

# Taking contextual differences into account in green gentrification research. The case of Vienna

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## 1. Introduction

The relation between urban environmental quality and residential choices and opportunities is a longstanding issue and has always affected the distribution of different social groups in the urban context. Throughout history, luxuriant gardens and parks have always characterised affluent neighbourhoods, while polluted and unhealthy areas have usually been a space of spatial segregation for the most deprived social groups. In response, planners and activists have channelled their concerns about the importance of green space, clean air and water, and salubrity into *city beautiful* and *garden city* (Howard 1902) movements. During the 20th century, in many cities worldwide such efforts resulted in massive park creation with the goal of both improving the quality of life of the working class and enhancing conditions for social cohesion and better coexistence of different social groups in the city (Fanstein, 2010). More recently, under the Sustainable Development Agenda, green infrastructures, ecosystem services and nature-based solutions have become prominent planning discourses and popular policy tools for cities around the world. They are often framed as win-win approaches, able to combine environmental protection, economic growth and wellbeing. However, political ecologists have put forward extensive critiques demonstrating the possible negative implications of urban greening for many vulnerable populations, in terms of the unequal distribution of social, economic and environmental resources among citizens as well as new spatial inequalities (Haase et Al. 2017).

In Canada and the USA, particular attention has been paid to emerging processes of *ecological gentrification* fostered by green urban renewal in several global cities (Checker 2011; Lewis & Gould 2016). According to these scholars, initiatives to improve the quality of the urban environment in deprived neighbourhoods have, in most cases, contributed to environmental sustainability and economic revitalisation. However, at the same time they have also fostered the displacement and self-segregation of the most affluent groups—a sort

of ‘green-space paradox’ (Wolch et al. 2014)—meaning that new greening developments only become accessible to more privileged social groups and elites. In order to better describe this paradox, building on the literature on gentrification and especially Smith’s concept of the rent gap (Smith 1987) some scholars have recently extended the concept of an environmental rent gap (Bryson 2013) to describe how municipalities, investors and privileged residents find new potential ‘green rents’ from greening projects, couching them in discourses of win-win benefits and public good for all (Anguelovski et al. 2018).

However, the social consequences of greening in European cities have been less investigated. (Author 2012; Anderberg and Clark 2013; Isenhour et al. 2015; Anguelovski et al. 2017), essentially confirming the ambiguous role that sustainability policies have played in the reconfiguration of social and spatial inequality in large European cities.

The main argumentation of this paper is that focusing on the European case may lead to a new understanding of the social change associated with the transition towards urban sustainability in cities. European cities display certain characteristics, and analysing processes such as (green) gentrification requires a deep understanding of such ‘context-related variabilities’ (Maloutas 2012). Indeed, European cities, in comparison with other cities worldwide, have historically been characterised by a strong association between social cohesion, a relatively high quality of life and good economic performance. The strong influence of public institutions on urban development in Europe as a whole, through (often national) welfare policies and urban planning, has led to local contexts characterised by lower levels of social inequality and spatial segregation compared with its counterparts in the rest of the world (Le Galès and Therborn 2010). If it is true that today’s European cities are under strong pressure, in the wake of long-term transformations associated with the post-industrial transition, demographic changes, welfare retrenchment and, more recently, the economic and financial crisis that is affecting most of their countries (Authors 2018), on the other side we still have to consider the relevance of certain forms of regulation in mediating social outcomes of change. In particular, in this paper we argue that differing approaches to the governance of housing sectors have given rise to a variety of ‘urban sustainability patterns’ in Europe when it comes to social-spatial outcomes of greening. Many scholars have already highlighted the risk associated with urban greening in many European cities characterised by weak public interventions in the field of housing. In this paper, we focus instead on the case study of Vienna, a city that more than others has tried to deal with both ecological innovation and housing affordability (Matznetter 2002). So far, the huge processes of replacement and displacement of the population affecting a large part of the growing green capitals of Europe

have been limited in Vienna. However, gradual changes in the affordable housing market can be said to characterise the most recent developments in this city (Kadi 2015), raising new challenges for reconciling ecological innovation and accessibility.

