

Vienna's Historic Ground Floor and its Socio-Urban Potential – Integrative Diversity Par-terre?

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1 ABSTRACT

In recent years, both academic discourse and administrative interventions have focused on public space, overshadowing the potential of *semi-public space*, that is: the ground floor and street-level environment.¹ Public street-level space is a much coveted good: on one hand, the fight for a re-structuring of transit space seems lost, while on the other hand financially powerful, mostly global actors compete for every inch of sidewalk space, with shops, service facilities, events companies, and advertising agencies colonizing the city's open space with mobile stalls and stationary kiosks. As a result of these and other trends – both economic (closure of shops, globalization, etc.) and administrative (parking space requirement², misdirected subsidies, etc.) – Vienna's ground floor spaces are being vacated and homogenized.

In order to prevent the impending abandonment of these ground floors and the connected public space, an intervention in the current process of structural evolution is needed. These spaces need to be attuned to and developed for current and future requirements. If satisfactory action is taken, the potential for a genuine New Urbanism exists – beyond any calculated orchestrations.

1.1 Research field

More than other European cities Vienna is coined by the historic urban structure of the Gründerzeitl – One quarter of all apartments in Vienna are located in Gründerzeit buildings.³ Therefore this structure, which has been built between 1848 and 1918, has been put in the center of interest.

1.2 Research question

Does the Gründerzeit ground floor hold specific potential in the form of affordable and adaptable living space and work space, as well as in the form of sufficiently accessible public areas? What conditions are necessary to bring forth this potential?

The characteristic potential of the Gründerzeit urban system rests upon, amongst other things, the traditional multi-use function in close proximity. This is particularly true of the street-level environment. In order to assess this potential in a form that is site-specific and detailed enough to be used as a basis for further work, both the open and the built-up street-level zone must be structurally mapped as a reserve of usable space. For this to be possible, a fundamentally cross-disciplinary approach is required, which addresses the following diverse issues.

2 WHO IS THE CURRENT PRIMARY USER, AND WHY?

The list of potential users of Vienna's street-level environment is extensive and highly diverse. What is striking is that currently there is only one single primary user: the greatest part of open and built-up space is currently occupied by moving and stationary traffic (parking spaces and garages in the basement of Gründerzeit apartment buildings).

¹ Vienna's ground floor and street level environment respectively refer to both open and built-up space, as both directly depend upon each other. As their uses are interrelated, they cannot be treated in isolation.

² Vienna's parking requirement calls for parking spaces to be provided on the lot for new construction, extensions, or changes of land use.

³ Out of 956.110 apartments 238.100 are located in Gründerzeit houses; 20% of the city's built up area consists in buildings from the GZ: this corresponds to a total number of 31.755 buildings out of 158.842 (source: STATISTIK AUSTRIA; Effective 2006 and Mikrozensus 2010).



Fig. 1: Street filled with parking spaces (image: © Angelika Psenner)



Fig. 2: small garages, and basement entryways (all images © Angelika Psenner)

However, land use conflicts that one might expect from this imbalance do not actively arise; instead, there exists an a-priori assumption in favor of a medium that from a social science point of view is elitist, benefiting only part of Vienna's population while paid for by everyone and requiring substantial public subsidies.⁴ The average car owner covers only 40 % of the costs he or she causes. This is the conclusion of a comprehensive cost analysis carried out by Gerd Sammer, which includes all the consequential impacts of car use including noise, harm caused by exhaust fumes, public health impact, greenhouse effect, CO₂ emissions, etc. (compare: Sammer, 2007).

According to Austrian traffic regulations, pedestrians are not among the “*preferred street users.*” Sidewalks and walkways are considered an integral part of street space and as such are exclusive to moving traffic. Using these spaces for “purposes other than street traffic” requires permission. In urban areas it is additionally forbidden to “*obstruct pedestrian traffic by stopping without cause*” (art. 78 Austrian traffic regulations). There is no detailed information as to what constitutes a legitimate cause for stopping.

