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Pojani, Dorina; Stead, Dominic

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# A Critical Deconstruction of the Concept of Transit Oriented Development (TOD)

*Dorina Pojani, Dominic Stead*

(Dr Dorina Pojani, Delft University of Technology, Faculty of Architecture and the Built Environment, Delft, The Netherlands, d.pojani@tudelft.nl)

(Dr Dominic Stead, Delft University of Technology, Faculty of Architecture and the Built Environment, Delft, The Netherlands, d.stead@tudelft.nl)

## 1 ABSTRACT

The concept of Transit-Oriented Development, or TOD, has generated much interest in Europe over the last decade. Because the term “TOD” originated in the United States, this model is often assumed to be a recent import from North American cities. This paper examines how planning policies in three European capital city-regions – Amsterdam, Stockholm and Vienna – have been shaped by the ideas and principles underlying TOD since the Second World War. All three case studies are located in countries with mature systems of spatial planning: the Netherlands (Western Europe), Sweden (Northern Europe), and Austria (Central Europe). The paper illustrates that TOD, albeit called by other names or not named at all in policy, has been an intrinsic principle of planning in Austria, the Netherlands, and Sweden and in their respective capitals for decades. Far from being a recent North American invention, TOD has its roots in Europe and dates back many decades. Clearly, the enthusiasm with which TOD in its recent embodiment has been received in the US and Canada has done much to highlight and promote the concept over recent decades in Europe.

## 2 INTRODUCTION

The concept of Transit-Oriented Development, or TOD, has generated much interest in Europe over the last decade due to a combination of factors including technological innovations in transit, privatization reforms in rail transit, new goals of sustainable urban development, and the shifting spatial dynamics of contemporary society (Bertolini et al. 2012). Some of the pioneering work to define and codify TOD was presented in ‘The Next American Metropolis’ by Peter Calthorpe in 1993, where he proposed a series of conceptual design schemes and diagrams that have come to epitomize TOD (Calthorpe 1993). Because the term “TOD” originated in the United States, this model is often assumed to be a recent import from North American cities. However, TOD is based on much older ideas of rail-based urban development that took place in many European cities during the 19th and 20th centuries (Newman and Kenworthy 1996). Arguably, the modern reincarnation of TOD is more focused on urban aesthetics (Pojani and Stead 2015). Other tenets, such as accessibility, density, and mixed-use have remained more or less unchanged.

### 2.1 Research Question

This paper examines how planning policies in three European capital city regions – Amsterdam, Stockholm and Vienna – have been shaped by the ideas and principles underlying TOD. All three case studies are located in countries with mature systems of spatial planning: the Netherlands (Western Europe), Sweden (Northern Europe), and Austria (Central Europe). To be clear, the study does not provide an analysis of direct references to TOD in planning policies in these city regions. Instead, it examines the extent to which planning policies from the middle of the 20th century to the present have reflected TOD principles. The main focus in this analysis is on train-based (i.e. “nodal”) TOD as opposed to tram-based or “corridor” TOD. Much of the analysis is based on secondary sources (i.e. articles, books, and planning reports) written in English. This study was conducted as part of the project “CASUAL – Co-creating Attractive Urban Areas and Lifestyles”, led by the Nordic Centre for Spatial Development (Nordregio) and funded by the Urban Europe Joint Programming Initiative. The present paper constitutes a synthesis of some key findings of the study. The full study will be available later in 2016.

### 2.2 Research Method

The paper presents an overview of the development of spatial planning in the Netherlands, Sweden, and Austria since WWII, with an eye to highlighting policies that could be considered to be, or might affect, TOD. The paper then considers the implications of the development of these policies in terms of TOD planning and practice in the respective capital city-regions: Amsterdam, Stockholm, and Vienna. The history of TOD is discussed using the “culturized planning model” as an analytical lens to explain the evolution of planning policies and processes. This model, as the name suggests, is concerned with planning culture, and

builds on earlier paradigms, including path dependence, path shaping, globalization, Europeanization, policy diffusion, and families of nations (see Knieling and Othengrafen 2015; Pflieger et al. 2009; Stead et al. 2015).

