

Circles of Expansion

An Introduction

Put simply, cities can grow in two directions: linear and circular. Of course, between these two alternatives, countless transitional forms exist. Social conditions, such as different centres of political power, or natural ones like rivers or hills, can deeply influence a given city's layout.¹ However, the physical form of the expansion should be definitely examined only secondarily. More important is the understanding of the meaning of the term "expansion". If we compare the growth of the cities before and after industrialization, it is undeniable that expansion has a new dynamic from the 19th century onwards. With this in mind, our present topic focuses exclusively on the modern urbanization period.² Very generally, this choice implies that urban history in the last 200 years can be understood, more or less, as essentially the history of circles of expansions.

Still, like all modern phenomena, the circles of expansions of modern cities cannot be understood without knowledge of their historical origin. Several factors played a role in the urban expansion of the 19th century, above all the radical demographic change which resulted in exponential population growth in the most developed regions of the world.³ Quite literally, this population increase found no room for itself in Europe. However, a high number of people by itself does not automatically create a modern city: in parallel, qualitative changes had to happen.⁴

The effect of machinery and mechanical production is well known⁵; consequently, I would like here to stress instead the environmental-historical aspect. The use of carbon-dense energy radically reconfigured the traditional balances between a given settlement's urban growth and its rural surroundings.⁶ Before the carbon age, urban centers (most of which can hardly be termed cities) used renewable energy (for example wood) to fuel their production; confined by the rhythm of natural renewal, technical evolution had its clearly defined limitations. Carbon-dense energy launched a new epoch, while the simultaneous emergence of capitalism became its "endless" fuel.

If we speak about capitalism, we should equally note the social changes in power. The age of political absolutism opened up previously local societies and established state monopolies on basic functions such as violence. The 19th-century modernization of cities took over this trend as a national program.⁷ This power transformation is strongly visible in the immediate case of military architecture.⁸ Instead of many point-like settlements with fortifications, a trans-regional (empire-like) system emerged, with a smaller number of central forts. In this point, we are very close to the origins of the circle boulevards: most of the European towns in the 18–19th centuries demolished or at least overbuilt their former defensive walls, while their urban planners (architects or engineer) used the resulting spatial legacy to propose a circular layout for modern cities. Of course, the fortifications did not disappear suddenly: we also know that the two processes – the demolition of the old fortifications and the creation of modern urban formations – took place in parallel. So, for example, while the mediaeval walls of Pest (Budapest) disappeared in the 18–19th centuries, new fortifications were still being erected in the south parts of the Habsburg Empire, e.g. Timișoara⁹ or Novi Sad, or the lesser-known case of Hódmezővásárhely.¹⁰ Regarding the relationship between city fortresses and boulevard systems, there are ample discussions in the present volume volume, most notably in the paper about Kraków by Michał Baczkowski.

All of these processes led to the that the emergence of a relatively narrow group of 19th-century European settlements not only spreading beyond their fortifications but assuming monopolistic power over other large regions.¹¹ Capitol cities witnessed rapid urban expansion in which linearly organized suburbs were created along the roads leading out from the fortification gates. As a simple geometric fact, the further from the gates, the larger were these "roundabouts" between the roads; i.e., the new suburbs. At the same time, the original historic cores could no longer manage the growing traffic. The local authorities tried to displace some functions outside

the borders, such as food processing, fairs and markets trading in firewood and building materials. As a result, the role of suburbs in the life of the nascent capital cities became far more important than before.

If we take a look at this Weberian *Idealtyp* of the early 19th-century capitalist city, we see already the ground forms of the later spider-web boulevard system of its modern fabric, a combination of the “ring” marked by the city wall on one side and the linearly organized suburbs starting from the gates on the other side. However, the modern city with its boulevard structure had yet to emerge: for this to occur, it was necessary to rethink the extant organic system into a rational urban plan. The urban designer structured the given layout into a hierarchic boulevard system, in which axial and circular boulevards organized city life.¹² Without these regulations, even the most spontaneous expansion could have ended up blocking itself, as the “random” positioning of factories and new neighborhoods all too often stood in the way of additional development.