This regulation provides a legal basis for other rules that from the urbanist's perspective are harmful (for example, the parking space requirement), rendering the goals for public space as defined by Vienna's urban development plan, STEP05, a distant vision: “Streets and squares fulfill an important integrative and communicative task in urban life. Street space, too, is an important habitat. [...] In order to safeguard urban identity, “meeting places” shall be created through a contemporary design of streets, squares, and open spaces adapted to the various “social” needs of the people.” (STEP05)

3 WHO ARE THE POTENTIAL USERS?

Forty-four percent of Vienna's population has a social life based on an active or passive experience of migration. Consequently, a migration-studies based approach should be a significant element in the investigation of the use change in relation to the Gründerzeit ground level. Development opportunities must be identified in terms of their real, potential, current, and future users. However, in order to keep sight of the larger context in which social, cultural, and religious differences are produced and reproduced, it will be necessary to let go of any perspective focusing *exclusively* on migration and embrace an approach based on

⁴ The average car user covers only approximately 40% of the cost he or she generates. This is the result of a comprehensive economic cost analysis conducted by Gerd Sammer covering consequential costs such as noise, emission-induced damage, health damage, greenhouse effect caused by CO₂ emissions, etc. The cost coverage of the average truck user amounts to as little as 25% (cf. Sammer, 2007, “Meinungen statt Fakten”).



theories of diversity.⁵ Diversity here means “social diversity” – a layering of classical migratory indicators (language, religion, cultural socialization) with ethnologically non-specific factors (age, gender, sexual orientation, disabilities, etc.), eventually blurring the boundaries that social science draws between people with and without migration backgrounds.

The minorities and the majority of a diversified society, that converge, mix, and (potentially) integrate with one another in Vienna’s semi-public street level structure, cover a wide spectrum.⁶ They are often identified by designations consisting of established, yet incomplete and one-dimensional attributions (age, gender, ethnic background, etc.). However, they can be comprehended as vastly diverse and often overlapping groups such as:

- Young business people with a migration background and a traditionally competitive approach to self-employed work, searching for a field of activity and often ready to take risks.
- Creative industries workers wanting to make use of the effectiveness of Vienna’s street level, and bringing with them a considerable potential for the further development of this area.
- Single mothers seeking to re-enter their professional careers and requiring both affordable and flexible child care at times and under conditions not offered by Vienna’s child care model. (To a large extent, the responsibility for childcare and family work in Austria still rests with women. Tightly interconnected childcare facilities at the street level could replace the existing clustered mega structures where children need to be delivered and picked up by car, inevitably generating traffic peaks.)
- Children looking for an environment that corresponds to the requirements specific to their particular age group, and in which they may move with relative independence. (In order to prevent a continuing drain of families with children into suburban neighborhoods (fat belt), leading to an increase in commuter traffic, urban spaces suitable for children should be created in the immediate living environment.)
- Young people with an active or passive migration background, or without a migration experience, requiring space for their transition into the adult world. (Vienna’s position is unusual in terms of the city’s demographic development: whereas Austria’s population is generally aging, Vienna is expected to experience an increase in children and young people up to 19 years of age. By 2030, a growth of up to 15% is expected, a figure that might even increase to 40% by 2050 within the region, for example in the town of Schwechat.⁷ What is required here are spaces that are not labeled as “youth spaces” but are instead publicly accessible and attractive for everyone, allowing young people to actively claim them, and experience “their” place as an equal.
- People of advanced age who are experiencing problems with the relentlessness and speed of social transformation, but nevertheless claiming their space in the public arena as well. (On the European level, aging societies are growing more typical, which is why a well-functioning labor market is becoming increasingly important for older workers. Even though recent studies suggest that the social consequences of this shift are overrated⁸, one has to assume that the usable living space for this age group will increase proportionally. Conceivable solutions include coffee houses, spaces for non-coordinated socializing in an independent fashion, as well as assisted living spaces for senior citizens.)
- People who for different reasons are unable or unwilling to afford the increasing expenditure of mobility and therefore depend on a “city of short paths.” (They use the Gründerzeit system in a way that brings together living, working, and recreation within a concentrated space; they live in their working space and work in their living space.)
- etc.

⁵ Cf. Boris Nieswand, 2010, “Diversität und Gesellschaft” and Steven Vertovec, 2007, “Super-Diversity and Its Implications”

⁶ Integration here implies social participation both by members of minorities and members of the majority. Integration is not static but a continuous interactive process, for integration occurs everyday through actions toward one another and mutually interpreted.

⁷ Cf. Statistik Austria, press release of 6 August 2010: “Bevölkerungsalterung: Baby-Boom-Generation 2030 bereits in Pension”

⁸ For example, Sanderson and Scherbov suggest that if one considers the increasing life expectancy and the number of life years spent in good health, the socioeconomic consequences of aging will be significantly less dramatic than anticipated.

4 WHAT ARE THE SPECIFIC QUALITIES OF THE GRÜNDERZEIT GROUND FLOOR? WHAT ARE THE INHERENT OPPORTUNITIES OF THE GRÜNDERZEIT STREET-LEVEL ENVIRONMENT?

