dependency involves a specific development reinforcing itself, according to a cyclical, iterative pattern (Mahoney, 2000:508-9; Pierson, 2000:252-3). Network externalities are an example of this; increasing returns are another, commonly found in economic literature (Arthur, 1989; Pierson, 2000:253-7). The cases discussed in this paper also concern this type of path dependency. Alternatively, path dependency may concern a chain of successive events, which follow from each other in a more linear way (Mahoney, 2000:508-9). This type is path dependency is more difficult to point at than the circular, partly because often only the latest stage of the sequence is observed. Moreover, as Pierson (2003:188) says, since the chance that a chain will hold is only limited, in practice convincing examples are found only when the number of successive links is small, and there is sufficient reason to believe that the links are strong.

The classic example of path dependency is the development of the QWERTY keyboard (David, 1985:333-5). Once introduced to prevent typewriter typebars to get jammed, it continued to be the standard also among non-typebar machines, and even after the

typewriter itself had became obsolete. Other keyboard arrangements have been proven to enable faster typing, but they are off-standard and not part of typists' education. Pierson (2000:254) mentions the rather similar example of the dominance of Windows over other operating systems. In transport technology, we may consider the prevalence of high-speed trains on conventional rails over maglev technologies. In all these examples, for each user the benefits of being compatible to the existing system compensate for the costs of changing to another, technologically superior system. However, for the system as a whole this means a suboptimal situation.

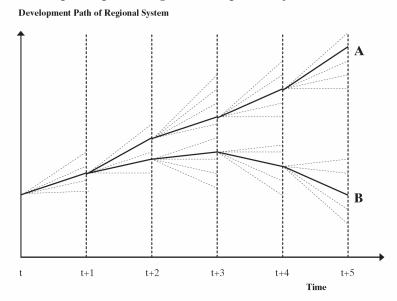
Many of the common examples of path dependency refer to technological path dependency. This means that the path dependency itself concerns a certain technology; however, as MacKenzie (in: Kemp *et al.*, 2001:271) states 'technological trajectories are sustained not by an internal logic but by the interests that develop in their continuance and the belief that the trajectory will continue'. Hence, the processes that actually cause the process to be path-dependent may as well be institutional, social etc. — for instance the role of the typists' education in the QWERTY case. Indeed, the processes that induce path dependency may be of a different nature than those that sustain it (cf. Stinchcombe, in: Thelen, 2003:209). Accordingly, whereas other two types of path-dependency need to be mentioned here with respect to urban-economic development, each may actually involve more different processes than their labels suggest.

Geographical path dependency implies the persistence of a certain phenomenon on a location due to past events, also when other locations have become more favourable. Industrial inertia is an example of this, largely based on past investments. In recent years, however, geographical path dependency is studied mainly in relation to the growth and semi-permanence of local economic clusters. This goes back to the 'industrial atmosphere' of Sheffield and Solingen described by Marshall (1920:284; 287), which provided manufacturers in those cities with considerable advantages that could hardly be found elsewhere. Accordingly, Marshall also points at the 'surprising permanence' of many industries once they have become locally rooted, as 'an atmosphere cannot be moved'. In line with this is the current focus on clusters of related firms, for instance by Storper (1997) and Hall (1998). Such clusters are locally 'rooted', as they are tied to a city by factors that are characterised by a high degree of geographical path dependency; not primarily material investments, but formal and informal networks of colleagues, clients, freelancers, subcontractors and other relations. This implies that normally these clusters will stay in place even if the people involved vary over time.

Institutional path dependency involves the phenomenon that previous institutions are locked in at earlier stages of the policy process and affect present and future decisionmaking. With regard to this, the focus here is on institutions as the rules, routines and conventions, mindsets, social norms and culturally defined values and attitudes that structure and constrain the behaviour of actors in the policy process (Scharpf, 1997:38; Kay, 2005:555). These institutions may have become grown together with a long-term, stable development path, and may retain a focus on supporting this path even when it has become suboptimal. Schienstock (2007:95-6) and Pierson (2000:265; 2003:196) also point at the importance of institutional path dependency in politics and the problem of old institutional frameworks that may no longer suit the requirements of the actual situation. As Woodlief (1998:410-1) explains, city decision making is indeed by definition purposive, but it is also, necessarily, restricted to a domain of bounded rationality, as decision makers are constrained by limited time and information and face various distractions from the intended course. At the time a certain development path evolves, it is virtually impossible to fully calculate possible consequences that may lead in future to a suboptimal development. As a result, 'in the urban setting, it [path dependency] explains why cities often stick with policies that are at odds with what general models and common sense would predict' (Woodlief, *op. cit*.:407).

Accordingly, when external circumstances become less favourable, a development path may turn into a vicious circle from which it is difficult to escape, making a city a prisoner of its own past (Figure 2). In the cases discussed here, the path is one of urban-economic development based on manufacturing. This has been a successful path for a long time, but since in the Western world manufacturing industries disappear or become increasingly labour-extensive, and service industries become ever more important, a change of direction is required. Such economic transformation processes give evidence of a strong institutional path dependency. Particularly in traditional industrial cities, the focus of local authorities still tends to be the manufacturing industry, in which large investments have been made and which is in many cases deeply involved in local governance, sometimes unwittingly. A deeply rooted 'industrial mindset' and past investments in the manufacturing sector thus may pose a burden on the development of a service economy. Grabher (1993) found this to be the case for the steel industry in the Ruhr area, Kloosterman and Trip (2004) for the seaport industry in Rotterdam. Nevertheless, the question remains why some cities are capable to change, while others in comparable circumstances are not (Martin and Sunley, 2006:419-20).

