

THE DE-COMMODIFICATION AND RE-COMMODIFICATION OF VIENNA'S *GRÜNDERZEIT* HISTORIC HOUSING STOCK

Sandra Guinand, Viktória Éva Lélek, Robert Musil

Abstract

Drawing on Braudel's idea of different layers of time (Braudel, 1958) and applying approaches from urban and economic geography, this chapter discusses the long-term real-estate dynamics of Vienna's *Gründerzeit* housing stock. It looks at the structural factors underlying real-estate prices and urban development over the long term: from the start of the *Gründerzeit* period (also referred to in architectural terms as the Founder's Period – 1848 to 1918) until the present day. From this perspective, it discusses the shift between three periods of commodification and their impact on the transformation and preservation of these buildings: phases of commodification, de-commodification, and re-commodification.

The *Gründerzeit* was characterised by rapid industrialisation and urbanisation during which housing was mainly provided by private actors. Due to the demographic growth of the city, a huge demand for housing drove up prices, which was highly lucrative for landlords, but created miserable housing conditions for a considerable part of the Viennese population (Period 1: 1848 until 1918). This housing commodification gave rise to two ideal-typical urban forms: the generous and aesthetic bourgeois apartment housing located in the city centre and the far smaller working-class tenement in more densely populated areas with fewer facilities. During and after World War I, rental price regulations and tenure protection caused rental prices to decline, leading to a de-commodification of this market segment for many decades (Period 2: 1919 until 2000). With the fall of the Iron Curtain, Vienna slowly turned from a "dead-end city" into a central European metropolis, once again experiencing demographic growth. Especially from the late 2000s (Period 3), the combination of strong demographic growth and increasing interest in housing as a safe investment meant Vienna's *Gründerzeit* stock again became a commodity for developers. This interest has put pressure on the housing stock, sometimes leading to its demolition.

This chapter examines transformation and preservation practices in the light of the long-term demographic, regulatory, and economic framework that influenced the situation of Vienna's *Gründerzeit* housing stock and considers how these practices reveal the various attributes, values, and expressions associated with these buildings. While preservation and heritage processes have been comprehensively studied in reference to public entities or local community initiatives, little has been said on the role of the real-estate market and commodification dynamics and their impact on preservation and heritage processes. This chapter seeks to shed light on this issue. The method applied relies on analysis of secondary sources, thematic and critical discourse analysis of planning and legal documents, as well as preliminary field observations undertaken in Vienna during the months of February, April, and May 2024.

Keywords

Gründerzeit housing, transformation, commodification, real estate market, longue-durée analysis, Vienna



1 INTRODUCTION

Over the last decade, real-estate prices in Vienna have been growing rapidly. Although the market is now slowing, due to a rise in interest rates followed by a decrease in demand, the acceleration of real-estate prices in the last decade has had a significant impact on the Viennese urban landscape. This is especially true when looking at the historical *Gründerzeit*¹ housing stock. This housing stock was constructed during the industrialisation period that took place during the Austro-Hungarian monarchy, starting in 1848 with the abolition of manorialism. During this period of rapid urbanisation, housing was mainly provided by private actors. Due to the demographic growth of the city, the huge demand on housing led to increasing prices, which caused high profits for landlords, but led to miserable housing conditions for much of the Viennese population. This housing boom gave rise, generally speaking, to two ideal-typical urban forms: generous and highly decorated bourgeois apartment housing located in the city centre, and far smaller, less well equipped, working-class tenements in densely populated areas of the outer districts (Bobek & Lichtenberger, 1966). This housing stock then experienced a long period of decline and degradation during and after World War I, due to rental price regulations and tenure protection (1922). This caused a de-commodification of this market segment for many decades, which was correspondingly the subject of few efforts at protection and preservation on the part of the city authorities. Eventually the city authorities intervened, launching soft urban renewal programs in the 1970s, which aimed at maintaining these buildings in consideration of their historical value with its current tenants. In the last two decades, the geopolitical repositioning of Vienna as a gateway to Eastern Europe, in combination with renewed population growth, has significantly raised the interest of private developers in this historic housing stock. In other cities, for instance in the UK, this rise of new actors often associated with financialisation processes has been accompanied by homogenisation, as properties have been turned into comparable, standardised commodities, especially in the housing sector (Fernandez & Aalbers, 2016; Aalbers, 2019). In Vienna, this private developer-led phenomenon has given rise to the re-commodification of the *Gründerzeit* housing stock, a process that has gone hand-in-hand with major transformations. Some *Gründerzeit* buildings have been demolished because of their “inferior” aesthetic qualities or shabby overall conditions (the result of decades of neglect) (Musil et al., 2021), and city authorities have done until recently little to stop this. It is however a historic fabric that has, to a large extent, shaped the social and urban landscape, as well as the identity of the Austrian capital city.

Drawing on Braudel’s idea of different layers of time and analysis of the *longue durée* (Braudel, 1958), this chapter discusses long-term shifts over three periods in the history of these buildings and their transformations: commodification (1848 to 1918), de-commodification (1919–2000), and re-commodification (2000–2019). This approach is used to examine the trans-

1 *Gründerzeit* refers to the industrialization period that took place in the Austro-Hungarian Empire, starting in 1848 and giving rise to a wealthy middle class and associated architectural buildings. During the *Gründerzeit* (literally “Founders’ Period”, referring to the founding of many large corporations during industrialisation), tenement houses were also referred to as *Zinshäuser*.

formation and preservation practices that influenced the history of Vienna's *Gründerzeit* housing stock. We use the terms "commodification" to refer to a process that turns the *Gründerzeit* historic housing stock into a commodity (Musil et al., 2022), i.e. an object whose exchange or storage value takes precedent over use value or social value. As stated by Bernt (2022, p. 3): "When housing is commodified, it can be treated as an investment and can be purchased, sold, mortgaged, securitised and traded in the markets." De-commodification, on the other hand happens: "when the provision of housing is rendered as a right and/or when a person can maintain accommodation without reliance on the market, or when the conditions in the markets make it impossible to trade housing or invest in it" (Bernt, 2022, p. 3).