4.1 Key structural data

The structural point of departure for use-intensification of the Gründerzeit ground level is in fact particularly disadvantageous. The street-level space created during the Gründerzeit period is dense and receives little daylight. The construction regulations in force at the time provided for roadways five or eight fathoms wide; from 1870 on the requirement was 16 and 12 meters respectively. Consequently, the average width of today's streets is between nine and 16 meters, which in relation to the building height of 24 meters is extremely narrow. Measuring 30 to 35 meters across, Berlin's residential streets are two to three times as wide. As a result, the daylight supply to Vienna's lower levels is relatively scarce. The situation is even worse in the interior courtyards, with light wells and airshafts at minimal size. Additionally, the surface area of the courtyards are often fully built-up or sealed, a circumstance that adds to a detrimental microclimate.



Fig. 3: obstructed inner courtyard - street profile in a Viennese Gründerzeit quarter – narrow sidewalk. (all images: © Angelika Psenner)

The basic conditions, then, are as unfavorable as they could possibly be. Therefore, mapping the generic conditions in a systematic and comprehensive way is an essential element in developing corresponding creative solutions.

4.2 The structural potential

The structural development potential of the Gründerzeit urban space rests in its strictly modular and small-scale lot structure (allowing units to be merged or separated across property lines, thus creating flexibility of use and diversity), as well as in use-neutral design (the architectural structure itself is not limited to a particular use but instead allows for diverse forms of utilization, a fact that is helped by the generous floor heights).

One further transformative advantage lies in the urban structure of the perimeter, which exhibit a large degree of social and cultural diversity because of the existing diversity of affordable housing and market rate apartments.

5 WHAT IS THE RELATIONSHIP BETWEEN POPULATION DENSITY AND GROUND FLOOR USE?

As the per-head requirement of living space continues to rise, fewer and fewer people inhabit large or former family homes⁹, and in view of the forecasted population growth¹⁰ and the rising number of one-person

⁹ In Vienna, as in most European cities, construction of housing is driven by an increase in living space requirements. Immediately after WW II, the per head requirement was of 10 square meters, whereas today it is 40 square meters and continues to rise. The forecasts for the next decade indicate up to 50 square meters per person; in some Swiss cities, for example Bern, these levels have been reached already. As a result of shorter working hours and a lower proportion of one's lifetime spent working, time spent at home has increased along with domestic space requirements.

¹⁰ The metropolitan area of Vienna (core zone, satellite towns, and exterior zone) currently counts 2,335,028 inhabitants. Population forecasts for the core zone Vienna indicate a growth of 60,000 people by 2015.



households, a selective increase of population density in the Gründerzeit structure, whether through new construction or through modifications or extensions of existing structures, must be favored. That is, as long as the increased spatial density is compensated by a reduction in density elsewhere, for example by gutting courtyards.¹¹

The population density of the Gründerzeit building structure is not too high. As exemplified by Vienna's rapid population growth at the beginning of the 20th century – around 1910, Vienna's population was at 2.1 million – the grid structure is capable of accommodating considerable population density.¹²

The perception of excessive density is due, therefore, not primarily to a large a number of apartments, but to a lack of readily useable free spaces. Wherever new construction and the concomitant increase of population density is accompanied by the gutting of courtyards, there is an attendant increase in the positive effects on the urban structure: for one, increased ability to counteract the threats of density loss, homogenization, and gentrification, and for another, the daylight situation of the street level is improved, creating the improved prospect of adequate utilization.

6 STREETS AND SIDEWALKS: TRANSIT SPACE OR LIVING SPACE?

In addition to sufficient daylight, other basic requirements for satisfactory use of the street level space include a pleasant sidewalk and low-frequency street traffic. Currently, the street is viewed primarily as transit space and reserved for motorized vehicles. Private motorized transportation and its aftereffects thus stand in the way of socially benign urban transformation at Vienna's street level.

In order to develop a sustainable solution to the transit problems that plague the Gründerzeit street level environment, it will be necessary to employ a systems-oriented view of mass mobility. Such a view will take into consideration causes, effects, benefits, and costs as well as consequential costs, resulting in a factual analysis of systemic interrelations and a suitable spectrum of key measures identified.



Fig. 4: Original handout by the “Motorist Lobby” during the election of the municipal council Vienna, in Oct. 2010

The objective must be to define most of the street space in the urban center as *living space* and to enact this categorization in the law. Dutch towns provide a good example: only a limited number of streets within the urban center are retained as thoroughfares (with a speed limit of 50 km/hr), whereas the remaining streets, in line with the principles of “sustainable security” are considered “living space” (with a 30 km/hr speed limit).