Based on the outcomes of a research project conducted between April 2015–2018<sup>1</sup>, in the next sections we first set out some contextual features of the Vienna case study; secondly, we explain how housing policies have been moderating possible negative outcomes of greening strategies; and finally, we discuss new challenges and future research needs.

## 2. Vienna and its ‘context specificity’

At first glance, the experience of Vienna might appear very similar to that of many other European green cities (Matznetter 2002). Today, it is a fast-growing city, strategically located in the heart of Europe; after the 1990s, the city made its new centrality an asset, becoming a sort of ‘gateway’ between eastern and western Europe, attracting people and investment. According to Statistics Austria, as of January 1st 2018 Vienna was home to 181 different nationalities. Austrians constituted 70.4% of the total population, followed by Serbians at 4.1%, while at 2.4% each the Turkish and Germans ranked equal third. Being one of the fastest-growing cities in Europe, Vienna is expected to reach over two million inhabitants by 2025. It is not only its dynamic economy and cultural heritage that attracts visitors and new inhabitants, but also the fact that Vienna is a safe city, ranked first in the world for quality of life (Mercer Human Resource Consulting 2018). In addition, Vienna is often ranked very highly in benchmarking studies on sustainable and/or smart cities, and is commonly particularly praised for its excellent water quality, use of renewable energies and the quality and availability of urban parks (about 50 % of Vienna's area is covered in green space) (City of Vienna 2010). As early as the 1970s, the city began to invest in environmental policies, not only anticipating European directives on urban planning and housing design but also paying close attention to the lifestyles of the city’s inhabitants (Paal 2003).

Vienna is also known worldwide for its housing policies. A very large part of its housing stock is subsidised by the public (social or municipal housing) and a relevant part of the private rent market is subject to rent control: 24% of the housing stock is owned by the municipality and 18% by limited-profit housing associations, while 26% of private rental stock (built before 1945) is under rent control (Kadi 2018).

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<sup>1</sup> Research project.... The investigation was based on a mixed method (qualitative and quantitative): institutional analysis (qualitative), analysis of socio-economic data (quantitative), ethnographic research (qualitative).

Tab 1. Dwelling Stock Ownership in Vienna (1981–2011)

	Private persons	Corporate Bodies	Other Public Bodies	Social Housing
1981	61.4	4.3	0.8	33.5
1991	55.0	5.5	2.0	37.5
2001	52.2	7.8	1.8	38.2
2011	52.0	8.1	1.7	38.2

Source: Statistics Austria

Social housing in Vienna has its historical roots in the 1920s, when the Social-Democratic party implemented progressive taxation and rent regulations to restrict private housing. This later culminated in the construction of council (social) housing units (Hautmann and Hautmann 1980). In the 1930s, non-profit housing associations were created to consolidate existing housing welfare *policies*. Currently, «the housing market in Vienna consists of the privately provided sector (i.e. private rental housing and owner-occupied housing, some of which are publicly subsidised) and the public housing sector (i.e. co-operative housing, protected rental housing and already constructed council housing)» (Kohlbacher and Reeger 2010, p.69).

This historical intervention of public institutions in the housing sector is entangled with a more recent orientation towards urban greening strategies.

