Infrastructure imaginaries

The politics of light rail projects in the age of neoliberalism

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Infrastructure Imaginaries: The Politics of Light Rail Projects in the Age of Neoliberalism

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Abstract
In the last decade light rail transit systems have become a popular mode of public transport in many cities around the world to upgrade the existing public transportation network, but also, and perhaps more importantly, to support neoliberal urban development strategies. The paper takes its starting point in the growing critical literature discussing the politics of light rail and related transport infrastructure projects in the context of neoliberalism. The paper uses the case of Aalborg, Denmark to demonstrate how light rail projects are embedded in particular infrastructure imaginaries, which reflect wider political agendas of promoting urban development and economic growth. In the case of Aalborg, the city’s spatial strategies have played an important role in constructing an imaginary of the city as the region’s ‘growth dynamo’, which in turn have led to a growth-fixated conceptualisation of the city’s spatiality, and contributed to rationalise the need for investments in light rail. The paper argues that light rail projects are first and foremost politically rationalised as important investments for facilitating urban development and supporting entrepreneurial city strategies of urban and economic growth, whilst their social objectives of providing affordable public transportation play a less prominent role in the contemporary imaginary of the city.

Keywords: neoliberalism, light rail, politics, strategic spatial planning, spatial imaginary

Great cities are born of and give rise to great infrastructure (Neuman and Smith, 2010: 21).

Light rail imparts a sense of urban modernity, permanence of place, order, sophistication, and connectivity benefitting enduring world-class cities (Boschken, 2002: 184).

In a global competition for inward investment, entrepreneurial public sector planners and policy makers are increasingly looking to cultivate a positive image of their cities through targeted planning of image-conscious projects such as investments in rapid transit infrastructure (Higgins and Kararoglou, 2016: 460).

Introduction
In urban studies there is a growing concern with how the political-economic ideology of neoliberalism affects the nature of spatial planning (Albrechts, 2015; Allmendinger and Haughton, 2012, 2013; Olesen, 2012, 2014a; Waterhout et al., 2013). Allmendinger and Haughton (2012: 89) have gone as far as suggesting that spatial planning ‘needs to be analysed as a form of neoliberal spatial governance’. Along the same lines, Olesen (2014a: 290) argues that there is a need for better understanding the relationship between neoliberalism and strategic spatial planning, in particular when it comes to ‘how neoliberalisation challenges how we think about process and space in
strategic spatial planning’. There is also a growing body of literature discussing how neoliberalism affects the planning and decision-making in larger infrastructure projects (Culver, 2017; Enright, 2013; Legacy, 2016; Marshall, 2013a, 2013b; Marshall and Cowell, 2016). Marshall (2013a) suggests that contemporary infrastructure planning is characterised by the ideology of ‘infrastructuralism’, that is, a never-ending demand for new infrastructure promoted by the idea that infrastructure is paramount to competitiveness and economic development.

There is a growing concern in the literature, that strategic spatial planning increasingly is led by infrastructure imaginaries which envision large-scale infrastructure projects as solutions to urban problems (Dodson, 2009; Olesen, 2017). However, despite the increasing focus on urban infrastructure in strategic spatial planning, there have been relatively few attempts to engage with this trend (Dodson, 2009; Ferbrache and Knowles, 2017; Higgins and Kanaroglou, 2016; Olesen, 2017). This paper seeks to bridge the critical discussion of the role of strategic spatial planning in the context of neoliberalism with the growing critical literature discussing the politics of transport infrastructure projects. In particular, the paper discusses the politics behind contemporary light rail projects, and the important role that spatial strategies play in legitimising and rationalising investments in light rail in the context of neoliberalism.

The paper argues that there is a particular politics behind contemporary light rail projects, which is rooted in particular neoliberal imaginaries of the city. In the contemporary neoliberal city, light rail projects seem to fulfil the desire to impart ‘a sense of urban modernity’ to the city (Boschken, 2002: 184), not unlike the status symbol that trams and streetcars developed in the modern city a century ago (Culver, 2017). Like trams and streetcars, contemporary light rail projects carry a significance beyond their materiality and have become the symbol of ‘the promise and the dream of a better society and a happier life’ (Kaika and Swyngedouw, 2000: 123). In the age of neoliberalism, the city’s aspirations very much equal the desire to become a leading world-class city (Boschken, 2002). These aspirations rest on an economic imaginary of the city, rooting in a particular understanding of what counts in the knowledge-based economy (Jessop, 2005).