Figure 2: Alternative path-dependent regional development trajectories.



A – Development path with sequential phases of 'positive 'lock-in''
B - Development path in which 'positive 'lock-in'' becomes 'negative 'lock-in''
Dashed lines represent fields of possible contingent paths, while solid lines are the realised actual paths. Development path here might be measured by innovation rate, or relative economic growth, for example.

Source: Martin and Sunley (2006:418).

Factors of change

Path dependency is not determinism. The situation at a given moment in time cannot be predicted from the initial event, and at all times it remains possible to leave a taken path. This will normally be a hard and long-term process, because the course of development is locked-in in earlier stages of the process, and the costs of reversal, or of adaptation to an alternative path, are high.

The attention of research is shifting from path dependency as such to path creation and path interruption. Stack and Gartland (2003), for example, analysed path creation in the US brewery industries after the repeal of Prohibition in 1933, Kloosterman and Stegmeijer (2005) the establishment of a supposedly path-dependent cluster of architecture in Rotterdam, and Djelic and Quack (2007) the origin of competition regimes in postwar Germany and the international standardization of accounting rules. In practice it is hard to find clear-cut examples of path creation, if only because the process needs to be studied over a longer period and the analysis should take into account the existing situation as well as many factors that may be relevant. At least two of these examples (the US brewery industry and postwar Germany) focus on situations that may be considered as close to a *tabula rasa* as can be found in social reality. The others also concern situations in which to a certain extent a fresh start has been made. In contrast, the focus here is on situations in which an existing path is adapted, its resistance to change overcome by a strong factor of change.

In path-dependent processes of the cyclical type, such as the cases discussed here, the pressure on the existing path may build up without effectively and visibly changing the process, until a certain threshold is reached (Figure 3). A factor of change may increase the pressure to near or over the threshold (T_3 in Figure 3), thus enforcing a change in the existing path (Pierson, 2003:182; 193). This does not necessarily require a large shock. As Djelic and Quack (2007:165) state, 'change comes about in unexpected ways and in an irregular fashion, mostly through a combination of contingent developments and agency'. Thus, change may be partly due to random developments, and partly to a deliberate scheme, and approaches to this may vary from deliberate planning to 'float with the coevolution processes and modulate them' (Kemp *et al.*, 2001:269-70).

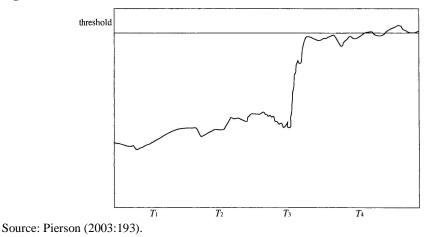
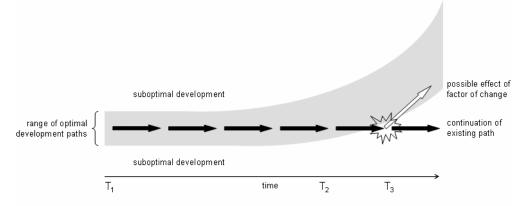


Figure 3: A threshold model with a structural cause (i.e. a factor of change).

Figure 4 shows the path-dependent development trajectory of an imaginary urban economy — represented as a linear process for graphical reasons, although it may equally involve cyclical path dependency — which evolves within a range of optimal development paths (T_1). When, in time, circumstances change, for instance in a time of economic transition, the focus of what may be considered the optimal direction of development may also change (T_2). Consequently, path dependency may actually lead to a suboptimal development (T_3). In this situation the value of a factor of change may be to induce a change in the city's development trajectory that accords to the now optimal direction development.

Figure 4: Adaptation of a suboptimal development path due to a factor of change.



A factor of change may occur in various forms. It may involve a change in legislation making impossible a previously feasible activity. It may take shape as an event, a term applied here in a broad sense. The implementation of a high-speed train is an example of this, but also the construction of a design museum, which may become a true icon of a city. Best known is the Guggenheim Museum in Bilbao (cf. Scott, 2007:1471), but for example in the Netherlands the Groninger Museum has, on a smaller scale, a somewhat similar role. Likewise the Olympic Games may give a boost to a city's development; Los Angeles and particularly Barcelona are examples of this (Arenas *et al.*, 1995:7; Shoval, 2002:584). The same is true, to some extent, for a World Exposition (Seville) or the designation as the European Capital of Culture (Lille, Glasgow, Rotterdam). Sometimes, these factors are combined: Seville got the World Expo and a HST, Lille got the HST and became 2004 Capital of Culture. Finally, we might also consider certain urban-economic concepts a factors of change, when they are influential and are applied in the right time and place to really make a difference. The concept of the creative economy, discussed below, might be an example of this, although it is too early to fully assess its impact.

Many of these phenomena are based on success stories in one of a few cases, and are subsequently imitated in other cities. They may involve, however, an exaggeration of a specific idea that is in itself true — such as an underrated factor of urban competitiveness — but then becomes too much emphasized (instead of too little), and too much isolated from any local context. The question is, then, in which case they can effectively make a difference as a factor of change. From this perspective, the next sections discuss the effect on an urban-economic development path of respectively the implementation of a high-speed train, and the currently highly popular concept of the creative economy.