As in other European capitals, in Vienna we can currently observe specific plans concerning various urban planning domains:

1. *Waterfront redevelopment* This includes several plans for the requalification of the Danube canal and Danube river. This is in line with what cities around the globe are doing, trying to redefine their relationship with the water and develop now-defunct harbour sites. Most of these brownfield sites are being transformed into new, high-quality, urban districts. In Europe, this process is particularly evident in cities such as Copenhagen and Oslo (Grønning 2018), which are strongly affected by the self-segregation of affluent groups in very luxurious, brand-new neighbourhoods characterised by direct access to water. Alongside creative hubs and cultural quarters, the waterfront is a site of intensified planning attention. Waterfronts follow a standard formula of fast policy transfer that has gone global (Keil 2007), which includes not only expensive apartments but also creative, cultural and technological industries as

well as commodified leisure and entertainment spaces. In addition, megastructures and signature buildings epitomise the performativity of neoliberal competitiveness on the waterfront (Doucet et al. 2011). According to Oakley (2011, p. 234), ‘waterfront renewal is being driven by a neoliberal competitive city paradigm’ fostering an *appropriation of the economic values of an environmental resource by one class from another*.

2. *New eco-districts*. These are located in central and peripheral sectors of the city, such as the areas around the central station and former airports and train stations (as in the case of Seestadt-Aspern, Hauptbahnhof and Nordbahnhof). Eco-city projects are proliferating globally (Holden et al. 2015) as recent surveys have highlighted, to the extent that in 2011 over 170 eco-city initiatives at various stages of planning, design, construction and implementation could be identified. In China, over 100 eco-city projects on a variety of scales are now under way (Wu 2012). Indeed, China has devoted significant political will and economic resources to the development of new-build eco-city projects, reflecting its government’s goals to build a ‘harmonious society’ in which environmental sustainability and social stability are mutually reinforcing. Although ‘eco’ has been defined as the discursive construction of an environmentally friendly city *for its inhabitants*, filtering and protecting through a highly technological envelope places within which urban life can be made clean, healthy and comfortable, basically they have become areas of self-segregation for a green elite (Caprotti 2014). The use of eco-districts has in fact been criticised for their high costs and because they have not always met expectations with respect to improved environmental quality (Holden et al. 2015). Moreover, their housing and services are often affordable only to a small elite. Consequently, not only spatial segregation but also social inequality may increase. In addition, eco-districts are sometimes built *ex-novo* rather than on existing urban sites, thus extending the use of natural land (Fitzgerald and Lenhart 2016).
3. *Neighbourhood renewal*. Plans developed according to green sustainability standards include the creation of pedestrian streets and bicycle infrastructure in the central area of the city (e.g. Mariahilferstraße) or in other Districts characterised by huge social change (Yppenplatz in the 16th District). However, the literature has highlighted how districts suited to cycling are often the target of gentrification. Closer to the inner city, these districts were often built during the age of slow-moving, horse-drawn carts (Stehlin 2015); today, among ‘the creative class’, the bicycle is a potent symbol of

identity and status. ‘Cycling to work is positively associated with the share of creative-class jobs and negatively associated with working-class jobs’, Florida wrote in 2011.

Basically, these kinds of projects are usually considered tools of urban planning that foster ecological sustainability, but eventually they also give rise to negative consequences such as unaffordable housing and gentrification (Lewis and Gould 2017). In the next section we will argue that current housing policies in Vienna can nevertheless work as a mechanism for weakening possible negative social outcomes.

### 3. Green gentrification in Vienna?

Although the affordability of housing in Vienna has worsened in recent years, especially for newcomers (Kadi 2015), we believe that the general literature on green gentrification only partially meets the goal of understanding how sustainability policies affect socio-spatial inequality in this city. Housing policies in Vienna have been able to mitigate or at least slow down some of the displacement processes associated with urban greening in other capital cities worldwide.

As far as waterfront redevelopment is concerned, the areas around both the New-Old Danube (a swimmable area) and the Danube canal (a leisure activities area) are not suitable for huge housing (re)development, fostering massive processes of gentrification or the spatial segregation of affluent groups. This is because of strict regulations concerning the use of Danube Island on the one hand, and the presence of municipal and social housing on the waterfront of the Danube canal on the other. However, the situation still appears vulnerable. As far as the Danube canal is concerned, a huge public debate has characterised the definition of the Masterplan for the requalification of the waterfront; ultimately, the first version of the Masterplan would have changed the public use of its open/public spaces with potentially heavy commercialisation of some areas.