The chapter is structured as follows: First, it provides an overview of the debate on commodification and historic housing stock. It then outlines our conceptual approach, underscoring the relevance of long-term analysis before providing an overview of the significant phases that influenced the transformation of Vienna's *Gründerzeit* historic housing stock. It concludes by discussing the implication of these transformations on the preservation, attribution of qualities and values, and the significance of this heritage for the cityscape and identity of the city. Vienna is an interesting case to look at regarding the impact of commodification cycles on preservation practices and heritage processes, as many areas of the city still possess a homogenous historical housing stock and cityscape, the *Gründerzeit*, which can be observed over a long time period. The method applied relies on analysis of secondary sources, thematic and critical discourse analysis of planning and legal documents, as well as preliminary field observations in Vienna undertaken during the months of February, April, and May 2024.

2 COMMODIFICATION AND PRESERVATION OF HISTORIC HOUSING

In the field of heritage studies, issues around commodification and heritage are nothing new (Schmitt, 2022). The process of commodification is often associated with objects of social and cultural value being turned into commodities to stimulate economic development (Licciardi & Amirtahmasebi, 2012; Ashworth, 2014), to "put a city on the map" (Guinand, 2015), or to create and frame a (new) cultural image for the city centre (Guinand & Rogerson, 2023). Once turned into heritage, historic buildings or historic building stock of a specific period then become a product the city uses to attract new investment and investors. In this case, the urban landscape is commodified and enables the construction of a competitive identity. The growing visibility given to these buildings can increase their exchange value in relation to the real estate market. This can be seen in the centres of major metropolis and in many restored and protected sites such as Porto (Guinand, 2015), Paris (Gravari-Barbas, 2017) or *Vieux-Québec* (Old Quebec) (Berthold, 2015) where commodification is often a sign of gentrification (Musil et al., 2022). As Gravari-Barbas et al. (2024) have shown, interest in old stones and their restoration is part of a process that goes beyond specialised workshops and

old stone experts. The authors note that the rehabilitation of historic buildings can play a significant economic role. This analysis builds on the statement made by Erwin (Erwin, 1980 quoted in Gravari & Jacquot, 2024, p. 249) in the 1980s, when he used the term “real estate revolution” to describe urban renewal processes taking place in the U.S. and initiated by large property owners, which eventually led to speculative bubbles. Forty years later, under very different economic conditions, the “real estate revolution” in Western urban contexts has been successful in leveraging the historical and aesthetic value of the inherited built environment (Lai & Lorne, 2019) for the realisation of economic added value. Moreover, the proximity of a protected or refurbished structure can also add value in the form of character or identity to a residential development. This does not mean that historic buildings are systematically preserved by developers or property owners, not even in highly regulated contexts such as the UNESCO world heritage site in central Vienna. These actors rather treat the historical and aesthetic dimensions as added-value for their portfolios (Guinand, 2015). A single historic façade can justify a real estate or redevelopment project, even if this leads to *façadisme* (Richards, 2003). As Kyriasi (2019, p. 190) shows, regulations and documents provide indications of what should be protected, yet they leave room for interpretation and the choice of criteria to apply. This is true, for example, in the case of the UNESCO world heritage site of “the historic core of Porto”, where in some parts, only the façades of historic buildings have remained after their refurbishment (Guinand, 2015).

The intervention of the real-estate sector in the heritage economy and its processes and production cannot be studied without considering works on the commodification of culture and the symbolic economy (Zukin, 1995; Lash & Urry, 1994; Lipovetsky & Serroy, 2013), as well as the role and function accorded to authenticity by these actors (Gilmore & Pine, 2007). The motive behind refurbishing a historic building is the hope of selling an “authentic” object from the past (Gravari-Barbas, 2005). These theoretical considerations teach us something about the political and economic restructuring of the built environment. Another important point to emphasise is the link between production and consumption (of the built environment), something stressed by Zukin and Smith Maguire (2004), who show how consumer desires for goods are socially constructed by cultural changes driven by industry and strategic marketing practices (supply), on the one hand, and by demographic changes (increase in wealth) and changing modes of expression and new social practices (demand), on the other. This points not only how cultural tastes but also cultural and social values are constructed and can lead to actions and interests for historical buildings (or not) and their refurbishment and preservation (or not): A process that Zukin explained well in many of her pieces examining Manhattan’s urban transformations (1982; 1995).

Changes in tastes that suddenly draw attention to a particular building, raising its value can also be examined from the perspective of Boltanski and Esquerre’s enrichment theory (2014; 2017). These authors show how the changes that occur in late capitalism, as a world dominated by the industrial economy, centred on innovation and the rapid renewal of objects, is replaced by an era of enrichment, in which goods already produced have an “enriched”,

prolonged existence and take on new value thanks to new addition of “heritage” features, in this case through historic features or aesthetic elements. In the context of *Gründerzeit* historic housing, this chapter is especially interested in looking at buildings that have first lost their economic (exchange) value before being “enriched” by means of refurbishment. Boltanski and Equerre use the notion of “trial” to situate this transformation of value (2017). The “trial” is characterised by a specific moment during which the (market and exchange) value of the object is called into question. In the case of our *Gründerzeit* transformation analysis, this is a critical moment – a favourable space of time within which certain decisions are made. For example, a change in spatial planning, public policy, vacancy of a historic building, and so on. This critical moment is the result of socio-economic conditions, political context, and actors’ decisions.

3 APPROACH: ANALYSING URBAN TRANSFORMATION IN THE *LONGUE DURÉE*

In an article published in 1958, historian Fernand Braudel introduced the concept of the *longue durée* when trying to forge links between disciplines in the social sciences and to stress the contribution of history to the field. According to Braudel, *longue durée* analysis is useful as an ontological tool that looks at and dialogues with the past and helps us to better understand the future. He states that the dialectic of duration, which he calls “the social continuities, the multiple and contradictory temporalities of human lives”, is “not only the substance of the past but the stuff of present-day social life.”² (Braudel, 1958, p. 726).

For Braudel, conducting a *longue durée* analysis is very useful in helping to understand the role of institutions, civilisation, etc. His reflection on time and the *longue durée* stems from his work on the Mediterranean civilisation (1949). In his analysis, he also acknowledged the presence of multiple temporalities that constitutes time (Braudel, 1958, p. 727): the *longue durée* relates to geographical temporality. He then identifies the social temporality that oscillates with the secular movements of the economy, modes of production, and economic exchanges that largely dictate the daily life of societies, and thirdly, the time of the individual, which he relates to the time of our daily lives. This nuance is important and since then other authors have, with Braudel, shown that time is not only to be understood from a subjective point of view, but must be considered as a historically and socially constructed phenomenon (Chiffolleau et al., 2017; Hartog, 2003). This necessarily implies the recognition of a multitude of times and perspectives, as human societies each develop their own relationship with time, based on their own referents and norms.

