

”In Swimsuits, We’re All Equals”: Building High-Rise Cohesion Through Social Infrastructure – The Case of Alt-Erlaa’s Rooftop Pools

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1 Introduction

In light of intersecting global crises such as the climate catastrophe and a crisis of affordable living in urban centres around the world, increasing academic and public interest has been given to urbanist concepts focusing on proximity and density, such as the 15-minute-city ([Lima & Costa 2023](#)). Among these ideas, highly concentrated dwelling in high-rise or comparable mass housing contexts might constitute one way to provide affordable habitation to urbanizing populations. Through the efficient use of space and by utilizing economies of scale, such buildings may enable the provision of otherwise luxurious amenities like rooftop pools, the focus of this study.

Mass housing contexts can, however, pose challenges for the connectedness of residents: Monumental buildings may appear as separate, alien islands in the city, dislodged from the broader urban fabric ([Reinprecht & Dlabaja 2014](#)). Especially in the case of post-war social housing estates, stigmatization along ethnic and class distinctions can be another driver of separation between residents and their environment ([Kabisch & Pössneck 2022](#)). Within mass housing, social life has

been shown to suffer: feelings of overwhelm and anonymity may prevail (Barros et al. 2019, Gibson et al. 2011, Gifford 2007), and measures of social cohesion (SC) – a characteristic describing a group’s interconnectedness and defined by Schiefer & van der Noll (2017) through “close social relations, pronounced emotional connectedness to the social entity, and a strong orientation towards the common good” (p. 592) – are often lower under conditions of high residential density (Dwijendra et al. 2021, Kalantari & Shepley 2021, Nzimande & Morris-Kolawole 2024).

One counterexample to this tendency might be found in Wohnpark Alt-Erlaa in Vienna, Austria (Figure 1). Housing almost 10.000 residents (Wien MA23 2025) in three buildings with up to 27 floors, the limited-profit housing estate has been publicly lauded as a best-practice example of social housing (e.g. Nonument 2018): Residential satisfaction and, in particular, the local sense of community have been reported to be substantially higher than in comparable estates (Wien MA18 2004).



Figure 1: Outside Views (author’s own) and Map of Alt-Erlaa (adapted from OSM and QGIS)

This success is often attributed to the site’s manifold amenities, among them shops, schools, indoor playgrounds, dozens of resident-managed rooms for clubs

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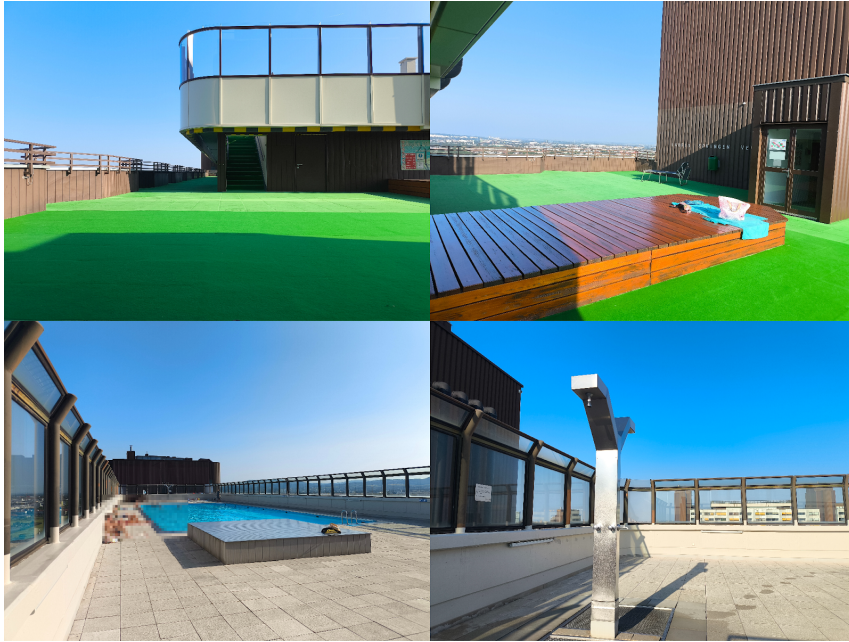