In terms of eco-district development, innovations in housing sustainability have been associated with efforts to keep rents affordable, starting from a strong commitment to the social housing sector (Reinprecht 2014). It is important to emphasise that public competition for the allocation of social housing in Vienna is based on four different elements: taking care of the design of private and public space, community aspects, affordability standards and the ecological profile of buildings. This approach was originally developed through a programme of ‘theme-oriented housing estates’, such as car-free housing areas, buildings powered by solar energy, projects aimed at the integration of newcomers and inter-cultural dialogue on

gender aspects, new forms of living and working together, and the so-called ‘orchard development’ with apartment complexes shaped like fruits and vegetables (UNECE 2006, p.109). This kind of experiment was first introduced in Vienna more than 20 years ago, with the AutoFreie social housing estate (Scavuzzo 2011). In accordance with the city’s general transport plan, which aimed to reduce private car travel by at least 25 per cent and promote new means of transport, AutoFreie was a social housing project whose residents decided to live without owning a car. Instead, all the space usually devoted to parking and streets was organised as common space (green areas, playgrounds for children and vegetable gardens) and areas for storing bicycles, providing services for bikes and car sharing. Although some recent studies have shown these kinds of interventions to have only partial success,<sup>2</sup> they represent interesting innovations for minimising car-dependency in non-inner-city districts. Current interesting and innovative projects can be seen in the new Seestadt-Aspern area. Overall, the entire district shares the ambition of becoming a car-free neighbourhood, thanks to its excellent public transport connections with the city centre. Additionally, Seestadt-Aspern is characterised by a high number of Baugruppen (Building Groups). These are associations of citizens that create common and self-determined housing for communitarian and self-use services respectively. Self-determination is very important, not only during the construction phase but also in managing the buildings on a daily basis and promoting initiatives. Quite often they are characterised by a strong orientation towards green building and sustainability through practices that ensure reciprocity (urban gardens, temporary housing for disadvantaged groups, etc.). However, questions are emerging about the creation of these new environmental goods (such as private green terrace/gardens, urban gardening, etc.) and their accessibility to the entire community.

Finally, in terms of neighbourhood regeneration, some strategies have been adopted to minimise the risk of gentrification. The most significant of these is the ‘soft’ urban renewal programme, supported by grants from the city, to improve urban quality while avoiding displacement and providing affordable housing units in renovated apartment complexes (Abele and Hölt 2007). Since 1974, Gebietsbetreuungen (area renewal offices) run by architects or housing developers commissioned by the city have been installed to co-ordinate and promote rehabilitation programmes, predominantly in private housing stock. Working with the principles of ‘soft’, i.e. social- and resident-oriented urban renewal strategy, fourteen area renewal offices are currently active in districts in need of renewal. These offices take a neutral stance among all the actors involved and are not allowed to carry out their own private

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<sup>2</sup> Interviews conducted with residents (carried out by MA students in....., supervised by the Author) showed that only 50 per cent did not actually own a car after several years of living in car-free development areas.

planning business in the area—a significant difference to rehabilitation commissioners in many other European cities. Ten years later Vienna started what has probably become the world's largest housing rehabilitation programme, now with more than 170,000 refurbished apartments. In accordance with the requests of tenants, the quality of the apartments has improved—with the installation of WCs and bathrooms, connection to central heating or district heating systems, improved thermal insulation, installation of lifts, etc.—without displacing the lowest-income sitting tenants. Such urban renewal is supported by an extraordinary subsidy system that enjoys an annual budget of about €218 million derived from national tax revenues. Most is dedicated to the renewal of old private rental buildings. However, as part of this programme, housing estates from the 1920s—and increasingly from the 1950s to 1970s—are also being completely rehabilitated and modernised. In addition, national funding is being provided to upgrade old buildings and keep rents affordable for a number of years.