3 The high-speed train: Euralille

The high-speed train increases the accessibility of the cities it calls at, and as such it contributes to one of the main elements of urban competitiveness. However, the magic of the HST also involves its image. Besides being an efficient means of transport for many, the HST has a cosmopolitan image, and in contrast to most trains it is considered clean, chic and stylish. Altogether, at present it enjoys more or less the same fashionable image that was the preserve of the aeroplane in earlier decades; an image that suits passengers, but also, more important, international business. However, much of the airplane's image has faded, and it is likely that this will also happen when in time the HST will become less 'special'.

The now widespread belief that the implementation of a HST service can be used as an important boost for a city's urban-economic development has, at least in Europe, its origins in the Euralille project. Before Euralille, the HST was not considered an important factor in urban development (Duthilleul, in: Koolhaas *et al.*, 1996:86-7; Moulaert *et al.*, 2001:151-2). It was the idea of Lille's mayor, Pierre Mauroy, to bring the TGV almost to the inner city of Lille and to use it as the anchor of the *European Business Centre*, a cluster of high-end service industries, commerce and leisure designed to improve the economic position of the city as a whole. Plans for this had already existed for some time. Industrial decline had set in particularly hard and early in Lille's garment industry, and the city had to find ways to develop a service economy. In fact, revitalisation and economic transformation had already started. In this situation, Euralille served as a catalyst to economic developments that were already in place (according to the process described in Figure 3). It was inspired by these processes, and subsequently reinforced them (Bertolini and Spit, 1998:68).

The effect of Euralille on the urban economy is generally considered positive. The transformation from an industrial to a service economy has only been partially successful so far, but since the 1970s Lille has nevertheless progressed significantly (Table 1), and the contribution of Euralille has been considerable. The number of new jobs created in the offices of Euralille is

Table 1: Salaried employment in largeenterprises in central Lille (zone A).

	1962	1977	1994
manufacturing	78,8	59,7	33,4
construction	7,9	9,4	6,5
trade	3,0	9,1	13,4
services	10,4	21,8	46,7
total	100,0	100,0	100,0

Source: based on Moulaert et al. (2001:147).

relatively low, but the project gave the urban economy as a whole a boost (Moulaert *et al.*, 2001:154-4; Spaans, 2002:223). It has in particular great symbolic value, contributing very much to the image and self-confidence of Lille as a modern city. A vibrant cultural atmosphere now characterizes the inner city, which attracts growing numbers of tourists and shoppers. Euralille itself is complementary to this, rather than competing (Bertolini, 2000:471). The effect seems to be surprisingly local, however. While central Lille — which is only a small area — is more of a service economy, the region as a whole still depends to a considerable extent on manufacturing industries, and services are underrepresented (Moulaert *et al.*, 2001:148).

A number of factors have been important for the success of Euralille. First, a distinct platform was created for the development of the project right from the beginning. A small study company was founded in 1988, followed in 1990 by the Société Anonyme d'Economie Mixte Euralille (SEAM) with Jean-Paul Baïetto, formerly director of the SCET (Société Centrale d'Equipement du Territoire), as president-director and Mauroy as chairman (Spaans, 2002:211-2). Dutch architect Rem Koolhaas was appointed to work on the urban design of what was to become Euralille. Parties not directly involved, such as the main other municipalities in the Lille region, where either included in the SAEM or compensated by other investments.

Second, the close cooperation and personal influence of Koolhaas, Baïetto and Mauroy seem to have been decisive for the success of the project. Each had a different, but essential role: Mauroy the initiator and influential politician, being at the same time mayor of Lille since 1973, prime minister of France at the time the crucial decisions were made on the construction of the Channel Tunnel and the TGV Nord, and chairman of the regional Communauté Urbaine de Lille; Koolhaas the visionary urban designer and subsequently supervising architect; and Baïetto the manager and intermediator, willing to accept Koolhaas' sometimes rather abstract ideas (Koolhaas and Mau, 1995:1164-1170; Bertolini and Spit, 1998:75; Spaans, 2002:204-205, 212).

Third, the urban design was conceived in the very early stages and was an important instrument as a framework for discussions on the project. Furthermore, it was important for the image of the project (before any of the landmark buildings had been designed) and it played a key role in attracting private parties (Tilman, 1994:29).

While these three factors mainly concern the development process, spatial and physical characteristics of the city itself have also been important. Probably most important of all is Lille's central position in the HST network between Paris, London and Brussels. Koolhaas based the concept of Euralille primarily on this node function. Besides the node, however, the place is important too. The historic inner city of Lille seems to have been a factor in the current success of Lille as a centre of shopping and tourism. The area had been neglected for a long time and would have been demolished, but it was saved miraculously and strongly gentrified (Moulaert *et al.*, 2001:156). Today the labyrinthine streets of *Vieux Lille* dazzle with fancy shops, cafés and restaurants. However, the drawback to this has been that part of the former inhabitants had no choice but to move to the outskirts.

Finally, apart from all these factors there seems to have been — even in the earlier stages — a strong sense of urgency, of the necessity to somehow grab the chance, provided by the TGV and the Channel Tunnel, to make a significant leap in the development of Lille (Koolhaas, in: Koster, 1994:20). Moreover, it would have to be done fast, as the station would have to be completed simultaneously with the Channel Tunnel. The station and all the major buildings have been constructed within five years.