In accordance with this perspective, *longue durée* or long-term perspective analysis is all the more important, as, beyond demographic and economic

2 Translation by Immanuel Wallerstein, Review (Fernand Braudel Center), Vol. 32, No. 2, Commemorating the *Longue Durée* (2009), pp. 171–203; the original wording is: “La dialectique de la durée, cette durée sociale, ces temps multiples et contradictoires de la vie des hommes, qui ne sont pas seulement la substance du passé, mais aussi l’étoffe de la vie sociale actuelle”.

curves, economic and social conditions we should also pay attention to actors and their temporalities. As Braudel (1958, p. 730) says, for instance, “Science, technology, political institutions, mental constructs, civilizations (to use this convenient word), all similarly have their life and growth rhythms. The new cyclical history will only reach maturity when it has assembled the entire orchestra”³.

Long term perspective analysis thus helps to explicate movements and cycles, facilitating the comparison of results and data and generating a more detailed understanding of what took place and what is at stake. In a book dealing with the transformation of waterfront urban development projects, Guinand (2022), one of the co-authors of this chapter, showed the pertinence of applying long-term critical analysis to urban transformation. This approach allows us, on the one hand, to look at the various layers of socio-economic and technical interaction that have shaped the urban fabric – in our case, the *Gründerzeit* housing stock. On the other hand, it also helps us understand the socio-economic role of the housing stock in the urban setting. This long-term analysis highlights major development trends. For instance, an examination of planning and urban regulation policies over a long time period highlights the critical dimensions of city development. It sheds light on what has changed and what has not. It provides information about the main objectives pursued so far and what the challenges of the future might be. The evolution of references and concepts used by the urban actors can be traced and revealed. A long-term analysis highlights the references and values that are cast aside and those that are brought to the fore. It gives a clear idea of the power relations at stake (ideologies, domination, etc.), and how these are rooted in the production of space and the urban landscape (Harvey, 1979; Olwig & Mitchell, 2009). It also sheds light on the socio-political economy of place: how socio-economic relations shape the political present (Micieli-Voutsinas, 2014) and envisage legacy for the future.

A long-term perspective analysis of Vienna’s historic *Gründerzeit* housing stock (GHS) as an aspect of urban development is an interesting undertaking. It involves looking at traces of historical efforts aiming at preservation (or not), refurbishment, transformation, and demolition. These traces offer a reading of the past but are also elements of identity-building and assessment, a foundation on which the city has built and asserted itself. Vienna’s GHS thus appears to cut across functions of both time and space: From a long-term perspective, it enables an analysis of the relation with time, and from the perspective of urbanisation, it provides information about the relation with space, the built fabric and the type of values that are maintained. In this context, the GHS has played a major role in shaping the social urban fabric of Vienna (Figure 1). As a consequence, the transformation of historic buildings holds cultural, social, and economic (e.g. business structure, tourism) dimensions that reach beyond the individual building and impact the entire urban milieu. This is especially true for housing. In Vienna, the GHS comprises

3 Unless otherwise stated, this and all subsequent translations from non-English-language sources are by the authors; the original wording is: “Les sciences, les techniques, les institutions politiques, les outillages mentaux, les civilisations (pour employer ce mot commode) ont également leur rythme de vie et de croissance, et la nouvelle histoire conjoncturelle sera seulement au point lorsqu’elle aura complété son orchestration.”

about 200,000 of its 900,000 existing apartments (Musil et al., 2022). Further, this market segment, especially in the outer districts, provides affordable housing and “arrival spaces” to temporarily settle (El-Kayed et al., 2020) for low-income migrants and households (Kohlbacher & Reeger, 2006). Consequently, the transformation and reduction of this stock mostly via its exit from the rental market and becoming a commodity to be sold (30,000 apartments between 2007 and 2019) (Musil et al., 2022) has had enormous social implications, especially for low-income households.



FIGURE 1 Gründerzeit Typology and Density in Vienna. This map shows the typology of the Gründerzeit housing in terms of building and population density and the importance of the Gründerzeit buildings for the city of Vienna, especially for more central areas. (Infographic: V. Lélek, TransHerit, CC BY-NC-ND based on data from Musil et al., 2021 and 2016, City of Vienna, MA18)

4 VIENNA'S GRÜNDERZEIT HOUSING STOCK IN THE LONGUE DURÉE

4.1 Building the *Gründerzeit* city

The construction of the “*Gründerzeit* city” (Musil et al., 2022) coincided with the intense urbanisation caused by industrialisation and rapid population growth. Vienna’s population went from approximately 400,000 inhabitants in the first census under Maria-Theresa in 1754, to 600,000 in 1846, to reach its peak of 2,100,000 inhabitants in 1910 (City of Vienna, 2024a). This period (1848 to 1918) witnessed large-scale infrastructure development and urban expansion beyond the *glacis* (an area of open land surrounding the city walls) and the construction of the emblematic *Ring*.⁴ The development of new housing capacity, which involved the incorporation of areas formerly outside the city, was facilitated by the suppression of the manorial system. This changed the general status of land (Musil et al., 2021), which became a good to be exchanged on the market. New industrial entrepreneurs acquired power in the form of capital, and housing became a speculative object. However, this wave of new construction was regulated by the construction zones plan of 1893, which differentiated between industrial, green, and residential areas; defined building height and number of floors (five floors inside the *Gürtel*,⁵ four floors outside); and regulated block construction in residential areas of the inner city, small residential settlements and industrial areas in the outskirts (Hagen, 2015; Suitner, 2020). This gave the *Gründerzeit* city its characteristic urban fabric and identity.

Many banks and corporations engaged in trade, industry, and commerce were founded during the *Gründerzeit*, making Vienna the financial and administrative centre of the Austro-Hungarian monarchy. The aristocracy and wealthy bourgeoisie bought or rented tenements in more prestigious locations, such as the *Ringstrasse*, while working-class housing was built around and outside the *Gürtel*. The buildings were built in the leading style of the era, following a historicist approach, and the façade and ornamentation were often symbolically representative of financial power and political status. This build-to-rent model allowed landlords to support themselves without additional earnings besides the rents. In 1869, 44.9 percent of Viennese owned their dwelling, while 55.1 percent rented (including 18.9 percent who merely rented a bed for part of a day, *Bettgeher*) (Bobek & Lichtenberger, 1966, p. 30). To support private construction, tenement housing construction was highly subsidised in form of tax benefits and tax-free years⁶ (Bobek & Lichtenberger, 1966, p. 47). This boom period was interrupted only temporarily by the stock market crash of 1873, after which new tax incentives were granted to restart the engine of economic growth (Pirhofer & Stimmer, 2007). This period of large-scale residential development was dominated by speculation

4 The *Ring* refers to the first large boulevard dividing the city between (mostly) the historic core (1st district) and the rest (see Figure 1).