Nevertheless, there are disadvantages to this system. After a 10-year rent freeze, rents can be increased in accordance with legal regulations. Furthermore, rent protection is not applicable to new tenants, whose rent contracts can be based on market prices alone. Additionally, the practice appears to differ in many cases, as not all developers and private investors opt for city funding, preferring to turn down subsidies in favour of retaining flexibility in rent adjustments on their investments (Franz 2015).

Vienna as a case study does not perfectly fit the classic picture of the green neoliberal city strongly affected by processes of ecological gentrification, the privatisation of high-quality environments and spatial segregation according to new urban greening projects (Bricocoli, 2011). In Vienna, the high percentage of social housing as well as rent control measures seem at least to moderate both processes of gentrification and the spatial segregation of high-income groups (Franz 2015). However, although wide-sweeping processes of displacement of its former inhabitants do not characterise the city as a whole, in many of its areas rent affordability has been decreasing as a result of various interventions (Kadi 2015). For example, in areas such as the 2<sup>nd</sup> District the new underground line U2 has played a crucial role in the process of neighbourhood change. In other areas, green urban renewal (for example, the abundance of urban gardening or the waterfront revitalisation of the Danube canal) seems to be more a consequence of gentrification than the main driver of the urban-social transformation itself.

To sum up, is Vienna a case study that disproves the existence of the widespread global process of green gentrification in contemporary cities? Not entirely. Indeed, certain problematic features are coming to the fore.

First, a gap has emerged between the circumstances of the *insiders* (old inhabitants and the middle class, able to afford the deposits required to enter the social housing sector) and that of *newcomers*, often subjected to the increasing costs of the private rental market (Kadi And Verlič, 2019). This division has already been problematised by scholars as far as general housing accessibility is concerned. Those who have lived in the city for longer have remained fairly well protected from market forces and have barely been affected by the new reforms. For instance, many of them, although on low incomes, have protected housing conditions as a result of living in council housing or being well-protected from market forces in the private rental sector (having old rental contracts from before liberalisation in 1994, which offer relatively low rents and are unlimited). Low-income newcomers, conversely, suffer the worst conditions. Given that the low-cost apartments available tend to be located in very crowded districts (such as the 15<sup>th</sup> District) with poor green facilities or are ground-floor apartments (more affected by air pollution and noise), questions of environmental justice are mounting in Vienna.

Secondly, there is the issue of housing segmentation according to energy savings standards and the effects of refurbishment on poverty and segregation. The international literature (Holm 2011; Grossmann and Huning 2015) stresses that barriers to energy efficiency are especially persistent among low-income households. Investment in energy-efficient devices is hindered by a lack of capital and the split-incentives barrier between landlords and tenants. However, refurbishing entire buildings or urban quarters encourages displacement and residential segregation (Pareja-Eastaway and Winston 2017). In many cases in Vienna, buildings and flats once subject to both very low rent prices (since they were under rent control) and very poor energy standards are today being demolished and replaced by both higher quality and more expensive housing. This has two implications: first, the volume of affordable housing stock shrinks; and second, poor households are not able to afford the new rents and must therefore move to less well-insulated housing stock. Bouzarovski et al. (2018) define this process, of displacement induced by housing retrofitting, as ‘low-carbon gentrification’. This need for new policies to promote both energy efficiency and affordability in the housing market appears to be an important urban green paradox that deserves further investigation, in Vienna and beyond.

Finally, as argued by Franz (2015), in many areas of Vienna affected by green urban renewal (for example the 16<sup>th</sup> District), the combination of public subsidies, extensive citizen participation and mediation through the local urban renewal office caused the revitalisation to be extremely successful, leading to better living conditions and low displacement. Nevertheless, as Franz critically observed, a change in the commercial and social mix can clearly be seen. Even if the local residents did not have to leave their neighbourhoods because of rent increases, cultural and social exclusion were a serious outcome of the transformation of a former workers' district to the chic and bohemian place-to-be it is today.