In short, the path of manufacturing industries had come to a deadlock in Lille. Plans for a chance already existed, but it was the HST, applied in a then new way, that made the difference as an effective factor of change. The success of Euralille, as well as its flaws, inspired HST projects in many cities, including a number of traditional manufacturing cities like Lille, such as Rotterdam (Central Station project) and Liège (Euroliège). But the HST is no guarantee for success, as has been indicated by the as yet not very

successful HST station in the fields of Haute Picardie. At the time a new airport of Paris was planned nearby, but as this was not realized there was insufficient potential for urban-economic development.

4 The creative economy

At the moment, the most sensational development in urban economy is the creative economy, of which Richard Florida is the main advocate (Florida, 2002). It is hardly exaggerated to call this a hype, centred around the stardom of Florida himself, but it is more than just that. The debate on the creative economy actually is just one element in the ongoing debate on the information society, the knowledge economy and the transition from manufacturing to service industries. Particularly since Florida published *The Rise of the Creative Class* in 2002, it has also been one of the most talked-of and most controversial topics in urban economics. Florida states, in brief, that in an age of increasing globalization, cities can only be competitive if they are innovative and, therefore, creative. In his view, capital follows jobs. Hence, advanced service economies are driven by a specific creative class, a broad category of knowledge workers, 'problem solvers' such as economists, legal, financial and ICT advisors, engineers, physicians, scientists, journalists, artists and managers 'whose economic function is to create new ideas, new technology and/or new creative content' (Florida, 2002:8). Consequently, cities should focus on attracting and retaining this creative class.

These ideas, although widely criticized in urban economics and urban geography, became almost instantaneously popular among local and regional policymakers, particularly in the US and Europe. This success is partly due to Florida's writing style, which makes his ideas accessible to a large audience outside the academic world. Florida focused on creativity, partly because of the non-discriminative nature of the concept: while higher education may be too costly for some, everybody can be creative (Florida, 2005:4-5). This appears to be interpreted in the sense that every city can be a creative city. Numerous city governments adopt Florida's ideas and develop strategies to make their city a creative city (cf. Peck, 2005:742; Kooijman and Romein, 2006:27). As his influence spread among local policymakers, Florida's ideas quickly became a topic of interest, debate and, sometimes venomous, criticism. But whatever one's views, the very fact that they affect the economic policies of so many cities makes them a relevant discussion topic. It is worthwhile, therefore, to discuss the role of the creative economy as a potential factor of change, and the conditions in which it may successfully be applied as such.

Numerous studies assess the economic validity of Florida's ideas (e.g. Marlet and Van Woerkens, 2004; 2005; Glaeser, 2005; Rausch and Negrey, 2006; Scott, 2006; 2007). Several critics have commented in this regard that some of the statistical evidence presented by Florida is a bit thin (Glaeser, 2005; Sawicki, 2003). Nevertheless, in analyses following the first criticisms, Florida (2005:24) again found a relationship between the creativity index and growth in high-quality employment and income. He found no direct relationship between the size of the creative class and growth in employment, but he did find a relationship with innovation, high-tech industry and talent

(Florida, *op. cit.*:37; 182). Likewise, Rausch and Negrey (2006:482-3) found no relation between creative class size and the economic performance of US cities, but they did find that the latter was positively related to tolerance and the relative concentration of immigrants. In the Netherlands, Marlet and Van Woerkens (2004) did actually find a relationship between the relative size of the creative class and employment growth and between the size of the creative class and the quality of a city as a place of residence. Other categories, especially the relative number of well-educated people, show a weaker relationship with employment growth.

In short, there is evidence in favour of Florida's ideas, but it is not conclusive. However, it is not my aim here to test Florida's theory per se. Rather, it is to evaluate under which conditions the creative economy concept might be successfully applied as a factor of change. If specific circumstances can be identified in which Florida's ideas are likely to be successful or not, this might partly explain the mixed results in terms of their economic validation. The question is, then, what is needed for a potentially successful implementation of the creative economy concept.

The creative class, according to Florida, is attracted and retained by certain characteristics of the day-to-day urban environment, which he defines as quality of place. This quality of place may roughly be divided into three components: 1) what's there: the built environment, specific amenities, 'third spaces' for informal meetings; 2) who's there: diversity of people, a tolerant climate; 3) what's going on: vibrancy, street life, 'buzz' (Kloosterman and Trip, 2006:3-4).

In various studies, Florida analysed the creative economy and, especially, quality of place in a series of US cities (Florida, 2000; 2002; Florida and Gates, 2001) and EU countries (Florida and Tinagli, 2004). Florida's analyses of US cities focused on the city (MSA) level, but for some criteria other scales might be more appropriate. People may live, work and shop in different cities within urban regions. Accordingly, some elements of quality of place should be measured on a regional or metropolitan scale. On the other hand, diversity or the level of amenities, for instance, might be equally relevant on a neighbourhood level. It is useful, therefore, to approach quality of place as a multi-scalar concept, with different elements of quality of place likely to prevail on different scales (Trip, forthcoming). For reasons of pragmatism, however, the discussion below will be limited to the city level and the smaller level of a neighbourhood or urban district.