In this context, contemporary light rail projects fulfil a double role in cities’ spatial strategies. First, light rail projects seek to boost the image of the city as foresighted, technically advanced and attractive for the global elite (Boschken, 2008; Higgins and Kanaroglou, 2016; Ferbrache and Knowles, 2017). Second, light rail projects are understood as urban development projects with ambitions of attracting investments and boosting land and real estate values (Culver, 2017; Ferbrache and Knowles, 2017; Higgins and Kanaroglou, 2016; King and Fisher, 2016; Olesen, 2014b). In these ways, light rail projects must be understood as playing prominent roles in (re)shaping the imaginary of the city and in (re)producing the neoliberal city. As a result, contemporary light rail projects are mainly implemented with a point of departure in economic imaginaries of the city, which threatens to undermine the social objectives usually associated with public transportation (Culver, 2017; Grengs, 2005; King and Fisher, 2016).3

This paper draws on the example of Aalborg, Denmark to demonstrate how the politics of light rail projects are shaped by particular imaginaries of the city. The city of Aalborg has since 2010 adopted the spatial concept of the ‘growth axis’, an urban corridor throughout the city connecting major urban redevelopment sites and main urban functions, in its spatial strategies. In the city’s strategies the desired light rail project is argued to constitute the spine of this axis, and to play a vital role in the city’s ambitions of transforming from an industrial to a knowledge and culture city. In this way, the light rail project is envisioned as the physical manifestation of the city’s growth-oriented spatial strategy, and becomes a testament to the city’s ambitions of promoting a new
spatial imaginary in accordance with contemporary neoliberal politics. Whilst the light rail is planned to connect major economic sites in the city, it fails to connect one of the most deprived neighbourhoods in the city. Despite the fact that the project was put on hold in 2015, the Aalborg light rail provides an illustrative case of how the economic (real) rationalities of attracting investments are prioritised over providing affordable public transport for low-income groups, thereby supporting findings from other studies of contemporary light rail projects (Culver, 2017; Grengs, 2005; Higgins and Kanaroglou, 2016; King and Fisher, 2016).

The paper is structured as follows. First, the paper discusses the important role of infrastructure imaginaries in building the modern city. Drawing on Kaika and Swyngedouw (2000), the paper argues that infrastructures have resurfaced as the ‘fetish’ of the neoliberal city. It is argued that this fetish is very present in contemporary strategic spatial planning, which increasingly is governed by what Marshall (2013a, 2013b) refers to as ‘infrastructuralism’. Second, the paper argues that light rail projects can be understood as strategic spatial planning projects, which first and foremost are implemented to boost the image of the city and stimulate urban development and economic growth. Third, the paper draws attention to the inherent negative side-effects for low-income groups of light rail projects, which primarily are envisioned with a point of departure in neoliberal urban politics. Fourth, the paper draws on the example of Aalborg, Denmark to demonstrate how the growth-oriented urban politics in the city supports the grand narrative of transforming the city from an industrial to a knowledge and culture city. As part of this agenda, the city envisions the light rail as the spine of the city’s ‘growth axis’, an urban development corridor throughout the city. In conclusion, the paper argues that the light rail project in Aalborg, just as many other urban infrastructure projects, is promoted as part of a larger neoliberal urban agenda of attracting private investments, increasing competitiveness and boosting land and real estate values. In this sense, light rail projects can be argued to constitute the fetish of the contemporary neoliberal city. The paper concludes that there is a need for more critical research investigating the politics behind contemporary infrastructure projects and the potential negative consequences for primarily low-income groups.

Infrastructuralism in the neoliberal city
Infrastructure is a constitutive part of the urban. In many ways, infrastructure is what characterises the urban and distinguishes it from nature (Kaika and Swyngedouw, 2000). Culver (2017) notes for example how the streetcar in the early 20th century American cities ‘was a symbol of what it meant to be a city’ (Culver, 2017: 22 – italics in original). The streetcars did not only hold a strong symbolic value for the city at the time, they also played an important role in shaping the urban form of many American cities (Culver, 2017; King and Fisher, 2016). Kaika and Swyngedouw (2000) illustrate eloquently the powerful role of infrastructure in shaping the modern city. Examining the importance of water infrastructure, they argue that production of infrastructures became an integral and very visible part of building the modern city.

When the urban became constructed as agglomerated use values that turned the city into a theatre of accumulation and economic growth, urban networks became the iconic embodiments of and shrines to a technologically scripted image and practice of progress (Kaika and Swyngedouw, 2000: 121).

Kaika and Swyngedouw (2000) argue that infrastructure in many ways can be understood as the ‘fetish’ of the modern city. Infrastructures were as commodities turned into ‘objects of desire in themselves and for themselves, independent from their use value’ (Kaika and Swyngedouw, 2000:
Infrastructures developed a significance beyond their materiality, as they became ‘iconic embodiments of and shrines to’ the city’s progress (Kaika and Swyngedouw, 2000: 121).