5 The *Gürtel* refers to the second large “ring” boulevard dividing the city (see Figure 1).

6 The number of tax-free years depended on the location and the length of the construction period.

and individual profit-seeking (Pirhofer & Stimmer, 2007). It gave rise to monumental buildings representative of the power of the new bourgeoisie (Figure 2) in the form of distinctive dense housing blocks featuring extensive ornamentation, as well as lower quality housing in smaller units (Figure 3) for the workers feeding the engine of industrialisation and urban growth.



FIGURE 2 Am Hof 11 with carriages in front. This site was originally a tavern called “Zur goldenen Kugel” (The Golden Ball), which was run by Michael Motz, who purchased it in 1683. The Neo-Baroque replacement building from 1883 preserved the golden ball above its gate and retained the name “Zur goldenen Kugel” (City of Vienna, 2024d). (Photo: Michael Frankenstein & Comp., ca. 1885, Wien Museum Online Collection 78079/534/3, CC0)



FIGURE 3 The corner at Johnstraße 21–23 and Goldschlagstraße 106–108 in 1900–1905. (Photo: Sperlings Postkartenverlag M. M. S, Wien Museum Online Collection 234706, CC0)

4.2 City neglect

The interruption of the First World War, the defeat and the fall of the Austro-Hungarian monarchy in 1918 put a drastic halt to this impressive capitalistic machinery and Vienna was plagued by misery, hunger, and a major housing shortage. Shantytowns proliferated in the suburban districts. After winning the municipal election in 1919, the Social Democratic Workers' Party introduced a rack of policies that created what is commonly referred to as "Red Vienna". These aimed at relieving the terrible socio-economic conditions of the population. Among these policies, a tenant-protection law was introduced by means of the Rent Act (*Mietengesetz*) of 1922. The housing and settlement funds (*Bundes-, Wohn- und Siedlungsfonds* 1921) introduced a new municipal housing programme (Suttner, 2017, p. 23). Interestingly, the layout of the new dwellings was based on urban forms typical of the *Gründerzeit*. However, instead of offering the historicist façades and generous inner spaces typical of the upper middle class *Gründerzeit* buildings, planners and architects looked for efficiency in the use of space and reduced unit and room sizes to provide dwellings for the working-class (Suttner, 2017). While large efforts were undertaken to construct municipal housing (1919–1934), little attention or capital was devoted to the maintenance and refurbishment of the *Gründerzeit* housing stock, especially in working-class neighbourhoods (Knauer, 2022, p. 44).

During the Austrofascist (1934–1938) and National Socialist periods (1938–1945), the *Gründerzeit* housing stock experienced another episode of neglect and transformation. While eliminating many social policies of their predecessors, the fascist and National Socialist regimes also focused on modern infrastructure, including road and rail networks, and the construction of new buildings. To provide space for these new developments, they undertook strategic demolition of historical buildings (Suttner, 2017). Minimal maintenance was conducted on existing historic residential buildings under the *Hausreparaturfonds* (House Repair Fund). However, transformation followed a modernist approach, favouring the division of large dwellings into smaller ones (Suttner, 2017) and facilitating façade restoration, leading in many cases to the removal of decorative elements (deornamentation or *Entstuckung*) (Knauer, 2022). The transformation that occurred during this period can be seen, for instance, on decorative elements on the roof, façade, and around the windows of the *Gründerzeit* building Am Hof 11 (Figure 2 & 4).

After World War II, Vienna's Social Democratic (*SPÖ*) government worked to re-build the city in line with the ideas of urban and architectural modernism and modernisation. Some historical areas were demolished in the name of modernity. Meanwhile, transport, mobility, and other major infrastructures projects were completed, such as the AKH (General hospital) in 1964 and the Vienna International Centre in 1972 (Pirhofer & Stimmer, 2007). While the housing built by the city authorities of Red Vienna offered comfortable living conditions, such as access to water, heating, and electricity in the units, much of the *Gründerzeit* working class housing that was in private hands lacked these conditions. According to the city of Vienna (Hauskunft, 2024), one third of the dwellings in the city were in the lowest categories C

and D in terms of the modern facilities they provided.⁷ Yet Knauer has shown that the period of post-war reconstruction nonetheless gave rise at the same time to discussion and reflection in the Federal Monument Authority on the preservation of an Old Vienna beyond individual buildings: “ensembles and entire city districts deemed worthy of protection were recorded in lists of the Federal Monuments Authority to prevent excessive changes or even the destruction of the city’s characteristic townscape as a whole” (2023, p. 202). She adds that the buildings and urban landscape of the second half of the 19th century were already understood as a legacy worth preserving by the Federal Monuments Authority (Knauer, 2023, p. 202).



FIGURE 4 City centre, Am Hof, Färbergasse, 1940. (Photo: Bruno Reiffenstein, WStLA, Photograph from the department of urban planning, FB2: 4500/1400, MA 8 – City of Vienna and Provincial Archives, CC BY-NC-ND)

The Federal Urban Renewal Act (*Stadterneuerungsgesetz*) of 1974 which established the Local Area Management Offices (*Gebietsbetreuung*) put a halt to demolition by shifting the focus in favour of less aggressive interventions on the historic fabric, promoting measures that retain the existing substance: This was the birth of Vienna’s soft urban renewal policies (Suitner, 2020). These policies were closely accompanied by the 1972 amendment of Vienna’s building code, which identified and defined groups of buildings characteristic of the cityscape as *Schutzzonen* (protection zones) to preserve them from demolition and alteration. The main focus of these zones, which remain in place today, is on the external appearance of the buildings as a homogenous and balanced ensemble. According to the City, protection zones are designated primarily based on characteristic architectural, spatial, and structural qualities of buildings, as well as other

specific elements of design and character, determined on the basis of criteria such as worthiness of preservation, originality, authenticity, effect on the townscape, and mentions of individual buildings in works of literature (City of Vienna, 2024b). Demolition licences would only be granted for buildings in protection zones if there is no public interest in their preservation from an urban design perspective or if the poor condition of the building justifies demolition on economic grounds. These protection zones have since been extended and reworked. However, most of the structures and areas built

⁷ A category C apartment had at least one internal water point and an inside toilet, while category D dwellings had neither a toilet nor a water point inside the apartment.