Current data and facts provided by the Austrian Ministry of the Environment show the urgency of the situation from a different angle – one that should not be neglected in this context: “Passenger transportation output has risen from 83.2 billion to 106.2 billion passenger-kilometers between 1990 and 2008 (27.6%). Both in 1990 and in 2008, the greatest percentage of passenger-kilometers was generated by automobiles [...]. During this period, the proportion of distances covered by trains, small motorcycles, bicycles, and foot decreased. (“Umweltbundesamt,” 2010, p. 113)

¹¹ Courtyard gutting does not mean erasing all built-up courtyard structures, for the hidden spaces and dark corners of the courtyards represent a key quality of the socio-cultural mix (and charge) of the block perimeter. Instead, what is required is an in-depth investigation of the interrelations between the various spaces (street–ground floor–courtyard), and a detailed mapping of possible adaptations.

¹² 103,351 of the current 158,842 buildings of Vienna were erected after 1919. Accordingly, the population of 1910 lived and worked in one third of the current structure, which explains the precarious social and public health conditions of the period.

According to the “Klimaschutzbericht 2010” (Climate Protection Report), reaching the Kyoto Protocol climate target of reducing greenhouse emissions by 16% (in reference to 2005 levels¹³ is in question. Among all sectors, it is transit that falls farthest behind the climate target, which is why it is seen as holding the greatest potential for change in reducing harmful emissions. “The rapid increase of road transit represents the greatest problem in implementing the measures suggested by the energy strategy: The emission reductions achieved through the use of bio-fuel and increased efficiency of personal vehicles are set-off by an overall increase in transit.”¹⁴

Current debates in the field generally acknowledge the urgency of the current situation, mostly with a view to the required reduction of CO₂ emissions in transit, to achieving the Kyoto targets, and to establishing economic independence from the oil price market. The *desire for a compact and diverse city* only comes second. Yet, the urban perspective on the climate change problem becomes particularly clear when one looks at the statistical data on Vienna: the number of private motorized vehicles increased by 110,000 between 1990 and 2008. This led to an additional requirement of parking space of nearly 1.3 square kilometers, equivalent to the size of 181 football fields. The urgency of this situation coincides with the view held by many transit scholars, according to whom radical interventions into the organization of private urban traffic are necessary.¹⁵

7 PLANNING VIENNA'S STREET LEVEL

Building ordinances and legal restrictions regulate, primarily, the construction of new buildings. Consequently, urban renewal and transformation remain mostly outside of the scope of such control factors. Therefore, structural changes, adaptive re-use, and other improvements can be realized currently only through indirect subsidies (for renovations, business development, etc.):

Vienna's strategy for urban renewal is based on three different tools: the *Wohnbauförderungs- und Sanierungsgesetz* (WWFSG 1989, a law promoting housing construction and renovation), the block renewal program of *wohnfonds_wien* (coordinating block renewal), and the work of the area renewal offices. According to official information provided by the city government, block redevelopment is focused on “ecologically effective improvements of the living environment” and “aims at structural, cross-property improvements in those areas of the city in greatest need of renewal.”¹⁶ However, this approach, focused as it is on quarters in need of renewal, only covers a small portion of the city: “Besides, the plans do not seem to have an effect and often remain unrealized, specifically with regard to the semi-public space of the street level. The required re-structuring of the street level and the advisable gutting or merging of courtyards fails because there are no mandatory legal requirements for owners.”¹⁷ (Brettschneider, 2008, p. 152 ff.) Brettschneider therefore calls for a coordinated planning process for land use and block renewal in addition to coordinated subsidies (for renovations, business, green space, culture). Additionally, she advises a focused clustering of measures from the various administrative departments that impact block renewal on various levels¹⁸ in order to develop comprehensive regulations for the improvement of the street level. In this way, legal instruments can be developed that will support the implementation of maximum building density (with

¹³ This reduction of emissions—referring to those areas that are not covered by the emissions trade—is scheduled to be completed by 2020.

¹⁴ The temporary decline in emissions caused by economic downturn is not enough to change the overall trend.