Infrastructures seem to play an equally important role in contemporary imaginaries of the city in the context of neoliberalism. Marshall (2013a, 2013b) argues that the contemporary neoliberal city’s concern with infrastructure must be understood as part of a wider trend of ‘infrastructuralism’, that is, the rationality that good ‘infrastructure is needed for economic success’ (Marshall, 2013b: 124). What counts as ‘good’ in this context is a moving target, which leads to a continuous and everlasting demand for new, better and faster infrastructure. The contemporary economic imaginary of the neoliberal city is thus also an imaginary of infrastructures. Paraphrasing Kaika and Swyngedouw (2000), infrastructure seems to constitute the ‘fetish’ of the neoliberal city.

The phenomenon of infrastructuralism has a number of consequences in terms of infrastructure planning and policy-making. First and foremost, infrastructuralism tends to depoliticise decision-making on infrastructure investments, as the decision to invest in a particular infrastructure project is often taking long before the “official” decision is announced. Infrastructure projects are surprisingly often rationalised by the argument that ‘the investment is “obviously” needed’ (Marshall, 2013a: 20), or that the project is a ‘done deal’ (Legacy, 2016). Second, research on mega-projects demonstrate how infrastructure projects are often implemented as prestige projects with a tendency of underestimating the construction costs, whilst overestimating the demand for the investments (Flyvbjerg et al., 2003; Priemus et al., 2013). Nicolaisen et al. (2017) illustrate for example how decision-making on light rail projects in Denmark is just as much guided by local urban development aspirations as the cost benefit analyses estimating the projects’ socio-economic feasibility. Third, Marshall and Cowell (2016) point to the increasing political concerns with the length of decision-making processes on large infrastructure projects and discuss political reforms in the UK aimed at speeding up decision-making in order to satisfy the need for infrastructures. This account resonates with Legacy’s (2016) case study of Melbourne, where the state government played a powerful role in restricting public discussion and scrutiny of the East West Link road tunnel project ‘by keeping the business case confidential, fast-tracking the signing of the contracts, and avoiding a public discussion around transport alternatives’ (Legacy, 2016: 3120).

Whilst the idea of using infrastructure to achieve strategic spatial planning goals is not new (Neuman and Smith, 2010), several theorists point to the increased significance infrastructure projects are given in spatial strategies. Dodson (2009) suggests that strategic spatial planning in Australia has taken an ‘infrastructure turn’, in which large-scale urban infrastructure projects are promoted and portrayed as solutions to urban problems. As a consequence, planning for infrastructure projects tends to take precedence over strategic spatial planning considerations, with the risk of the city itself becoming ‘a constellate infrastructure “giga-project”’ (Dodson, 2009: 110). As van der Heijden (2006: 24) notes ‘large-scale infrastructure is seen by many as a form of what could be called “unreflexive modernization”, exclusively aimed at enhancing economic growth’. In this sense, there seems to be a close link between the image of urban modernity, which cities subscribe to, and the never-ended demand for new urban infrastructures. This is a demand that only seems to have exaggerated in the contemporary age of neoliberalism.

**The light rail and the imaginary of the city**

One of the infrastructure projects which recently has moved into the sphere of strategic spatial planning, blurring the boundaries between strategic spatial planning and transport planning, is light
rail projects (Culver, 2017; King and Fisher, 2016; Olesen, 2017). King and Fisher (2016) argue that recent investments in streetcar projects in the US represent ‘a strong turn towards strategic spatial planning through transportation infrastructure’ (King and Fisher, 2016: 383). They argue that streetcar projects increasingly are implemented for non-transportation purposes, and instead represent a tool for strategic spatial planning. Studies of light rail projects in a European context have come to similar conclusions (Nicolaisen et al., 2017; Olesen, 2014b; Olesen and Lassen, 2016; Olesen, 2017; Siemiatycki, 2005). Olesen (2017) argues for example that the light rail project in Copenhagen should just as much be understood as a neoliberal urban development project seeking to boost Copenhagen’s competitiveness in the aftermath of the global recession, as a transport infrastructure project providing the public transportation network with a missing link.