#### 4. Concluding Remarks

What are the impacts of the green urban renewal projects promoted by many European cities on the socio-spatial configuration of the urban context? Are categories such as green gentrification and processes of self-segregation as a result of the construction of eco-districts helpful for understanding the urban changes taking place in EU cities? The case of Vienna shows that a focus on European cities may bring about a different understanding of the patterns and mechanisms characterising the transition to urban sustainability in contemporary cities.

First of all, it calls for a broad understanding of many different transformations fostered by a variety of interventions aimed at improving sustainability; not only urban greening, but also waterfront redevelopment, ecological retrofitting and the development of new eco-districts are affecting housing affordability in European cities in different ways. At the same time, different systems of governance of housing sectors may foster a variety of urban sustainability patterns in Europe. As already explored in the general literature on gentrification, housing regimes shape a variety of gentrification processes (Maloutas 2012; Van Gent 2013; Semi 2015; Franz and Torri, 2016).

In Vienna, it is possible to observe a strong tendency towards interventions favouring high environmental standards. However, while in other cities this has gone hand in hand with a strong re-orientation of local policies towards neoliberal strategies of urban development, in Vienna the transition has been characterised by policies that are more sensitive to the need to keep housing affordable. However, new trade-offs between environmental innovation and social justice are emerging in Vienna: among others, the processes of housing segregation and segmentation according to energy standards criteria; the emerging gap between old residents and newcomers in terms of access to high-quality urban environments; and, decreasing

affordable housing. These are all changes that challenge Vienna as a paradigmatic example of the *green-just city*, requiring further studies and ad-hoc interventions. At the same time, the case study shows that green gentrification is not a destination but a process that can be governed by local administrations through urban planning and housing policies aimed at both affordability and environmental quality.

## Bibliography

- ABELE, H. & HÖLT, A., 2007. Housing in Vienna. In: Å. ANDERSSON, L. PETTERSSON and U. STRÖMQUIST, ed. *European metropolitan housing markets*. New York: Springer, pp. 241-266.
- ANDERBERG, S. and CLARK, E., 2013. Green sustainable Öresund region – or eco-branding Copenhagen and Malmö? In: I. VOJNOVIC, ed. *Sustainability: a global urban context*. East Lansing: Michigan State University Press, pp. 591-610.
- ANGUELOVSKI, I., CONNOLLY, J. J. T., MASIP, L. and PEARSALL, H., 2017. Assessing green gentrification in historically disenfranchised neighborhoods: a longitudinal and spatial analysis of Barcelona. *Urban Geography*. vol. 39, no. 3, pp. 458-491.
- ANGUELOVSKI, I., CONNOLLY, J. J. T., GARCIA-LAMARCA, M., COLE, H., PEARSALL, H., 2018. New scholarly pathways on green gentrification: what does the urban ‘green turn’ mean and where is it going? *Progress in Human Geography*, 0309132518803799
- BRICOCOLI, M., 2011. Qualità e consistenza delle politiche abitative. Riflessioni a partire dal caso Viennese. In: L. SCAVUZZO, ed. *Social housing a Vienna. Il progetto della residenza come campo di sperimentazione per le politiche pubbliche*. Milan: Maggioli Editore, pp. 5-9.
- BOUZAROVSKI S., FRANKOWSKI J. AND TIRADO HERRERO S., (2018) Low-Carbon Gentrification: When Climate Change Encounters Residential Displacement. *International Journal of Urban and Regional Research* 42(5), pp.845-863.
- CAPROTTI, F., 2014. Eco-urbanism and the eco-city, or, denying the right to the city? *Antipode*. vol. 46, pp. 1285-1303.
- CHECKER, M., 2011. Wiped out by the “greenwave”: environmental gentrification and the paradoxical politics of urban sustainability. *City & Society*. vol. 23, no. 2, pp. 210-229.
- CITY OF VIENNA, 2010. *Environment in Vienna – vision, guidelines, objectives* [online] [viewed 24 May 2018]. Available from: <https://www.wien.gv.at/umweltschutz/pdf/vision-engl.pdf>.
- DALE A. and NEWMAN, L., 2009. Sustainable development for some: green urban development and affordability. *Local Environment*. vol. 14, pp. 669-681.
- DOOLING, S., 2008. Ecological gentrification: re-negotiating justice in the city. *Critical Planning*. vol. 15, pp. 40-57.
- DOUCET, B., [VAN KEMPEN, R., AND VAN WEESEP, J. 2011](#). Resident perceptions of flagship waterfront regeneration: the case of the Kop van Zuid in Rotterdam. *Tijdschrift voor Economische en Sociale Geografie*, 102(2), pp.125-145.
- FAINSTEIN S, 2010, *The Just City*, Cornell University Press
- FITZGERALD, J., AND LENHART, J., 2016. Eco-districts: can they accelerate urban climate planning? *Environment and Planning C: Government and Policy*, 34(2), pp.364-380.
- FRANZ, Y., 2015. *Gentrification in neighbourhood development: case studies from New York City, Berlin and Vienna*. Vandenhoeck & Ruprecht.