### 3 THEORETICAL FRAMEWORK: THE “CULTURIZED PLANNING MODEL”

Unlike other professional activities such as civil engineering or computer programming, planning varies greatly depending on the place in which it is practiced. Culture shapes the way in which planning systems are devised and constructed, as well as the way in which planning operates and performs. It affects both formal and informal rules, methods, and procedures. Differences in planning culture are reflected in a diversity of planning instruments, planning practices, and professional ethos (see Friedmann 2005; Sanyal 2005; Stead et al. 2015).

Building on their earlier work, Knieling and Othengrafen (2015) put forward the “culturized planning model” as an aid to analyzing the impacts of cultural contexts on planning policies and processes. This framework considers both manifest and latent aspects of culture. The underlying assumption is that “planning culture” encompasses collective thinking modes and behavioral patterns, stemming from shared professional codes as well as more general societal values. The culturized planning model consists of three analytical levels: (a) planning artifacts; (b) planning environment; and (c) societal environment (Fig. 1). Clearly, the levels are not discrete: there are interactions within levels and between levels.

Adopting the culturized planning model as a frame for analysis, this paper considers how planning policies have been shaped by principles of TOD in three case study city regions: Amsterdam, Stockholm and Vienna. The analysis and discussion is framed by the three levels contained in Fig. 1 (i.e. societal environment, planning environment and planning artifacts) and the elements contained in each level. In the interest of simplicity and flow, no attempt is made to divide each section into subheadings based on the different levels and their constituent elements. Instead, the most important occurrences of these levels are highlighted as they arise in the text.