The creative city

Many elements of quality of place are relevant at least partly on the level of the city. Florida stresses the importance of specific amenities that appeal to the creative class. These entail specific shops, fancy restaurants and cafés that may serve as locations for informal or spontaneous meetings, cultural facilities and recreational amenities. No soccer stadiums, but biking tracks and fitness clubs, as the creative class are no team players; no large shopping malls; not so much big ticket events, but popular festivals.

Furthermore, he emphasizes tolerance, which allows people of various groups to live together and live their own life. This is considered a precondition for creativity and for attracting and retaining creative people. He therefore stresses the importance of a diversity of people, and particularly the presence of groups such as gays and bohemians, which he considers an indication of the existence of a tolerant urban climate (the criticism that he nevertheless overemphasizes the importance of these groups as creatives per se is therefore largely unjust). Safety is another issue related to tolerance. The relationship is somewhat ambiguous, however, as in different situations feelings of being unsafe may be related to too much, or too little tolerance (on the part of the authorities as well as the public). Likewise, more elusive qualities such as authenticity, liveliness and urbanity are important, as well as environmental quality.

A major problem is that many of these qualities concern intangibles that are hard to define or measure, and that are extremely difficult to create out of the blue. Furthermore, some are to a large extent subjective, although it is hard to think of any not attached to a certain general feeling of what is 'good' or 'bad' quality. Nevertheless, these intangibles constitute the 'symbolic value' of the city, and therefore cannot be left out of consideration completely. Authenticity, for example, is highly elusive and subjective, but it is unmistakably a quality of great cities. An analysis of the quality of place of Amsterdam and Rotterdam (Trip, forthcoming) indicates that whereas the difference in economic performance between these cities is clear, the difference in quality of place ---which is obvious in itself — may for a large part be traced back to differences in the socio-cultural scene: cultural industries, gay and bohemian scenes, nightlife, culture and image. Not only are these some of the most disputed and intangible aspects of quality of place; they are also factors which are strongly emphasised by Florida. Florida's critics to some extent recognize the importance of intangibles. Rausch and Negrey (2006) conclude that tolerance is one of the most significant elements of quality of place, and Nathan (2005) also recognizes the relevance of intangibles.

In short, on a city level the creative economy requires a multitude of qualities, many of which are hard to grasp or plan. Nevertheless, in many cases they affect the quality on the street level, although often indirectly or in different ways (Trip, forthcoming); think only of the local effects of a city's police regime or the overall level of environmental quality, or diversity on a city scale, which often results in segregation on a smaller level (Scott, 2007:1475-6). Hence, the issue of what is required for a creative city — assuming that something of a programme of requirements can be formulated — leads to the question what this actually means for urban planning practice.

The creative neighbourhood

Several studies have paid attention to elements of quality of place on scales smaller than that of the city. Bertolini and Salet (2003), for instance, study the conditions for 'urbanity' of certain neighbourhoods within a regional context, Musterd (2006) focuses on the effects of segregation on a neighbourhood level, and Trip (2007b) relates quality of place on the urban level to that of newly developed areas. One step further is the question which implications quality of place may have for concrete urban planning (cf. Peck, 2005:745). A multi-scalar approach then implies relating between the essentially economic creative class discourse to urban planning and design. Although Florida himself provides scarcely any clear-cut urban planning guidelines as, for instance, Jacobs (1961), the practical implications of his ideas on a neighbourhood scale have been recently analysed by for instance Landry (2000) and Richards (2007).

It is easy to imagine how quality of place evolves in historic inner cities with their small-scale mix of functions and buildings. Furthermore, authorities tend to focus on the cultural industries, for instance by the reuse of old industrial buildings for ateliers and studios, but this entails only a small sector of the creative economy as intended by Florida. However, in newly-developed areas the role of quality of place is less clear. Analysis of the role of quality of place in large-scale urban redevelopment schemes in Amsterdam and Rotterdam (Kloosterman and Trip, 2006; Trip, 2007b) indicates that actors involved in the development process pay attention particularly to elements of quality of place that are closely related to urban design and to their own sphere of action. In both cities the aim is 1) to increase liveliness and street-life, by means of functional diversity, which is expected to increase liveliness outside office hours, and by offering a fine-grained variety; 2) to reduce urban fragmentation by infrastructural barriers, and to improve the comfort and safety of pedestrians; 3) to ensure good quality public space; and 4) to apply distinct, high-quality architecture and building materials. Richards (2007:38) also finds that creative neighbourhoods require diversity, authenticity and connections 'to people, to other ideas, to nature, to history, to culture, to inspiration'.

These elements largely resemble the characteristics of vital neighbourhoods that have already been emphasized by Jane Jacobs and many after her. However, the abovementioned analysis also indicates that, as far as quality of place can be included in urban planning practice, establishing and maintaining it requires a collective, long-term action of all public and private actors involved, and an open, incremental planning, both of which are not easy to achieve in practice (Kloosterman and Trip, 2006:16-7).

Beyond the hype

Richard Florida's ideas on the creative class and quality of place are something of a hype at the moment. It seems fairly safe to assume that this is partly because, in a period when economic factors have become prevalent, Florida has articulated and economically justified all the things we always wanted to see in a city, particularly amenities and intangibles that tend to be uneconomic or cannot be quantified economically (Kloosterman and Trip, 2006:4; Scott, 2007:1476). An attractive environment is regarded as increasingly important from an urban-economic perspective, as it is assumed to be a prime condition for the development of an advanced service economy. Admittedly, creativity and quality of place are not the only factors that define urban competitiveness, but they are far more relevant now than before, and their significance is more explicit.