FIGURE 5 Goldschlagstraße with Reithofferplatz, with house number 7 on the right, prior to 1905. (Wien Museum Online Sammlung 58891/1234, CC0)



FIGURE 6 Goldschlagstraße and Reithofferplatz, looking towards Neubaugürtel. (Photo: V. Lélek, TransHerit, CC BY-SA)

during the *Gründerzeit* that have been protected lie within the *Gürtel*. Consequently, these actions have mainly served to preserve the prestigious *Gründerzeit* of the former bourgeoisie and aristocracy, while giving less recognition to its more ordinary form, which is no less representative of this key historical transformation of the city. These protection zones also facilitated the demolition of historic housing in areas located outside the *Gürtel*.⁸ This is true, for example, of the building located at *Reithofferplatz 7*, a section of which made way for a new building in the late 1990s (Figure 5 & 6).

Following the soft urban renewal approach of 1974, the second comprehensive urban development plan, *STEP 1984*, prioritised urban renewal over urban expansion. The first comprehensive development plan for the city of Vienna had been completed in 1976 (Pirhofer & Stimmer, 2007). The emphasis on soft urban renewal policies was a consequence of the growing criticism of the mono-functional suburban housing estates. The negative consequences of these included the flight of economic activity away from the city centre and structural deficiencies in the most densely built-up part of Vienna (Pirhofer & Stimmer, 2007). Prioritised areas of the *Gründerzeit* city that contained a high proportion of the substandard dwellings were identified for rehabilitation. The twin goals were to improve the material living conditions of the population and to raise the attractiveness of Vienna for investment and as a tourism destination (Pirhofer & Stimmer, 2007, p. 73). The preservation of the large-scale historical urban area became an important element to be used in disseminating a positive image of the city. Indeed, Vienna's location in the 1970s and 1980s, squashed up against the Iron Curtain, was not an attractive or a comfortable one.

During this period, the real estate market was highly regulated by the public authorities, who used it as a tool to mitigate social and economic segregation. This strategy led to the skimming of speculative profits from land and property (Lichtenberger et. al, 1990) and a highly segmented housing market: By 1990, social rental housing covered over 40.9 percent of the housing sector, while a tightly regulated private rental market made up 32.7 percent (historic and new built housing stock) (Kadi, 2015, p. 2). This also led to low levels of investment in maintenance of the historic housing stock by landlords, who saw no incentives to do so and could not foresee any return on their investment in the form of rents. In 1985, the *Wiener Wohnbauförderungs- und Wohnhaussanierungsgesetz* (Act for the Promotion of Housing Construction and Renovation) was adopted and the *Wiener Bodenbereitstellungs- und Stadterneuerungsfonds* (Vienna Land Supply and Urban Renewal Fund) was created. The former changed the legal framework to make it easier for private owners to refurbish entire residential buildings, while the latter helped coordinate the procurement of land and promote refurbishment (Pirhofer & Stimmer, 2007, p. 88).

8 See for instance the interesting website *wienschaufen* by Georg Scherer (<https://www.wienschaufen.at/10-favoriten/>) which has been listing urban transformations in Vienna from 2018 until now for each district.

4.3 Re-commodification

With the fall of the Iron Curtain in 1989 and the accession of Austria to the European Union in 1995, the geopolitical position of Vienna shifted. It became a gateway between West and East, attracting capital and people. This new growth period also affected the *Gründerzeit* housing stock. Since the 1980s, urban (re)development had been characterised by the implementation of soft urban renewal policies favouring a bottom-up approach and minimising displacement and gentrification (Franz, 2014). In contrast to these publicly funded projects, new urban development projects from the 1990s onwards have been planned through public-private partnerships (Hatz, 2008; Guinand, 2020). City authorities have been eager to take advantage of Vienna's new geopolitical location to reposition the city on the international map. As well as pursuing large development projects such as Donau City, the authorities also played the cultural card by applying to the Organisation of the United Nations for Education, Science and Culture (UNESCO) to inscribe the city centre as a World Heritage site,⁹ with the status being granted in 2001. Moreover, in an attempt to homogenise the cityscape, numerous buildings and façades were restored according to the historicist architectural style typical of the Austro-Hungarian monarchy, which had declined in the 1930s and after the Second World War (Figure 7).

The geopolitical shift and the new orientation in public policies pursued by the city authorities favouring private capital investment have raised the attractiveness of the Austrian capital. After years of public efforts to refurbish the historic housing stock accompanied by a significant slowdown in new public social and subsidised housing constructions, the availability of affordable dwellings has been significantly reduced. This has put pressure on the private rental market, a phenomenon unseen since the post-WWI period or even the Industrial Revolution. These socio-economic developments have impacted the *Gründerzeit* housing stock in two ways: The low-quality units usually located along or outside the *Gürtel* have become the home of many lower income migrants who cannot access the social housing market (Franz & Gruber, 2018), while the higher-priced segment of the *Gründerzeit* buildings have started to attract the interest of private developers (Musil et al., 2021) as real estate prices have significantly increased, the average price index moving from 83.83 in 1999 to 271 in 2022 (2015 being the base year with an index of 100) (OENB, 2023).

Private investment in the *Gründerzeit* housing has materialised in two main forms: (1) The demolition of historic buildings, leaving room for the construction of new residential buildings that can offer more floor space thanks to lower ceiling heights and higher building heights; and (2) the conversion of historic buildings from undivided properties into apartment blocks, often coinciding with the transformation of the attic into high priced penthouses. As one author of this chapter has noted elsewhere, “both forms of transformation imply the departure of former tenants” (Musil et al. 2021, p. 980) (Figure 3 & 8). The results of a study conducted from 2007 to 2019 (2021, p. 990) revealed that the transformation of Vienna's *Gründerzeit* housing stock affected



FIGURE 7 Vienna – the house at 11 Am Hof. (Photo: Andrzej Otrębski, 2018, CC BY-SA)



FIGURE 8 The corner at Johnstraße 21–23, and Goldschlagstraße 106–108. (Photo: V. Lélek, TransHerit, CC BY-SA)