- FRANZ, Y. and TORRI, R., 2017. The impact of gentrification in times of economic crisis: emerging new socio-economic divisions of urban space. In: R. CUCCA and C. RANCI, eds. *Unequal cities: the challenge of post-industrial transition in times of austerity*. London: Routledge, pp. 69-88.
- GROSSMANN K AND HUNING S, 2015. Energy Energy-efficient retrofitting and affordable housing: Open questions for urban research and practice. *Paper presented at the RC21 International Conference on "The Ideal City: between myth and reality"*
- GRØNNING M., 2018. *What is the Fjord City?* *Planum*, 35, II, pp.105-117
- HAASE, D., KABISCH, S., HAASE, A. ET AL. (2017): Greening cities e To be socially inclusive? About the alleged paradox of society and ecology in cities, In: *Habitat International* 64, 41-48 (DOI: 10.1016/j.habitatint.2017.04.005).
- HAUTMANN, H., HAUTMANN, R., 1980., *Die Gemeindebauten des Roten Wien 1919–1934*. Trad. eng. *The Council Houses of the 'Red Vienna' 1919 – 1934*. Wien: Schönbrunn-Verlag.
- HOLDEN, M., LI, C., AND MOLINA, A., 2015. The emergence and spread of ecourban neighbourhoods around the world. *Sustainability*, 7(9), pp.11418-11437.
- HOLM A(2011) Ein ökosoziales Paradox. *Stadtumbau und Gentrifizierung. politische ökologie* (124) (Post Oil City), pp.45-52.
- HOWARD E., 1902. *Garden Cities of Tomorrow*. ISENHOUR, C., MCDONOGH, G. and CHECKER, M., 2015. *Sustainability in the global city: myth and practice*. Cambridge: Cambridge University Press.
- KADI, J., 2015. Re-commodifying housing in formerly “red” Vienna? *Housing, Theory and Society*. vol. 32, no. 3, pp. 247-265.
- KADI J, VERLIČ M. (Eds.) (2019), *Gentrifizierung In Wien, Perspektiven aus Wissenschaft, Politik und Praxis*, Stadtpunkte Nr 27, AK Wien.
- KEIL, R., 2007. Sustaining modernity, modernizing nature: the environmental crisis and the survival of capitalism. In: R. KRUEGER and D. GIBBS, eds. *The sustainable development paradox: urban political economy in the United States and Europe*. London: Guilford Press, pp. 41-65.
- KOHLBACHER, J., REEGER U., 2010, «Housing Integration of Immigrants in Vienna. Equal Opportunities?». In: H. Fassmann, Y. Franz. (ed.). *Integration policies at the local level: housing policies for migrants*. Vienna: Austrian Academy of Sciences. Available at: <http://hw.oeaw.ac.at/6853-9inhalt?frames=yes>
- LEWIS, T. and GOULD, K., eds. 2016. *Green gentrification: urban sustainability and the struggle for environmental justice*. London: Routledge.
- MALOUTAS, T., 2012. Contextual diversity in gentrification research. *Critical Sociology*. vol. 38, no. 1, pp. 33-48. <https://doi.org/10.1177/0896920510380950>
- MATZNETTER, W., 2002. Social housing policy in a conservative welfare state: Austria as an example. *Urban Studies*. vol. 39, no. 2, pp. 265-282.
- MERCER HUMAN RESOURCE CONSULTING, 2018. *Worldwide quality of living survey 2018* [online]. Available from: <https://mobilityexchange.mercer.com/Insights/quality-of-living-rankings>
- MUSTERD, S. and MURIE, M., 2010. *Making competitive cities*. Oxford: Wiley-Blackwell.
- NOVY, A., 2011. Unequal diversity – on the political economy of social cohesion in Vienna. *European Urban and Regional Studies*. vol. 18, no. 3, pp. 239-253.
- OAKLEY, S., 2011. Re-imagining City Waterfronts: A Comparative Analysis of Governing Renewal in Adelaide, Darwin and Melbourne. *Urban Policy and Research*, 29(3), pp.221-238.