In the literature, there seems to be the emerging consensus that light rail projects should be understood as urban development projects, rather than projects concerned with transportation alone (Culver, 2017; Ferbrache and Knowles, 2017; Higgins and Kanaroglou, 2016; King and Fisher, 2016; Olesen, 2014b). Olesen and Lassen (2016: 373) argue that ‘light rail projects need to be rethought as complex urban development projects instead of just simple “pieces of infrastructure”’. This implies that light rail projects must be understood in the context of city branding or, what Higgins and Kanaroglou (2016) refer to as ‘image-led planning’. Light rail projects play an important role in the ‘desire to achieve more intangible planning goals, such as cultivating specific symbolic or emotional images’ of the city (Higgins and Kanaroglou, 2016: 452). In this sense, intangible planning goals, such as branding, take precedence over more tangible planning goals such as ridership numbers when light rail projects politically are approved (Higgins and Kanaroglou, 2016; Nicolaisen et al., 2017). As Boschken (2008) argues

Whether transit vehicles are full or empty may have less to do with ‘showing’ the urban area’s global vitality than whether the system’s mere presence (i.e. capacity) gives a sense of bustle, freshness, and performance (Boschken, 2008: 16).

Light rail projects should thus be understood ‘as a means of re-envisioning the city’ (Olesen, 2014b: 11). Light rail projects are believed to contribute positively to the image of the city, ‘generating a sense of place associated with modernism, prestige and the future’ (Knowles and Ferbrache, 2016: 433). Boschken (2008: 11) argues that light rail on the contrary to the bus appear as ‘technologically advanced, safe, clean comfortable, permanent and on-time transit services fitting the expectations of a bustling global city clientele’. Bilbao represents a case in point, as transit investments are reported to have contributed to boosting the city’s ‘self confidence and global image’ (Siemiatycki, 2005: 43). In the US context, Culver (2017: 28) argues that ‘within this second reincarnation of the streetcar, the streetcar has once again been taken up as a symbol of vibrant and dynamic urban life like that of a century ago’. In summary, light rail projects

*can be understood as part of place-making strategies that help to rejuvenate individual streets, (re)produce urban spaces and, in turn, shape discourses about city and its image (Ferbrache and Knowles, 2017: 103).*

The implementation of light rail projects can thus be understood as part of a wider agenda of promoting a particular image of and re-envisioning the city as a competitive, attractive, global, world-class city.

Vigar et al. (2005) argue that imaginaries have always played an important role in shaping the city, as conceptualisations of the city influence policy formulations and policy outcomes. Strategic spatial planning has in particular been concerned with promoting particular imaginaries of the city,
often expressed in the form of spatial concepts or metaphors (Healey, 2007; Olesen, 2017). Baker and Ruming (2015) provide an illustrative case of this by drawing attention to the important role of spatial strategies in promoting the spatial imaginary of the ‘Global Sydney’, through various practices such as benchmarking Sydney against other global cities, and importing seemingly globalising extra-local policy models, such as high-speed rail services. Spatial imaginaries are therefore also performative. As Davoudi (2018: 103) points out

They also perform the future in the present, and by doing so they essentialise a specific imaginary of urban futures which has material consequences for how cities are planned, redeveloped, invested in and reimagined.

For Lauermann (2016) spatial strategies and the imaginaries underpinning them represent an act of claimsmaking on the city. Lauermann (2016) argues that claimsmaking constitutes an important technique in urban politics, as spatial strategies promote ‘a form of targeted simplification that benefits particular stakeholders by defining the city around sites in which they are invested’ (Lauermann, 2016: 77). In this understanding, planners

make claims on the city, which strategically simplify its form and processes, often by defining the city in ways that mediate between particular land investment projects and broad visions for citywide development. The implication is that claimsmaking on the city through urban strategic planning is intentionally simplistic and acts as an ideological practice for justifying urban development projects. (Lauermann, 2016: 77)

We can thus understand spatial strategies as important sites for promoting particular imaginaries of the city, which necessarily will simplify the meaning of the city. Light rail projects often play an important role in this re-imagining of the city, often to the extent that the imaginary of the city is turned into an imaginary of the light rail city. These infrastructure imaginaries play an important role in contemporary urban development, as the light rail becomes synonymous with the competitive, attractive, global, world-class city in accordance with the contemporary neoliberal city ideal.

The light rail as a neoliberal project
It is in this context that we can begin to understand light rail projects as not only benign sustainable public transport projects, but urban development projects driven by a very explicit neoliberal economic rationality. Grengs (2005) argues for example in a US context that the social goals of mass transit have been replaced by neoliberal economic agendas.

Public transit is being transformed to fit the larger political project that we call neoliberalism, driven by the same forces that are stripping the social purpose from other public programmes (Grengs, 2005: 58).