2,117 buildings and about 30,300 apartments. As observed (2021, p. 990), this may appear low in relation to the total size of the market, but due to the concentration of the affected housing stock (Figure 1), the implications for the affected neighbourhoods are not without socio-economic consequences. Moreover, these transformations have significantly altered the Viennese landscape, with some of these buildings even being located in protected zones. As the City of Vienna website notes (2024c), essential basic information on these protection zones – comprehensive ownership data, building data (architect, age, building type, number of storeys, photos), descriptions, and assessments – was not even maintained before the mid-1990s. This has since been remedied and the protection zone model is to better assess the material structure of these historic buildings as valuable for the cityscape. Besides the designation of protection zones, a *Gründerzeit* Masterplan (City of Vienna MA21, 2018) has now also been established. This document assesses the potential for transformation of these buildings. However, while this plan describes their different values (p. 31–32) it says little about their management and protection, or the importance of the intangible dimension of these buildings. Finally, an amendment of the Viennese building code was implemented in July 2018. This makes it harder to demolish any building erected before 1945, as a permit is now required for buildings located in a protection zone. For all other buildings a confirmation by the municipal authorities is necessary, that there is no public interest in preserving the building in consideration of its impact on the local cityscape. Moreover, since the building code amendment of 2023, owners are obliged to keep a building register and record the condition of the property. However, besides these plans and regulations, little has been done to preserve this historic housing stock in either its tangible dimension, and even less to maintain its intangible value. As a result, Viennese civil society is still engaged in a contested debate on the importance of *Gründerzeit* housing as part of the Viennese identity (Wojciech, 2023; Zoidl & Redl, 2021).

5 DISCUSSION – CONCLUSION

This chapter has discussed the pertinence of looking at a specific topic, Vienna's historic *Gründerzeit* housing stock, over the long term. This *longue durée* analysis has enabled us to distinguish three different and decisive periods of commodification, de-commodification, and re-commodification that have formed and structured the *Gründerzeit* city. Each of these periods can be characterised in terms of specific socio-economic events, public policies and planning actions. And each of them has – through defined rationales (or logics), motives, and aesthetic and economic values – influenced actions relating to the transformation and preservation of these buildings.

Two points can be underlined from this long-term analysis. First, as mentioned in the introduction, reading how the urban landscape has been shaped offers a glimpse into the political economy of a city. In the case of the Viennese *Gründerzeit*, what we see is that the processes of commodification, de- and re-commodification have established a hierarchy among *Gründerzeit*

buildings, where buildings considered of greater value (according to aesthetics, architectural characteristics, etc.) are being preserved or refurbished, while others are considered less valuable even though they may have significant cultural and social value. As Olwig (2001, p. 349) argues, it is only those people who can afford to, desire to, and who possess the right cultural capital, who can adopt “the antiquarian approach”. This gulf between power and powerlessness, centre and periphery, and sometimes wealth and poverty, seems, in the case of the *Gründerzeit* housing stock, to be increased by the process of commodification (and those who pursue it), which in turn influences preservation and heritage practices and processes. This observation thus raises issues around preservation processes and official criteria that exclude ordinary elements of the urban landscape, a phenomenon that becomes more prevalent in times of capital accumulation. This also calls into question the “enriched” building that suddenly possesses heritage value, is preserved and refurbished: How could this heritage process work without producing notions of difference? (Smith, 2015). Second, this notion of differences sheds light on “ordinary” buildings, such as the working class *Gründerzeit* historic housing, that are neither recognised by private actors and public authorities, nor listed on official heritage registers. These buildings are, however, considered significant or culturally meaningful by individuals, communities, and collectives in terms of how they constitute themselves and operate in the present (Harrison, 2010). They are also part of the social history of the city. This stresses the importance of the intangible dimension associated with these historic buildings. Indeed, ordinary *Gründerzeit* dwellings tell a story. They offer a specific socio-cultural reading of a site, which in turn affects the understanding and the ordinary life that contributes to the neighbourhood’s identity as well as people’s identification with the place (Stephens & Tiwari, 2014; Papadam, 2017). Yet neither commodification processes and practices nor preservation policies take into account such intangible dimensions, nor do they consider the relations and connections that contribute to the sense of place (Tuan, 1977; Anzani, 2020). As a consequence, the fate, development, and preservation of the *Gründerzeit* historic housing stock is still very much influenced by the commodification regime – and is likely to remain so in the absence of effective preservation regulations.

REFERENCES

- Aalbers, M. B. (2019). Financial geography III: The financialization of the city. *Progress in Human Geography*, 44(3), 595–607. <https://doi.org/10.1177/0309132519853>
- Anzani, A. (2020). Identity. Place identity between preservation and innovation. In A. Anzani (Ed.), *Mind and place: A Multidisciplinary approach to the design of contemporary city* (pp. 267–274). Springer.
- Ashworth, G. J. (2014). Heritage and economic development: Selling the unsellable. In *Heritage & Society*, 7(1), 3–17. <https://doi.org/10.1179/2159032X14Z.00000000015>
- Bernt, M. (2022). *The commodification gap: Gentrification and public policy in London, Berlin and St. Petersburg*. Wiley.
- Berthold, E. (2016). Vieux-Québec, site du patrimoine mondial: Un titre porteur. *Continuité*, (147), 9–10. <https://id.erudit.org/iderudit/79988ac>
- Bobek, H., & Lichtenberger, E. (1966). *Wien: Bauliche Gestalt und Entwicklung seit der Mitte des 19. Jahrhunderts*. Böhlau.
- Boltanski, L., & Esquerre, A. (2014). La « collection », une forme neuve du capitalisme la mise en valeur économique du passé et ses effets, *Les Temps Modernes*, 3(679), 5–72. <https://doi.org/10.3917/ltn.679.0005>
- Boltanski, L., & Esquerre A. (2017). *Enrichissement: Une critique de la marchandise*. Essais Gallimard.
- Braudel, F. (1949). *La Méditerranée et le Monde méditerranéen à l'époque de Philippe II*. Armand Colin.
- Braudel, F. (1958). Histoire et Sciences sociales: La longue durée. *Annales. Economies, sociétés, civilisations*, 13(4), 725–753. <https://doi.org/10.3406/ahess.1958.2781>
- Chiffolleau, S., Dannaoui, E., Madoeuf, A., & Slim, S. (Eds.). (2017). *Explorer le temps au Liban et au Proche-Orient*. Institut français du Proche-Orient de Beyrouth & U. de Balamand.
- City of Vienna. (2024a). *Auf dem Weg zurück zur Zwei Millionen Stadt: Die Entwicklung der Wiener Bevölkerung*. Retrieved June 20, 2024, from <https://wien1x1.at/bev-entwicklung-1/>
- City of Vienna. (2024b). *Wien Geschichte Wiki: Schutzzonen*. Retrieved June 20, 2024, from <https://www.geschichtewiki.wien.gv.at/Schutzzonen>
- City of Vienna. (2024c). *Schutzzonen Wien*. Retrieved June 20, 2024, from <https://www.wien.gv.at/stadtentwicklung/grundlagen/schutzzonen/>
- City of Vienna. (2024d). *Wien Geschichte Wiki: Ledererhof*. Retrieved July 24, 2024, from <https://www.geschichtewiki.wien.gv.at/Ledererhof>
- City of Vienna MA21 (2018). *Masterplan Gründerzeit. Handlungsempfehlungen zur qualitätsorientierten Weiterentwicklung der gründerzeitlichen Bestandsstadt*. Magistrat der Stadt Wien, MA21 – Stadtteilplanung und Flächennutzung.
- El-Kayed, N., Bernt, M., Hamann, U., & Pilz, M. (2020). Peripheral estates as arrival spaces? Conceptualising research on arrival functions of new immigrant destinations. *Urban planning*, 5(3), 103–114. <https://doi.org/10.17645/up.v5i3.2932>
- Fernandez, R., & Aalbers, M. B. (2016). Financialization and housing: Between globalization and varieties of capitalism: *Competition & change*, 20(2), 71–88. <https://doi.org/10.1177/1024529415623>
- Franz, Y., & Gruber, E. (2018). Wohnen „für alle“ in Zeiten der Wohnungsmarktkrise? Der soziale Wohnungsbau in Wien zwischen Anspruch und Wirklichkeit. *Angewandte Geographie*, (42), 98–104. <https://doi.org/10.1007/s00548-018-0533-1>