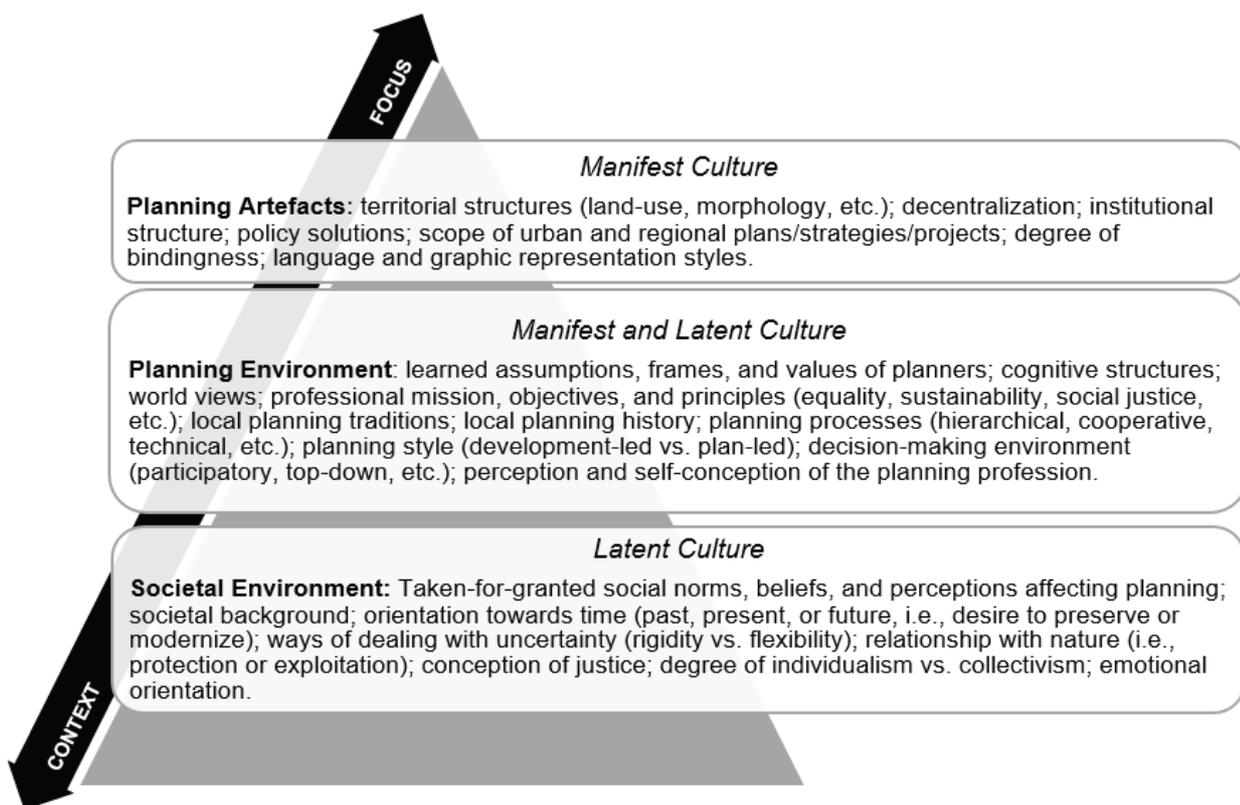


Fig. 1: The culturized planning model (based on Knieling and Othengrafen 2015).

### 4 KEY FINDINGS

All three case studies are located in countries with mature systems of spatial planning, which represent a specific region of Europe: the Netherlands (Western Europe), Sweden (Northern Europe), and Austria

(Central Europe). TOD, albeit called by other names or not named at all in policy, has been an intrinsic principle of planning in these places since WWII.

#### 4.1 Amsterdam

Amsterdam has a dense multi-modal public transport system based on metro, tram, bus, and bicycle. Its metropolitan region is an exemplar of relatively successful, albeit complex, development control which has attracted interest from planners around the world. In the post-war period, the city expanded out from its historic fan-shape. Major efforts were poured into creating urban “lobes,” as well as new satellite towns, which followed TOD concepts (planning artifacts). Although a highly knowledgeable “TOD lobby” is evident, it has failed to reach a wider audience and frame the TOD concept for the planning community (planning environment). Local planners are searching for (a) ideas related to the design of areas in the immediate proximity of train stations, especially in terms of aesthetics, mixed uses, 24-hour uses, and accessibility, and (b) financial tools that would make TOD viable without substantial investment from the public sector (Fig. 2). The recent economic crisis has been particularly problematic for the City of Amsterdam which finds itself with a large amount of land in its ownership which is not located in TOD zones. Before being able to develop TOD sites, the city needs to find a way of disposing of its current stock of land. While train station areas are seen as convenient work places, families and individuals do not perceive them as high-status living environments. Because bicycle use is widespread, the standard distance for non-motorized travel to train stations is much higher than in TOD zones in other countries. Despite these difficulties, many Dutch planners are still positive about the future of TOD in the Amsterdam region and view it as an efficient urban and regional development strategy.



Fig. 2: Amsterdam's Zuidas district, a TOD site centred around Amsterdam South Station (Source: Dutch Office Fund).

#### 4.2 Stockholm

While planning at the regional scale is generally weak in Sweden, Stockholm is arguably a leading example of coordinated rail transit and urban development (planning artifact). In the post-war period, the city was transformed from a monocentric city to a polycentric transit-dependent metropolis. Although the term TOD has not been used, TOD has been a guiding concept of Stockholm's (and other Swedish regions') regional development for many decades (planning environment). While no longer the cornerstone of planning, TOD is still present in planning visions for the future (Fig. 3). However, the automobile lobby has also gained ground. Individual development projects have come to dominate the development scene. Their siting often appears to be accidental rather than based on careful planning and coordination with public transport. Various new projects have been built along regional motorways and offer ample parking. This laissez-faire

approach has blurred the previously sharply defined borders of the inner city. TOD is seen as one of several complementary tools which could potentially be adopted but by no means the leading one.