Nonetheless, it seems that although many cities now adopt Florida's ideas a one of the pillars of their economic policy, the success of his approach partly also depends on the existence of a certain potential just as other factors of urban competition do. A 'creative economy' policy might successfully exploit this potential, but can hardly create it where it does not exist. The fact, for example, that intangibles are indeed relevant for urban competitiveness in the creative economy seems to point at an advantage of cities with preserved historic neighbourhoods, many cultural amenities and, for instance, universities. These tend to be the kind of environment where quality of place is 'in the air', but that is hard to reproduce. Moreover, a self-reinforcing effect might occur, because a quality such as tolerance is strongly attached to the attitudes and behaviour of people, rather than to the physical environment. The creative class, which according to

Florida's ideas consists largely of tolerant, open-minded people, might then contribute to a tolerant urban climate simply by being there.

Finally, it seems that even the creative economy cannot function without at least some of the traditional factors of competitiveness. Florida particularly emphasises proximity, face-to-face contacts and openness to other ideas and sources of inspiration, but he does not mention accessibility as such much. Nonetheless, in practice cognitive proximity, may sometimes be more important than spatial proximity (Boschma, 2005:69-70). As Granovetter (1973) demonstrated, essential knowledge often depends on weak ties to distant acquaintances or quite different businesses. Likewise, Landry (2000), Grabher (2002) and Bathelt et al. (2004) state that relations to other cities and other sectors of the economy are essential not only to provide specific knowledge or skills that are not available locally, but also to provide fresh input to the local buzz circuit, which they consider essential to the origin of new ideas. In a more general context, Landry (2000:111) stresses the importance of external contacts and immigrants for bringing in new ideas, skills and talents, and hence of an environment that is receptive to them. This recalls the importance of openness and tolerance for quality of place, as stressed by Florida. Bathelt et al. (2004) also emphasise the role of external contacts in maintaining the local buzz over a longer period. In short, in the longer run the creative economy cannot exists in isolation and, therefore, in inaccessible locations.

5 Discussion

In the preceding pages, I discussed the possible role of certain factors of change in interrupting unfavourable path dependency that often complicates the transition from an industrial to a post-industrial economy in traditional manufacturing cities. Taking a broad perspective, I focused on two different examples of this: the high-speed train, notably in the case of Euralille, and the currently popular creative economy concept. I explored the questions of which conditions define the effect of a factor of change, and whether it is possible to distinguish any common conditions for this.

It is clear that two short case studies are not sufficient to draw more than tentative conclusions. However, some elements may be distinguished that are involved in both cases. Some of these concern the way a factor of change, once it is there, is incorporated and utilized in the local situation. A factor of change may serve to establish a platform for discussion, to attract and unite actors, and to support the elaboration of the initial ideas. As such it may enable the realization of plans that already existed before. In Lille, such a platform was created for the development of Euralille, which consisted not only of an organisational body, but also included several key individuals and an expressive urban plan that gave the project a 'face' even in its earliest stage. Although this may be relatively easy with a concrete project, some platform may also contribute to the development of a 'creative city'; this should take place on a city level, but also on a smaller scale. To incorporate elements of quality of place in concrete urban planning, a collective, long term action is needed of all actors involved. In practice this may also take shape as a platform as mentioned above.

Furthermore, the success of factors of change appears to depend, still, to a considerable extent on the more 'traditional' elements of urban competitiveness. From the cases discussed here two factors in particular emerged. Accessibility is important, in the case of the HST — part of its effect is based on improving a city's accessibility — but also in the case of the creative economy. Creativity rarely flourishes in isolation, perhaps even less so than knowledge, another pillar of the service economy. Especially in urban regions, as opposed to monocentric cities, the creative economy is relevant on multiple scales, which means accessibility is a factor of concern.

Urban quality is another issue involved in both cases. The quality of place that is supposed to be of great importance as a factor of competitiveness in the creative economy points at an advantage of cities with preserved historic neighbourhoods, many cultural amenities and, for instance, universities. These may be present or not, but in the latter case they are hard to reproduce. Likewise, and perhaps more surprising, in the case of Euralille — conceived over a decade before the creative economy became *en vogue* — the increase in tourism and shopping in Lille is partly thanks to the attractiveness of the historic inner city, in particular the gentrified *Vieux Lille*.

Finally, some sense of urgency seems necessary. This was developed quite strongly in the planning of Euralille, but in other HST projects this is not always the case. It seems particularly weak in many 'creative cities'. Perhaps this is because Florida's ideas are as elusive as they are attractive, easy to pay lip service to but hard to put in practice. Perhaps also they are too controversial to serve as a means to unite actors. Chatterton (2007:392) is more sceptic, as he states that the creative economy is often 'little more than a rhetorical device which can placate the hearts and minds of local councillors and politicians that they are actually doing something whilst doing hardly anything at all'. If a change is actually achieved, however, the social-economic consequences deserve special attention, since both cases discussed here suggest that a the processes induced or stimulated by a factor of change may lead to in spatial and socio-economic polarization, such as between parts of the city and between those included in the creative class and those excluded.