- Franz, Y. (2014). *Gentrification in neighbourhood development*. V&R Uni Press.
- Gravari-Barbas, M., & Jacquot, S. (Eds.). (2024). *Patrimonialisations: La fabrique touristique globale du patrimoine*. Presses universitaires de Rennes.
- Gravari-Barbas, M. (2017). Super-gentrification and hyper-tourismification in Le Marais, Paris. In M. Gravari-Barbas & S. Guinand (Eds.), *Tourism and gentrification in contemporary metropolises: International perspectives* (pp. 299–328). Routledge.
- Gravari-Barbas, M. (Ed.). (2005). *Habiter le patrimoine*. Presses universitaires de Rennes. <https://doi.org/10.4000/books.pur.2208>
- Guinand, S., & Rogerson, R. (2023). Culture and heritage. In B. Giddings & R. Rogerson (Eds.), *The future of the city centre: Global perspectives* (pp. 215–230). Routledge. <https://doi.org/10.4324/9781003141198>
- Guinand, S. (2022). *Festival marketplaces, entre postérités et discontinuités: Après la régénération*. Editions Infolio.
- Guinand, S. (2020). Star architecture and the urban landscape: The case of Vienna. In N. Alaily-Mattar, D. Ponzini, & A. Thierstein (Eds.), *About star architecture: Reflections on european cities* (pp. 291–308). Springer International.
- Guinand, S. (2015). *Régénérer la ville: Patrimoine et politiques d'image à Porto et Marseille*. Presses Universitaires de Rennes.
- Hagen, A. (2015). *Wiener Bauordnungen und Planungsinstrumente im 19. Jahrhundert*. Zentrum für Umweltgeschichte.
- Harrison, R. (2010). Heritage as social action. In S. West (Ed.), *Understanding heritage in practice* (pp. 240–276). Manchester University Press in association with the Open University, Manchester and Milton Keynes.
- Hartog, F. (2003). *Régimes d'historicité: Présentisme et expériences du temps*. Editions du Seuil.
- Harvey, D. (1979). Monument and Myth. *Annals of the Association of American Geographers*, 69(3), 362–381. <https://doi.org/10.1111/j.1467-8306.1979.tb01262.x>
- Hatz, G., & Lippl, C. (2009). Stadterneuerung: Neues Wohnen in alten Quartieren. In H. Fassmann, G. Hatz, & W. Matznetter (Eds.), *Wien–Städtebauliche Strukturen und gesellschaftliche Entwicklungen* (pp. 147–180). Böhlau Verlag. <https://doi.org/10.7767/9783205119326-005>
- Hauskunt, City of Vienna. (2024, April 25). *Presentation*. Four cities excursion.
- Kadi, J. (2015). Recommodifying housing in formerly “red” Vienna? *Housing, theory and society*, 32(3), 247–265. <https://doi.org/10.1080/14036096.2015.1024885>
- Kyriazi, E. (2019). Façadism, building renovation and the boundaries of authenticity. *Aesthetic Investigations*, 2(2), 184–95. <https://doi.org/10.58519/aesthinv.2i2.11967>
- Knauer, B. (2022). *Gesunde Stadt: Die Assanierung der Stadt Wien (1934–1938)*. Birkhäuser Verlag.
- Kohlbacher, J., & Reeger, U. (2006). Die Dynamik ethnischer Wohnviertel in Wien. Eine sozialräumliche Longitudinalanalyse 1981 und 2005. *ISR-Forschungsberichte*, (33). Institut für Stadt- und Regionalforschung / ÖAW.
- Lai L., & Lorne, F. (2019). Sustainable urban renewal and built heritage conservation in a global real estate revolution. *Sustainability*, 11, 850. <https://doi.org/10.3390/su11030850>