Along the same lines, Culver (2017: 22) argues that the reemergence of streetcar projects in the US ‘reflects and is embedded in the general trajectory of neoliberal urbanization’, and should be understood as a tool for developing the creative city, as advocated by Florida (2002). Culver (2017) illustrates how (re)arrangements of urban mobility and space in 12 streetcar projects in the US are driven by certain interests and, as a consequence, produce certain outcomes over others. Culver (2017: 28) finds that streetcar projects often are promoted and “sold” in a ‘neoliberal, creative city “packaging”, reflecting downtown neoliberal redevelopment interests. Along the same lines, King and Fisher (2016) argue that ‘modern streetcars are part of strategic amenity packages cities use to
achieve real estate and economic development goals’ (King and Fisher, 2016: 383). They highlight that one underlying assumption of modern streetcar projects is that the infrastructure will enhance (private) land values. In fact, ‘many streetcar systems’ capital and operational funding relies on taxation schemes predicated on increased land values and property development benefits’ (King and Fisher, 2016: 384). One of the consequences is that improving service for low-income groups or transit dependent populations are ‘deprioritized to the extent that they do not even appear on the radar of streetcar project planners’ (King and Fisher, 2016: 388). Another consequence seems to be that the transport network becomes increasingly fragmented, as streetcar projects primarily are implemented to support urban development aspirations (King and Fisher, 2016).

Whilst light rail projects may contribute to boosting the economy of the city in various ways, it is more questionable to what extent the gains of the projects can be to captured by public authorities, e.g. to help finance the infrastructure investments or other investments in the public realm, especially if the land is privately owned4 (Knowles and Ferbrache, 2016). Furthermore, Knowles and Ferbrache (2016: 438) argue that while a rise in prices may bring benefits for developers, there is a negative impact on low-income households who may be priced out of the market near to light rail stations. Arguably, it is these people who are unable to afford cars and are reliant on access to public transport.

The studies referenced above support the thesis that there is a particular politics behind contemporary light rail projects, which is rooted in a neoliberal ideology of attracting private investments and boosting land and real estate values. As these agendas step into the foreground of contemporary light rail projects, there is a risk that public transport’s goal of providing affordable transportation for low-income groups is undermined. Whilst the studies referenced above primarily have discussed the politics of streetcar / light rail projects in a US context, the next section will use the case of Aalborg, Denmark to illustrate how planning for light rail projects in a Scandinavian context in a similar way is deeply embedded in political agendas of promoting a particular imaginary of the city in accordance with contemporary neoliberal urban politics.

The politics of the Aalborg light rail project
Aalborg Municipality has for the last couple of decades been promoting a transformation of the city of Aalborg from an industrial city to a knowledge and culture city. The vision of this transformation has been very prominent in the city’s spatial strategies and in the material transformations of the city, especially the regeneration of the harbour front and the development of high-profile urban development projects such as the House of Music (Jensen, 2007). The development of cultural flagship projects has been particularly important in terms of adding the spatial and material dimension to the imaginary of Aalborg as a knowledge and culture city. In this way, the specific development projects do not only fit the overall narrative, they also become part of the story of ‘what must be done’ in order to achieve the desired transformation (Jensen, 2007). As part of this storyline, the development projects on the harbour front are being rationalised as ‘necessary for attracting global capital and development’ (Jensen, 2007: 223). In this sense, there is a new ‘realpolitik’ underpinning the urban development agendas in Aalborg (Flyvbjerg, 1998), which is embedded in and part of a wider move towards neoliberal urban politics in Denmark (Carter et al., 2015; Olesen, 2011; Olesen and Richardson, 2012).

This section seeks to demonstrate how Aalborg’s spatial strategies are driven by a strong growth discourse, which does not only manifest itself in the promotion of a particular imaginary of the city, but also in the city’s conceptualisation of its own spatiality, and in its ambitions of
supporting and realising its growth-oriented spatial policy through investing in light rail. In the grand narrative of Aalborg’s transformation into a knowledge and culture city, the light rail project is given a significance beyond its use value as a piece of public transport, and framed as an important piece in the realisation of the city’s growth strategy. The significance of the light rail is, alongside the city’s other flagship projects, elevated to the very materialisation of the city’s much desired urban transformation and a vital element in the imaginary of the future city.

As outlined above, spatial strategies constitute important sites for promoting imaginaries of the city and for rationalising the need for particular investments in transport infrastructure. This section draws on a critical discourse analysis of Aalborg Municipality’s spatial strategies, together with other policy documents from the municipality, the region and the regional public transport company seeking to establish the ‘need’ for the light rail project in Aalborg in the period 2010-2015.5 Furthermore, the analysis draws on insights from numerous other data sources such as public meetings, informal conversations with city planners etc. that the author has generated over a period of approximately five years as planning academic and citizen of Aalborg. These insights have helped to shape and deepen the understanding of the analysed policy documents. The aim of the analysis has been to explore how the spatial imaginary promoted by Aalborg Municipality is linked to the light rail project, and how in turn the light rail project is framed within this particular imaginary of the city. The analysis is inspired by Jensen and Richardson (2004), who argue for the importance of bringing space into analyses of spatial policy discourses, in order to understand how space is constructed through discourses and how mobilities and infrastructures are framed in policy discourses. In particular, this paper seeks to bring attention to the power-rationalities or politics that underpin contemporary light rail projects (Flyvbjerg, 1998; Jensen and Richardson, 2004).