In general it may be concluded that there needs to be at least some potential for development that the HST, the creative economy or another factor of change can build upon. This may entail for instance a pool of well-educated employees, one or more key economic activities, a specific urban climate or a particularly attractive urban district, if at least it provides a point of departure for the change process in question. A factor of change may reinforce an existing development or utilize a latent potential, but it is hard to create change out of the blue.

Acknowledgement

I would like to thank Annet Jantien Smit for her valuable comments on an earlier version of this paper.

References

Arenas, M., X. Basiana, M. Gausa and M. Ruano (1995): 1984-1994 Barcelona transfer; Sant Andreu – La Sagrera. ACTAR, Barcelona.

Arthur, B.W. (1989): Competing technologies, increasing returns, and lock-in by historical events. *Economic Journal*, 99, 116-131.

Bathelt, H., A. Malmberg and P. Maskell (2004): Clusters and knowledge: local buzz, global pipelines and the process of knowledge creation. *Progress in Human Geography*, 28(1), 31-56.

Beauregard, R. (2003): City of superlatives. City and Community, 2(3), 183-199.

Bertolini, L. (2000): Planning in the borderless city; a conceptualisation and an application to the case of station area redevelopment. *Town Planning Review*, 71(4), 455-475.

Bertolini, L. and W. Salet (2003): Planning concepts for cities in transition: regionalization of urbanity in the Amsterdam structure plan. *Planning Theory and Practice*, 4(2), 131-146.

Bertolini, L. and T. Spit (1998): *Cities on rails; the redevelopment of railway station areas.* Spon, London/New York.

Boschma, R.A. (2005): Proximity and innovation: a critical assessment. *Regional Studies*, 39(1), 61-74.

Brenner, N. (2003): Stereotypes, archetypes, and prototypes: three uses of superlatives in contemporary urban studies. *City and Community*, 2(3), 205-216.

Chatterton, P. (2007): Will the real Creative City please stand up? City, 4(3) 390-397.

David, P. (1985): Clio and the economics of QWERTY. American Economic Review, 75, 332-337.

Djelic, M.L. and S. Quack (2007): Overcoming path dependency: path generation in open systems. *Theory and Society*, 35, 161-186.

Florida, R. (2000): *Competing in the age of talent: quality of place and the new economy*. Carnegie Mellon University, Pittsburgh.

Florida, R. (2002): The rise of the creative class; and how it's transforming work, leisure, community and everyday life. Basic Books, New York.

Florida, R. (2005): Cities and the creative class. New York/London: Routledge.

Florida, R. and G. Gates (2001): *Technology and tolerance: the importance of diversity to hightechnology growth.* Center on Urban and Metropolitan Policy, The Brookings Institution, Washington D.C.

Florida, R. and I. Tinagli (2004): *Europe in the creative age*. Carnegie Mellon Software Industry Center/Demos, Pittsburgh, PA/London.

Foster, J., C. Muellerleile, K. Olds and J. Peck (2007): Circulating economic geographies: citation patterns and citation behaviour in economic geography, 1982-2006. *Transactions of the Institute of British Geographers*, 32, 295-312.

Glaeser, E.L. (2005): Review of Richard Florida's The rise of the creative class. *Regional Science and Urban Economics*, 35, 593-596.

Grabher, G. (1993): The weakness of strong ties; the lock-in of regional development in the Ruhr area. In: G. Grabher (ed.): *The embedded firm; on the socioeconomics of industrial networks*. Routledge, London/New York, 255-277.

Grabher, G. (2002): The project ecology of advertising: tasks, talents and teams. *Regional Studies*, 36(3), 245-262.

Granovetter, M.S. (1973): The strength of weak ties. *American Journal of Sociology*, 78(6), 1360-1380.

Hall, P. (1998): Cities in civilization. Pantheon, New York.

Harris, H. (2006): *Supercity me; on contextualising the creative city discourse within contemporary urban studies.* Paper presented at the International Conference 'Urban Conditions and Life Chances', 6-8 July 2006, Amsterdam.

Howlett, M. and J. Rayner (2006): Understanding the historical turn in the policy sciences: a critique of stochastic, narrative, path dependency and process-sequencing models of policy-making over time. *Policy Sciences*, 39, 1-18.

Jacobs, J. (1961): The death and life of great American cities. Random House, New York.

Kay, A. (2005): A critique of the use of path dependency in policy studies. *Public Administration*, 83(3), 553-571.

Kemp, R., A. Rip and J. Schot (2001): Constructing transition path through the management of niches. In: R. Garud and P. Karnøe (eds.): *Path dependence and creation*. Lawrence Erlbaum Associates, Mahwah.

Kloosterman, R. and E. Stegmeijer (2005): Delirious Rotterdam: the formation of an innovative cluster of architectural firms. In: R.A. Boschma and R.C. Kloosterman (eds.): *Learning from clusters; a critical assessment from an economic-geographical perspective*. Springer, Dordrecht, 203-224.

Kloosterman, R. and J.J. Trip (2004): Gestold modernisme. Een analyse van de Rotterdamse economie vanuit een postindustrieel perspectief. In: F. Becker, W.R. van Hennekeler, M. Sie Dhian Ho, B. Tromp and M. Linthorst (eds.): *Rotterdam; het vijfentwintigste jaarboek voor het democratisch socialisme*. Mets & Schilt/Wiardi Beckman Stichting, Amsterdam, 39-57.