With this in mind, engineering intervention is the other aspect that must be taken into account.¹³ We have to recall the architecture of the “grand manner”: the formal axis of the Baroque, corresponding precisely to the rules of Baroque garden architecture.¹⁴ The grand avenue has no curves or bends: it imprints in the landscape a rigidly logical perspective and grandiose scales. Hence both the ceremonial garden avenue and the first city boulevards use a wide track culminating in an architectural motif at the end (whether church, chapel, triumphal arch, garden folly, etc.).¹⁵ The rearrangement of the established urban structure of Rome or later Paris, the opening up of the urban fabric with wide boulevards, ultimately follows the same logic as that of the Baroque garden: the triumph of order over disorder, of planning over the unpredictable forces of urban growth.¹⁶ What most significantly sets apart the planned circular expansion (ring roads) along the old city walls from the axial boulevard is, first of all, its direction. The axial boulevard leads from one point to another, but the circular boulevard turns back on itself. Of course, this difference is not only a mark on the map.¹⁷ Often, the axial boulevard leads from the center to the periphery, and thus its character changes over its course from the dense fabric of downtown to the green-dominated parks with pavilions.

All these theses can be formulated as the results of numerous case studies of urban history, above all the example of Vienna, which is the best-known European case of a circular boulevard created on the site of an old fortification. This street formation has assumed its own German name in the international discussions: the Ringstrasse.¹⁸ The uniqueness of the Ringstrasse is easy to understand if recalling that Vienna, after London and Paris, was the third capital of contemporary Europe by the middle of the 19th century, yet at the same time the continent’s largest fortress city. The Ringstrasse came into being in a historical period when the traditional

aristocracy was still strong enough to enforce its will, and the new capitalist elites were partners in financing the enterprise. And in the Habsburg realms, the Ringstrasse became a direct model for the other cities of the Danube Monarchy.¹⁹ It is also not a coincidence that the authors of this volume – not only because of the call – at a certain point in their papers reflected on the example of Vienna, which only underscores the importance of that city in European urban-planning history.

If the Ringstrasse was a model, this status it does not mean that the other cities necessarily followed it. The case of Budapest, as the other capital of the Dual Monarchy after 1867, is essentially a contradictory instance in realising a circular ring boulevard. Not only is the Budapest Nagykörút [Grand Boulevard] chronologically younger, it equally represents a new form of urbanism, even if its designers did not think so at the start of construction.²⁰ By the second half of the 19th century, a revolutionary change was underway in conception of urban form, with the railway not only mobilizing the spaces between cities, but also the cities themselves. At the beginning, it was almost by mere coincidence that the tram lines (often referred as “urban railways”) developed in parallel with the creation of the Nagykörút. Yet over time, electrified and then automotive transport became the most important shaping force of the boulevard. All the same, beyond Budapest, Berlin, Paris and Vienna built their own ring railways, typically on a much larger scale than the Budapest tram network could manage at the turn of the century.²¹

In the beginning of the 20th century, the spiderweb structure based on traffic issues became the most common planning method. During the transition period, however, a number of designers aimed to preserve the classical heritage of the previous century alongside new developments. Their proposed “outer” ring boulevards are not only traffic arteries but workable main streets with picturesque views toward important buildings. Éva Lovra’s paper about the designs of Antal Palóczy treats this period in this volume. In the paper of Ján Sekan about Košice, we can read about a similar project, just before the end of WWI, created by the urban planners Jenő Lechner and László Warga. However, their grandiose great ring-boulevard around Košice was never realized. Similarly, in other cities it happened that such outer circuit boulevards around the existing suburbs could not fulfill the aesthetic functions of a classic ring boulevard.²² For one, they lay too far from the downtowns and for another, were often too long for an efficient traffic system. As the ring boulevard basically forms a detour, it only makes sense to follow it if doing so implies a significantly faster mode of transportation. This was the “luck” of Budapest’s Nagykörút with the tram, and it was the goal of the *Stadtbahn* [suburban train] along the Vienna Gürtel.²³ The “outer” ring boulevards had to offer a very fast traffic in spite of the cross-axis, resulting in a constantly increasing traffic speed.²⁴ The Hungária Körút, the outer ring boulevard in Budapest, is a typical example of this effort, where a fast tram and a six-lane road ensure fluid

through transit, yet at an undeniable cost (see more in the paper of Marian Simon).

City planners began to discern this conceptual trap only in the second half of the 20th century, when “highways” encircling downtowns were built in Europe, partly as an artificial solution imported from the USA (about the “English-USA way” of circle roads see more in the paper of Cornelius Van der Westhuizen in this issue). Despite the original hopes for better living quality in the downtowns, the end effect was often the opposite: the ring highways formed a “traffic wall” between neighborhoods.²⁵ Ondrej Ficeri shows in this volume how the process operated in the case of Košice, where the romantic green environment of a water canal became transformed into a heavily travelled transit road.