¹⁵ The most frequently suggested solution to the problem of stationary traffic is the introduction of a city toll and the extension of permitted parking, as currently intended by the Vienna city government. Transit researcher Hermann Knoflacher's model of Equal Distance (equal distances to parking space and a public transport stop) is more radical and promises “considerable long-term benefits for urban space.” In terms of traffic distribution, the model (covering the period 2003-2033) provides for a significant shift towards walking, bicycling, and public transport; in terms of population development, a shift that halts the current trend of moving into Vienna's greenbelt, and gives greater value to the inner districts, thus generating retroactive positive impressions of transit in the city core.

¹⁶ In the framework of block renewal, the revitalization of 168 apartment buildings was subsidized with approximately 58 million Euros of public money.

¹⁷ Unsealed, relatively natural courtyards not only create urgently required free, recreational, and play space in densely built-up urban areas, they also ease the workload of the sewage system, while the greening of courtyards significantly contributes towards an improved microclimate. In Berlin, the percentage of sealed surfaces is strictly controlled using the biotope area factor (BFF).

¹⁸ This refers to areas of responsibility for redevelopment, green space, transportation, and street space utilization, as well as architectural and urban planning.



a view to the gutting and unsealing of courtyards), the design of the street level, and the creation of cross-property urban design measures.

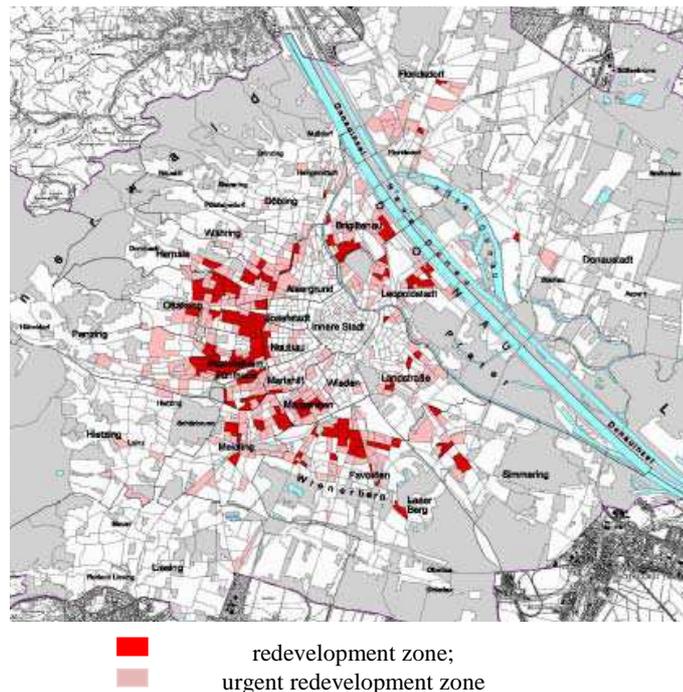


Fig. 5: target area for redevelopment fundig (section) (source: Magistrat der Stadt Wien. Stadtentwicklung und Verkehr, 2005)

In addition to the above, it is important to note that the accumulation of various legal stipulations – parking space requirements, regulations controlling adaptations and renewals in new acquisitions of street level shops or workspaces – create a disincentive and contribute to ground floor vacancies.

In order to create a sustainable revival of Vienna's street level environment as well as the corresponding identification of improvement measures and appropriate planning and implementation, involving all involved municipal departments and divisions, a *systematic and comprehensive site plan of the street level* (*Zusammenhängende Grundrissplan ZGP*) is necessary. Currently, no basic planning data are available, and therefore a comprehensive and full mapping of the present state of Vienna's street level, i.e. a comprehensive site map must be carried out. At present, there is only one as yet incomplete and very rudimentary map of objects in protected areas. Information on the state and the use of the street level is scant or missing altogether; often, information is limited to standard phrases such as “street level – commercial area with new additions and modifications” or “street level zone with rusticated portal area and original surviving gate.”

A site map (ZGP) is the critical foundation for any future analytical work and thus for the conceptual development of the historical city, as well as for future research and development on the subject matter. The site map will provide the prerequisite for real, site-specific, concrete planning, resulting in more effective results and thus the long-term revival of Vienna's street level.

8 CONCLUSION

The above considerations allow us to summarize a catalogue of measures for Vienna's Gründerzeit quarters as follows:

- Street space must – at least within Gründerzeit residential areas – be legally defined as Aufenthaltszonen (for example, through road use regulations).
- New construction must in its entirety be legally obligated to meet the requirements of density reduction.
- Structural and business subsidies must be evaluated and coordinated over a wide spectrum.
- Appropriate planning tools must be put into place: a unified and comprehensive site map of Vienna's street level (zusammenhängende Grundrissplan ZGP) will be required.

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