Kloosterman, R. and J.J. Trip (2006): *Planning for quality? Assessing the role of quality of place in developing high-speed railway stations*. Paper presented at the International Conference 'Urban Conditions and Life Chances', 6-8 July 2006, Amsterdam.

Kooijman, D. and A. Romein (2006): Beleid voor creatieve steden. *Real Estate Management*, 45(3), 27-33.

Koolhaas, R. and B. Mau (1995): Small, medium, large, extra large. 010 Publishers, Rotterdam.

Koolhaas, R., J. Nouvel, C. de Portzamparc, C. Vasconi and J.M. Duthilleul (1996): *Euralille; the making of a new city centre*. Birkhäuser, Basel/Boston/Berlin.

Koster, E. (1994): Euralille-project van Koolhaas krijgt gestalte; vernieuwing Lille door TGV. *Stedebouw en Volkshuisvesting*, 75(3), 17-20.

Landry, C. (2000): The creative city; a toolkit for urban innovators. Earthscan, London.

Mahoney, J. (2000): Path dependency in historical sociology. Theory and Society, 29, 507-548.

Marshall, A. (1920): Industry and trade; a study of industrial technique and business organization; and of their influences on the conditions of various classes and nations. MacMillan, London.

Marlet, G.A. and C.M.C.M. van Woerkens (2004): Het economisch belang van de creatieve klasse. *ESB*, 89(4435), 280-283.

Marlet, G. and C. van Woerkens (2005): *Tolerance, aestethics, amenities or jobs? Dutch city attraction to the creative class.* Tjalling C. Koopmans Research Institute Discussion Paper Series 05-33, University of Utrecht, Utrecht.

Martin, R. and P. Sunley (2006): Path dependence and regional economic evolution. *Journal of Economic Geography*, 6, 395-437.

Moulaert, F., E. Salin and T. Werquin (2001): Euralille; large-scale urban development and social polarization. *European Urban and Regional Studies*, 8(2), 145-160.

Musterd, S. (2006): Segregation, urban space and the resurgent city. *Urban Studies*, 43(8), 1325-1340.

Nathan, M. (2005): *The wrong stuff; creative class theory, diversity and city performance*. Centre for Cities Discussion Paper no.1, obtained from www.ippr.org (1 March 2006).

Nijman, J. (2000): The paradigmatic city. *Annals of the Association of American Geographers*, 90(1), 135-145.

Peck, J. (2005): Struggling with the creative class. *International Journal of Urban and Regional Research*, 29(4), 740-770.

Pierson, P. (2000): Increasing returns, path dependence, and the study of politics. *American Political Science Review*, 94(2), 251-267.

Pierson, P. (2003): Big, slow-moving, and... invisible; macrosocial processes in the study of comparative politics. In: J. Mahoney and D. Rueschemeyer (eds.): *Comparative historical analysis in the social sciences*. Cambridge University Press, Cambridge, 177-207.

Rausch, S. and C. Negrey (2006): Does the creative engine run? A consideration of the effect of creative class on economic strength and growth. *Journal of Urban Affairs*, 28(5), 473-489.

Richards, J. (2007): Placemaking for the creative class. Landscape Architecture, 92(2), 32-38.

Sawicki, D. (2003): Economic growth; the rise of the creative class: and how it's transforming work, leisure, community and everyday life [book review]. *Journal of the American Planning Association*, 69(1), 90-91.

Scharpf, F.W. (1997): *Games real actors play; actor-centered institutionalism in policy research*. Westview Press, Boulder/Oxford.

Schienstock, G. (2007): From path dependency to path creation; Finland on its way to the knowledge-based economy. *Current Sociology*, 55(1), 92-109.

Scott, A.J. (2006): Creative cities: conceptual issues and policy questions. *Journal of Urban Affairs*, 28(1), 1-17.

Scott, A.J. (2007): Capitalism and urbanization in a new key? The cognitive-cultural dimension. *Social Forces*, 85(4), 1465-1482.

Shoval, N. (2002): A new phase in the competition for the Olympic gold: the London and New York bids for the 2012 games. *Journal of Urban Affairs*, 24(5), 583-599.

Spaans, M. (2002): *The implementation of urban revitalization projects*. Delft University Press, Delft.

Stack, M. and M.P. Gartland (2003): Path creation, path dependency, and alternative theories of the firm. *Journal of Economic Issues*, 27(2), 487-494.

Storper, M. (1997): *The regional world; territorial development in a global economy*. The Guilford Press, New York/London.

Thelen, K. (2003): How institutions evolve; insights from comparative historical analysis. In: J. Mahoney and D. Rueschemeyer (eds.): *Comparative historical analysis in the social sciences*. Cambridge University Press, Cambridge, 208-240.

Tilman, H. (1994): Vruchtbare reductie van de complexiteit; de stedebouw van Euralille. *De Architect*, 1994/12, 22-30.

Trip, J.J. (2007a): What makes a city? Planning for 'quality of place'. The case of high-speed train station area redevelopment. IOS Press, Amsterdam.

Trip, J.J. (2007b): The role of urban quality in the planning of international business locations: the case of Amsterdam Zuidas. *Journal of Urban Design*, 12(2), 275-293.

Trip, J.J. (forthcoming): Assessing quality of place: a comparative analysis of Amsterdam and Rotterdam. *Journal of Urban Affairs*, 30.

Woodlief, A. (1998): The path-dependent city. Urban Affairs Review, 33(3), 405-437.