As we saw, the idea of circle of expansion is a core issue of urban modernization which has changed its form repeatedly but accompanies the history of Central European cities from the 19th century until today. Consequently, this thematic issue focuses more on the historical patterns, starting not from Vienna but from Budapest. Budapest’s central position in this volume is the result of the previous year of 2023, when the Hungarian capital celebrated its 150th anniversary unification (between formerly independent Pest, Buda, and Óbuda). As part of the jubilee year, the Institute of Hungarian History in Vienna [*Bécsi Magyar Történelmi Intézet*] organized a conference under the scholarly supervision of the present author, Máté Tamáska. Here we discussed not only the case of Budapest but also Vienna and other cities in the Habsburg Monarchy. Drawing upon this meeting, we decided to publish a call for papers that would significantly enlarge our perspective.

In the present issue, four contributions involve Budapest. Enikő Tóth presents the architectural heritage of the Nagykörút, where the public buildings (railway station, theaters) were designed by international architects while the apartment blocks were the work of local architects, drawing upon a very wide range of late Historicism. The paper by Marian Simon examines the Nagykörút as well: she highlights that the outermost ring (Hungária Körút) is not a legacy of the *fin-de-siècle* but of 150 years of changing architecture solutions. Accordingly, the outmost ring road is instead an “exhibition” of architectural history.

Another new topic is the history of the chronologically more recent district of Budapest, District XI in South Buda. The paper of Domonkos Wettstein and Károly Zubek is especially exciting because it shows how the given determination of the 19th-century spiderweb structure changed the planning ideas of the originally planned *tabula rasa* district. The fourth paper on Budapest discourses the urgently vital topic of the circle of expansion: how we can stop the expansion of new construction and make green belts around our cities? In the paper of Balázs Almási, Orsolya Bagdiné Fekete, Krisztina Szabó and Péter István Balogh, they discuss the question of Budapest in conjunction with international issues and examples.

At our conference in Vienna, it was also a priority to involve a range of different international case studies.

The paper from Michał Baczkowski about Kraków is an excellent example of how the “Ring” idea survived past the *fin-de-siècle* and how modern architecture used the theatrical structure of boulevards for city representation. A similar case but with a notably different answer can be observed in Szeged. This city received its spiderweb layout after the devastating flood of 1879, yet instead of the well-known reconstruction narrative, Anna Váraljai focuses on the circular flood dam, which in the unrealized plans from the interwar years could have become a recreational green belt for the growing city. Ján Sekan’s paper about Košice is again a special case. The city started to create its own Ringstrasse, then later intended to a boulevard system similar to that of Budapest. However, Košice never relinquished its linear orientation along its main north-south central axis and over time, the idea of the great ring boulevard disappeared – even city maps forgot mention it. The situation is somewhat similar with Brno, the subject of research for Adam Guzdek. At one time, Brno was even referred to as “Little Vienna”, yet the equivalent of the Ringstrasse in Brno already contained significant compromises, compared to the original in Vienna. Later, due to 20th century traffic management, some sections of the boulevard were lost to the new traffic system. Other papers from Éva Lovra and Ondrej Ficeri, as discussed above, similarly provide important theoretical background, jointly confirming how far the twentieth century moved away from classical ideas on urban architecture.

Of course the topic of ring roads is not only a story in Central Europe. Therefore we opened the call for a global discourse. We received several papers, and eventually selected two of them. One is a European case as well, Nikšić in Montenegro. Vladimír Bojković’s paper on this city was included because it presents a special case of a settlement, unquestionably a small town, yet designed from the “moment of its birth” as an ideal regulated urban organism. The other is, in geographic terms, a radically different location. The paper from Cornelius Van der Westhuizen about Pretoria is, nonetheless, an extremely useful insight for the present topic, as it reveals the difference between Central European and “Global” urbanism. The first is deeply rooted in the historical dependence, the second is more a story of the 20th century urban planning, a form developed in the USA and imported by local planners in the whole world.

It is clear that a thematic journal issue cannot provide a long-term comparison of the subject. It cannot clarify in detail the changing concepts of boulevards of each period, since even one aspect, like for example the management of green areas, traffic, or monumental architecture, would require separate analysis. The most important result of the issue was to uncover and define these aspects toward the future, and no less to present excellent case studies for further comparative studies. Yet even if no further perspectives are forthcoming, it is nonetheless valuable that this special heritage of Central-European cities has gained a new international forum for discussion.

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