- Lash, S., & Urry, J. (1994). *Economies of signs and space*. Sage.
- Licciardi, G., & Amirtahmasebi, R. (2012). *The Economics of uniqueness: Investing in historic city cores and cultural heritage assets for sustainable development*. The World Bank.
- Lichtenberger, E. (1990). *Stadtverfall und Stadterneuerung: Beiträge zur Stadt- und Regionalforschung (Bd. 10)*. Verlag der Österreichischen Akademie der Wissenschaften.
- Lipovetsky, G., & Serroy, J. (2013). *L'esthétisation du monde: Vivre à l'âge du capitalisme artiste*. Gallimard.
- Loulanski T., (2006). Cultural Heritage in Socio-Economic Development: Local and global perspectives. *Environments*, 34(2), 51–69. <https://www.proquest.com/scholarly-journals/cultural-heritage-socio-economic-development/docview/207670841/se-2>
- Mieli-Voutsinas, J. (2014). Contrapuntal memories? Remembering the holocaust in a post-9/11 world. *Human Geography*, 7(1), 49–68. <https://doi.org/10.1177/1942778614007001>
- Musil, R., Brand, F., & Punz, S. (2022). The commodification of a rent-regulated housing market: Actors and strategies in Viennese neighbourhoods. *Housing Studies*, 39(8), 1930–1950. <https://doi.org/10.1080/02673037.2022.2149707>
- Musil, R., Brand, F., Huemer, H., & Wonaschütz, M. (2021). The Zinshaus market and gentrification dynamics: The transformation of the historic housing stock in Vienna, 2007–2019. *Urban Studies*, 59(5), 974–994. <https://doi.org/10.1177/00420980211051906>
- OENB. (2023). *Real Estate Database*. Vienna: Oesterreichische Nationalbank. Retrieved June 20, 2024, from https://www.oenb.at/Geldpolitik/schwerpunkt_immobilienmarktanalyse.html
- Olwig, K. R. (2001). 'Time out of mind'–'mind out of time': Custom versus tradition in environmental heritage research and interpretation. *International Journal of Heritage Studies*, 7(4), 339–354. <https://doi.org/10.1080/13581650120105543>
- Olwig, K., & Mitchell, D. (Eds.). (2009). *Justice, power and the political landscape*. Routledge.
- Pirhofer, G., & Stimmer, K. (2007). *Pläne für Wien: Theorie und Praxis der Wiener Stadtplanung von 1945 bis 2005*. Stadtentwicklung Wien.
- Tuan, Y-F. (1977). *Space and place: The perspective of experience*. University of Minnesota Press.
- Papadam, M. (2017). *Heritage of the ordinary: an alternative view. Strategies for using cultural heritage as a driver for sustainable urban [re]development in Piraeus*. P5 Report. Delft University of Technology.
- Pine, B. J., & Gilmore, J. H. (1999). *The experience economy: Work is theatre & every business a stage*. Harvard Business Publishing.
- Richards, J. (Ed.) (2003). *Facadism*. Routledge.
- Schmitt, T. M. (2022). The commodification of world heritage: A Marxist introduction. In M.-T. Albert, R. Bernecker, C. Cave, A. C. Prodan & M. Ripp (Eds.), *50 years world heritage convention: Shared responsibility – conflict & reconciliation* (pp. 377–389). Springer International Publishing. https://doi.org/10.1007/978-3-031-05660-4_29

- Stephens, J., & Tiwari, R. (2014). Symbolic estates: community identity and empowerment through heritage. *International Journal of Heritage Studies*, 21(1), 99–114. <https://doi.org/10.1080/13527258.2014.914964>
- Suitner, J. (2020). Vienna's planning history: Periodizing stable phases of regulating urban development, 1820–2020. *Planning Perspectives*, 36(5), 881–902. <https://doi.org/10.1080/02665433.2020.1862700>
- Suttner, A. (2017). *Das schwarze Wien: Bautätigkeit im Ständestaat 1934–1938*. Böhlau Verlag.
- Wojciech, C. (2023, January 21). Abbrüche von Gründerzeithäusern: „Wiener Identität droht zu verschwinden“. *Der Standard*. Retrieved June 20, 2024, from <https://www.derstandard.at/story/2000142764373/abbrueche-von-gruenderzeithaeusern-wiener-identitaet-droht-zu-verschwinden>
- Zoidl, F., & Redl, B. (2021, March 26). Zurück in die Gründerzeit? Warum Häuser heute ganz anders ausschauen. *Der Standard*. Retrieved August 22, 2024, from <https://www.derstandard.at/story/2000125365475/zurueck-in-die-gruenderzeit-warum-haeuser-heute-ganz-anders-ausschauen>
- Zukin, S., & Smith Maguire, J. (2004). Consumers and consumption. *Annual Review of Sociology*, 30, 173–197. <https://doi.org/10.1146/annurev.soc.30.012703.110553>
- Zukin, S. (1995). *The culture of cities*. Blackwell.
- Zukin S. (1982). *Loft living: Culture and capital in urban*. Johns Hopkins University Press.

ACKNOWLEDGEMENT

This work is part of the TransHerit project financed by the Austrian Funding Agency, FWF, Grant P37102-G, Grant-DOI 10.55776/P37102

BIOGRAPHY

Sandra Guinand is an urban planner and geographer. She holds a doctorate in geosciences and the environment from the University of Lausanne and in geography from the University of Paris 1-Sorbonne. She is currently researcher at the Institute for Urban and Regional Research, Austrian Academy of Sciences and associate researcher at EIREST Paris 1-Sorbonne University. She was a Swiss National Science Foundation visiting scholar (2014–2016) at the Center for place, culture and politics at the Graduate Center, City University of New York and Johns Hopkins University as well as at the Department of geography and regional research, University of Vienna (2017–2019).

Her research interests are urban regeneration projects and socio-economical transformations of urban landscapes with a specific focus on heritage processes, public-private partnerships, tourism and visual methods. Her last book (2022) *Festival marketplaces, entre postérités et discontinuités. Après la regeneration* at Infolio Editions deals with the legacy of festival marketplace projects as precursors to urban regeneration programs.

Viktória Éva Lélek holds a degree in architecture from TU Wien. During her master studies, Lélek specialised in urban planning and urban history research. In her master's thesis "Urban Parterre Budapest" Lélek conducted a comparative analysis of the historical housing stock of Vienna and Budapest. The results were presented at the AISU Bologna, as well as at EAUH Antwerp conferences. She has earned her degree in 2019, passing with distinction. Lélek worked several years in the architecture and planning industry on designing new residential buildings, as well as on housing renovation projects. In 2024, Lélek started working as a PhD student at the Institute for Urban and Regional Research (ISR).

Robert Musil is geographer in the field of urban studies and economic geography. He studied geography and history at the University of Vienna and finished his PhD at the University Innsbruck in 2005. He holds a habilitation in human geography, approved in 2015 at the University of Vienna. Since 2001, he has been a researcher at the Institute for Urban and Regional Research (ISR); between 2007 and 2009 he was post-doc assistant at the University of Salzburg, and between 2014 and 2016 he was visiting professor for economic geography at the University of Vienna. He has led the research group "Innovation and Urban Economy" since 2016 and has been acting director of the Institute for Urban and Regional Research, Austrian Academy of Sciences, since 2018.

His research interests lie at the juncture of economic and urban geography, including the areas of housing-market research, spatial innovation, and comparative urban research. His current methodology includes small-scale analyses at the level of individual buildings and building complexes.