- PAAL, M., 2003. Metropolitan governance and regional planning in Vienna. In: W. G. M. SALET, A. THORNLEY and A. KREUKELS, eds. *Metropolitan governance and spatial planning: comparative case studies of European city-regions*. London: Spon Press, pp. 230-243.
- PAREJA-EASTAWAY, M. and WINSTON, N., eds. 2017. *Sustainable communities and urban housing: a comparative European perspective*. London: Routledge.
- REINPRECHT, C., 2014. Social housing in Austria. In: K. SCANLON, ed. *Social housing in Europe*. Oxford: Wiley, pp. 61-74.
- SCAVUZZO, L., 2011. *Social housing a Vienna. Il progetto della residenza come campo di sperimentazione per le politiche pubbliche*. Milan: Maggioli Editore.
- SEMI G., 2015. Gentrification. Tutte le città come Disneyland? Bologna: Il Mulino.
- SMITH N (1987) Gentrification and the rent-gap. *Annals of the Association of American Geographers* 77: 462-465.
- STEHLIN, J., 2015. Cycles of investment: bicycle infrastructure, gentrification, and the restructuring of the San Francisco Bay area. *Environment and Planning A: Economy and Space*. vol. 47, no. 1, pp. 121-137. <https://doi.org/10.1068/a130098p>
- UNITED NATIONS ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC (UNESCAP), 2005. *Annotated provisional agenda (E/ESCAP/SO/MSCED(05)/L.2)* [online] [viewed 24 May 2018]. Available from: [http://www.un.org/ga/search/view\\_doc.asp?symbol=E/ESCAP/67/L.2](http://www.un.org/ga/search/view_doc.asp?symbol=E/ESCAP/67/L.2) [24.05.2018].
- UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE (UNECE), 2006. *Guidelines on social housing. Principles and examples*. New York: United Nations.
- UNITED NATIONS WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT (UNWCED), 1987. *Our common future*. New York: Oxford University Press.
- VAN GENT W., 2013. Neoliberalization, housing institutions and variegated gentrification: how the 'third wave' broke in Amsterdam. *International Journal of Urban and Regional Research*. vol. 37, no. 2, pp. 503-522.
- VIENNA CITY ADMINISTRATION, 2007. *Business location Vienna: competitive factors in European and International comparison. Vienna in Figures 2007: economy and business* [online]. Vienna: Vienna City Administration [viewed 24 May 2018]. Available from: <https://www.wien.gv.at/statistik/pdf/wirtschaftsstandort-07.pdf>.
- WOLCH, J. R., BYRNE, J. and NEWELL, J. P., 2014. Urban green space, public health, and environmental justice: the challenge of making cities "just green enough". *Landscape and Urban Planning*. vol. 125, pp. 234-244.