**Light rail as the spine of the growth axis**

Since 2011 Aalborg Municipality has promoted the spatial concept of ‘the growth axis’ in its spatial strategies. In the 2011 strategy, entitled *North Denmark’s Growth Dynamo*, the mayor of Aalborg expresses a need to rethink the city’s spatial planning and to a greater extent prioritise urban development in the areas that are already undergoing urban development (Aalborg Municipality, 2011). It is argued that the role of planning is to support the existing urban development, which is first and foremost in the growth axis. The growth axis is largely conceptualised as ‘a geographical band throughout Aalborg’, where ‘the vast majority of the planned investments in infrastructure, culture institutions and new urban development areas are located’ (Aalborg Municipality, 2011: 2, author’s translation). Geographically, the growth axis runs from the airport in the north-western part of the city via the city centre to the university campus in the south east and the industrial harbour to the very east of the city, see figure 1. In addition, the growth axis connects and unites a number of highly prioritised urban redevelopment sites across the city, which the municipality is keen to see developed in the future. The growth axis is therefore also conceptualised as the ‘dynamo’ and ‘spine’ of urban development and growth, not only in Aalborg, but in the entire region of North Denmark. This reflects Aalborg’s vision of establishing its positions as ‘North Denmark’s growth Dynamo’ (Aalborg Municipality, 2011).

The growth axis is the dynamo and spine, which shall be the driving force for growth in the entire North Denmark. Therefore, the city council concentrates the future effort on creating the best conditions for making the development here strong and capable of growing further. (Aalborg Municipality, 2011: 5, author’s translation)
The geographical area that makes up the growth axis is rather loosely defined. Its amoeba shape is both a testament to an area which is purposively defined rather fluidly with fuzzy boundaries, and which is still in the process of becoming. This understanding is reflected in Aalborg’s spatial strategy, which also suggests that the growth axis perhaps more should be understood as a ‘brand’ rather than an urban development area in the traditional sense.

The growth axis does not have sharp geographical boundaries like a traditional urban development area. It is rather an area, which is created by the development and the projects that exist. A name or perhaps rather a brand for the development and the great potential there is in Aalborg. (Aalborg Municipality, 2011: 8, author’s translation)

The idea of the growth axis as a brand is prominent in several of the municipality’s policy documents, where the growth axis features as a ‘logo’. The idea of the growth axis seems thus to have transformed into a taken-for-granted understanding of the city’s spatiality, which both exists and is in the making. It is likewise a concept that with its simplicity speaks to developers and private investors in the city and seeks to provide certainty to their investments.

One of the ways that Aalborg Municipality seeks to provide certainty and attract investments to the growth axis is through investments in infrastructure, which in turn provide some fixity and permanence to the otherwise fluid growth axis. The spatial strategy from 2011 highlights the importance of infrastructure for the development of the growth axis. In fact, investments in infrastructure are perceived as a precondition for boosting the city’s competitiveness.

In an increasingly global world, Aalborg Municipality’s competitiveness depends on a strong infrastructure (Aalborg Municipality, 2011: 11, author’s translation).

An important project in this regard has been the idea of having a light rail running along the growth axis. In Aalborg’s spatial strategy, the light rail project is presented as a ‘package deal’ of transit-oriented development, where the light rail is expected to generate urban development, which in turn provides the necessary critical mass in terms of commuters to turn the light rail into as an economically sound investment.

The ambition of the light rail is an important piece. The city council is working intensively to investigate this possibility. Aalborg does not at present have the size and thereby the passenger volume, which is needed to support this mode of transport. But if we concentrate growth in the
growth axis, the necessary 'critical mass' can be created. (Aalborg Municipality, 2011: 13, author’s translation)

The importance of the light rail project is also discussed in a number of joint publications by Aalborg Municipality, Region North Denmark and the regional public transport company NT (Nordjyllandsstrafikselskab). In these publications, the light rail project is portrayed as a flagship project that will boost Aalborg’s image for the benefit of the entire region.