Fig. 3: Hammarby Sjöstad, a TOD-influenced brownfield redevelopment area, houses 20,000 inhabitants and constitutes a mix of TOD and green urbanism (Source: La-Citta-Vita on Flickr).

### 4.3 Vienna

In the first few post-war decades, urban planning in Vienna was heavily preoccupied with reconstruction of the building stock destroyed in the war. Large housing estates were also developed on vacant land south and east of the city, the dimensions of which were reminiscent of Eastern European socialist estates. They were based on TOD principles in the sense that public transport was provided. At the time, Vienna was an exemplar of a top-down, corporatist form of social-democratic urban governance, based on rigid master-planning (planning environment). The city expanded in a circular fashion along its historical radial structure (planning artifact). In the 1970s and 1980s, Vienna experienced a wave of urban renewal to counter urban deterioration, which was becoming visible in the cityscape of the centre, but urban renewal took a gentler form than the demolition and rebuilding works occurring elsewhere.



Fig. 4: Vienna's Seestadt Aspern, a TOD site still under development, is planned to house 20,000 residents (Source: Liebherr-Werk Bischofshofen GmbH).

During the 1980s, social-democracy began to establish new forms of urban governance in line with the neo-liberal political restructuring of other European countries (planning environment). Municipal socialism began to transform into municipal capitalism. In contrast with the publicly-funded TODs of the past, new

urban development projects were planned as public-private partnerships. From the 1980s onwards, Vienna's TOD focus shifted to inner city areas. Part of the shift was driven by the desire of city leaders to promote Vienna's image as an internationally competitive city and a gateway between Eastern and Western Europe, and motivate the private sector to implement this vision. Contemporary TODs are an expression of a new form of planning comprising new urban policies and entrepreneurial governance (Fig. 4). While marking a break with traditional corporatism, they represent an elitist approach with coopted public participation. The approach is also in line with the deeply entrenched hierarchical structure of Vienna. The key actors involved include real estate businesses, international investors, and public opinion leaders.

## 5 CONCLUSION

The analysis conducted in this study has illustrated that TOD, albeit called by other names or not named at all in policy, has been an intrinsic principle of planning in Austria, the Netherlands, and Sweden and in their respective capitals since WWII. Far from being a recent North American invention, TOD has its roots in Europe and dates back many decades. Clearly, the enthusiasm with which TOD in its recent embodiment has been received in the US and Canada has done much to highlight and promote the concept over recent decades in Europe. The study has illustrated that the extent to which the TOD concept can find resonance in a European context is closely related to the prevailing societal environment as well as the planning environment.

In the early postwar period, entire new satellite towns or lobes were developed around the peripheral stations of the train and metro systems of Vienna, Amsterdam, and Stockholm. This period reflected the economic prosperity and the popular desire to suburbanize in that era. In later years, in parallel with the urban revival movement, TOD efforts were transposed to the inner cities, in new brownfield redevelopments. In both cases (earlier suburban and later urban TODs), the national, regional, and local governments played a major role in steering development (a planning artifact) towards public transit stations and lines – or in servicing existing housing developments with public transport. The TOD phenomenon (a mix of transit and land use) did not occur naturally.

Current planning in Austria, the Netherlands, and Sweden is in a state of flux. The discourses contained in policy documents show support for sustainable and resilient urban and regional development, and include TOD in a major way. At the same time, changing political priorities and administrative reform (affecting the planning environment) have led to a gradual decline of the status of the planning profession. The recent economic crisis has favored deregulation and market-led economic development. Planning is increasingly framed as a time-consuming and cost-intensive activity. The concept of space as a regulated public domain has weakened. Spatial planning has lost ground especially at the national and regional levels. Economic growth has priority at the moment. As a result, the interests of developers are generally placed ahead of strategic efforts to structure cities and regions in a more environmentally sustainable manner. Given that planning has a long tradition in all three countries, this reorientation is seen by many commentators as a dramatic step backwards (Kunzmann and Koll-Schretzenmayr 2015).

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