The wish to establish a light rail or BRT in Aalborg should not be seen as a transport project alone, but as an important link in Aalborg’s overall urban strategy and transition from industrial city to knowledge city. A light rail or BRT is the integrating element in the urban strategic vision for Aalborg Municipality, and this is reflected in the municipality’s overall strategies. (Region North Denmark et al., 2014: 10, author’s translation)

The light rail will transform the city. It will contribute to that Aalborg will appear as a modern, foresighted and environmental friendly city. The rail can become a part of the city’s identity, and will be used actively in connection to urban development and urban regeneration. (Region North Denmark et al., 2010: 11, author’s translation)

As highlighted in the quotes above, the light rail project is promoted as an important project in Aalborg’s overall transformation into a knowledge city. The light rail ‘will transform the city’ and ‘become a part of the city’s identity’ (Region North Denmark et al., 2010). The light rail project should therefore not only be understood as a transport infrastructure project or urban development project. It is a city image project, which seeks to transform the imaginary of Aalborg from an industrial to a knowledge and culture city.

This logic is also engrained into Aalborg Municipality’s Spatial Vision 2025 published in 2013 (Aalborg Municipality, 2013). The spatial vision elaborates on the importance of the growth axis and the need for the light rail project in the city. This storyline is furthermore coupled to Aalborg’s new slogan as the ‘tough little big city’ (in English) (Aalborg Municipality, 2013: 10). This slogan seeks to encapsulate Aalborg’s past as a tough industrial city and project this ‘identity’ onto the city’s ambitions of developing a more international vibe.

A targeted and focused urban growth in the growth axis supported by a light rail trace shall develop Aalborg further as “The tough little big city” with international big city pulse (Aalborg Municipality, 2013: 10, author’s translation).

The spatial vision elaborates further on the rationality of the growth axis by referring to ‘the growth axis as the city’s engine’ (Aalborg Municipality, 2013: 10), whilst the light rail is argued to constitute ‘the spine of the growth axis’ (Aalborg Municipality, 2013: 11). This reflects the understanding that ‘urban development and public transport go hand-in-hand in the growth axis’ (Region North Denmark et al., 2014: 10).

The example outlined in this section illustrates that there in Aalborg, as in many other places, is a particular power-rationality underpinning the city’s planned light rail project. In the case of Aalborg, the light rail is promoted to support the city’s urban development concept of the growth axis. The light rail project is argued to constitute the spine of the growth axis, acting as the physical manifestation of and foundation for the much-desired urban growth. At the same time, the growth axis plays a central role in the city’s overall ambitions of transforming into a knowledge and culture city. In this sense, the desire of having a light rail running through the city of Aalborg is embedded in a larger narrative of a former industrial city aspiring to transform its image and spatiality into a
brand that is attuned to attract attention and investments in accordance with the contemporary ideals of the neoliberal city.

Discussion
The strong neoliberal ideology underpinning many contemporary streetcar projects in the US can also be identified in European light rail projects. As demonstrated in this paper, there is a particular politics behind the light rail project in Aalborg, which is not unlike the politics identified elsewhere. The Aalborg light rail project is inscribed into the spatial vision of transforming the city’s image through the grand narrative of Aalborg being in a transformation process from industrial to knowledge and culture city. As part of this imaginary of the city, a logic is constructed which seeks to adjust the role of planning through arguments that planning must support urban development by concentrating public investments in the areas of the city where developers are most keen to invest. The spatial concept of the growth axis is introduced to visualise and support this logic, whilst at the same time providing a powerful spatial imaginary of ‘what the city looks like’. As a consequence, the urban development projects described in Aalborg Municipality’s spatial strategies ‘make sense’ due to the single fact that they are located within the growth axis, and at the same time these projects contribute to turning the growth axis into ‘reality’.

In many ways, spatial strategy-making in Aalborg reflects what Lauermann (2016) discusses as ‘claims making’ in strategic plans. The strategic simplification embedded in the design of spatial concepts, such as the growth axis, is deeply ideological, in the sense that the concept becomes a powerful persuasive device for justifying particular urban development projects. This spatial imaginary of the city is ‘not intended to represent the broader city at all, but rather to articulate a justification for local development narratives’ (Lauermann, 2016: 78). In the case of Aalborg, the growth axis performs just such a role, as it provides an overall spatial logic to a number of urban redevelopment projects in the city. This logic is further supported by the light rail project, which is portrayed as ‘the spine of the growth axis’, or in other words the light rail is what will bring the growth axis to life. In this way, the complexity of the light rail project is reduced into ‘more intangible and easily understood symbolic meanings’ (Higgins and Kararoglou, 2016: 455).

The Aalborg light rail project seems to be governed by the same ‘mobilizing myths’ that Enright (2013) identifies in the case of the mass transit scheme the Grand Paris Express. She argues that this project was structured by the underlying rationality of orienting investments in public transportation ‘towards a marketized logic of real estate development, urban rent production, and territorial competition’ (Enright, 2013: 797). The Aalborg light rail project has been structured by a similar logic. The light rail, as a public investment, is intended to support private investments in the growth axis by increasing land and real estate values. The extent to which the municipality is able to capture some of the economic gains will among other things depend on how much of the redeveloped land is publicly owned, and at which stage the municipality decides to sell off its land to capitalise on its investment. In a commentary to the local newspaper Nordjyske, the mayor of Aalborg explained that he expected an 8-10 times return of the investment, as the light rail would attract new citizens and more tax revenue (Nordjske, 2015).

The politics of the Aalborg light rail project becomes even more evident, if one looks at the proposed trajectory of the light rail through the city. The light rail connects many urban redevelopment sites, the city centre, and main urban functions in the city, such as the city’s main sport venues, the university campus, and the new university hospital under construction at the eastern fringe of the city. This raises the question of who the light rail has been planned for. Whilst
the proposed trajectory does connect some social housing areas, it bypasses one of the biggest social housing areas in the Eastern part of the city. This is a neighbourhood, which traditionally has been characterised by various socio-economic challenges and an increasing population of ethnic minorities, and as a consequence has featured on the national government’s so-called ‘ghetto list’ of particularly vulnerable housing areas. Clearly the residents in this neighbourhood are not meant to do their daily commute on the light rail, which instead seems primarily to be aimed at doctors, university staff, students and sport fans – cementing Aalborg’s transformation towards a knowledge and culture city.

Conclusion
The case of Aalborg suggests alongside other studies that there is a new politics of urban infrastructure projects, which is not only deeply rooted in a neoliberal ideology of promoting economic growth and attracting private investments, but which also seems to undermine the traditionally strong social dimension of public transport. In the age of neoliberalism, light rail projects seem primarily to be conceived as a means to promote urban development by boosting land values and property prices, rather than a means for providing affordable transport options for the low-income groups in society. In fact, these groups may very well be priced out of areas in close proximity to light rail stops, as land value and rents increase (Knowles and Ferbrache, 2016).

However, as Culver (2017: 28) warns us, we should be careful not to automatically conclude that light rail projects will lead to particular outcomes, just because the projects are “sold” in a neoliberal, creative city “packaging”. There is thus a need for further critical analysis of the potential negative consequences of the politics behind contemporary urban infrastructure projects. The neoliberal packaging that light rail projects come in does, however, provide a clear indication of the language that one has to speak to build support and legitimacy for public investments in urban infrastructure projects such as light rail.

In Aalborg the light rail project has been put on hold, as the national government elected in 2015 decided to withdraw national funding for the project as part of the preparation of the new government’s budget.6 In the most recent spatial strategy from 2016, the light rail project has been replaced by the cheaper bus rapid transit (BRT) solution, whilst the overall agenda of urban transformation and the development concept of the growth axis remain intact (Aalborg Municipality, 2016). What the consequences will be of this (minor) change in technology remains to be seen. So far, the BRT has replaced the light rail one-to-one, constituting the new argumentative armour in the city’s ambitions of promoting urban development and growth. The politics behind the light rail project remains in this context remarkably resistant, despite BRT missing some of the light rail’s ‘mythical allure’ (De Bruijn and Veeneman, 2009). One could therefore expect similar outcomes for low-income groups as discussed in this paper when the planned BRT line will open in 2023.

Notes
1. Thanks to one of the anonymous reviewers for suggesting this title
2. The author acknowledges that the term light rail can have different meanings in different geographical contexts. This paper uses the term light rail as a generic term to refer to a rail-based public transportation system, which is integrated into the street environment (unlike heavy rail or metro systems), often powered by electricity. In this paper, light rail is considered to be a similar technology to the tram, the streetcar and the German Überlandstrassenbahn.
3. Notwithstanding this critique, the author acknowledges that light rail projects may fulfill other progressive policy objectives such as reducing the use of private cars.

4. The author acknowledges that there may be alternative ways of capturing increases in land value, see Mathur (2014). The author would like to thank one of the anonymous reviewers for pointing this out.

5. The discourse analysis covers policy documents published in the period 2010-2015, as this was when the light rail project was discussed most intensively in Aalborg. The light rail project was cancelled in 2015 and replaced by a BRT solution in the spatial strategy from 2016. An analysis of the BRT project is outside the scope of the paper.

6. In the three other Danish cities where light rail projects have been implemented or implementation is underway, national funding has not been cut (see Nicolaisen et al., 2017 for an analysis of these projects). However, the National Government has made it clear that it will not provide additional funding for these projects.

References


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