Figure 2: Rooftop Pool Area (author’s own)

and association, as well as – particularly uniquely – seven resident-only rooftop pools (Figure 2). Such spaces can be considered social infrastructure (SI), a term coined by Klinenberg (2019) and defined by Latham & Layton (2019) as “the networks of spaces, facilities, institutions, and groups that create affordances for social connection” (p. 3). While recent literature has stressed the role of SI to facilitate interconnections and build community resilience (e.g. Enneking et al. 2025, Renner et al. 2024), studies of the presence, use and design of communal spaces in mass housing remain rare (Nguyen et al. 2024, Wu & Xin 2020).

Given these considerations, this study set out to answer one main research questions and two subquestions:

- R1) In what ways can semi-public swimming pools in high-rise housing serve as social infrastructure that contributes to neighborhood social cohesion?
- R1.1) What are the measures, drivers and consequences of social cohesion in Wohnpark Alt-Erlaa?
- R1.2) To what extent does Wohnpark Alt-Erlaa constitute a closed or open urban system through socio-spatial boundaries and borders?

2 Methods

To answer these questions, a place-based single case study with interviews and observations was employed at the site of Wohnpark Alt-Erlaa, with particular focus on its semi-public rooftop pools. As a qualitative study, the inquiry aimed to elaborate on the lived realities and experiences (Peake et al. 2024) of relevant stakeholders, with the place-based approach (Paddock et al. 2021) meaning that the site was foregrounded while research questions were gradually refined and narrowed. Although examining only a single case limits the study's explanatory power and comparability, this focus was deemed necessary in order to allow for immersion and the build up of trust over time; ascertaining Alt-Erlaa as an "unusual [and] revelatory" (Yin 2018: p. 288) case to generate knowledge.

Access to the site was achieved by numerous visits between April 2024 and June 2025. This included the participation in various resident-organized social events, where most respondents were later recruited. Furthermore, respondents were acquired through chance encounters in the estate, through social media, and as snowball references through earlier interviewees.

Semi-structured interviews with residents of the estate, as well as one visitor and one employee of local facility management, constitute the primary data material. Eleven such interviews were conducted between January and June 2025, recorded and transcribed in German. Furthermore, four participant observations at rooftop pool sites were carried out together with hosts in June 2025; utilizing observation guides that focussed both on visible interactions and on spatial qualities following the twelve quality criteria of public space by Jan Gehl (2010: p. 239). Data gathered was coded with MaxQDA through a framework of qualitative content analysis (Mayring 2014) comprising both inductive and deductive coding (Peake et al. 2024).

3 Results

While different results pertain to the theme of track 1, Proximity and Permeability Revisited, findings regarding questions R1 and R1.2 are of particular relevance and will be elaborated on in greater detail.

Regarding research question R1, the estate's rooftop pools were found to constitute important sites of SI, contributing to local SC through seven dynamics. First, they constitute a worthwhile meeting spot to visit with neighbors and an arena for various acts of care, such as keeping an eye on children or sharing food and drink, which helps maintain existing local friendships. Second, the

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shared activity in a casual setting, as well as a reduced social distinction through clothing – “In Swimsuits, We're All Equals” being a quote by the estate’s architect, Harry Glück – enable new connections between residents. Third, even beyond verbal interactions, repeated encounters of the same faces at the pool and during the journey establish comfort and public familiarity. Fourth, the indispensable navigation of frequent irritations such as children’s noises or other swimmers obstructing the lane requires visitors to keep an eye out for another, thus building mutual tolerance and permissiveness. Fifth, evocative rooftop views and feelings of luxury increase local identification and pride, as residents see their pools as a unique and remarkable feature of their estate. Sixth, threats of closure in the past have inspired neighborhood solidarity, leading neighbors to band together against perceived threats to their cherished amenity. Seventh and perhaps most interestingly, unauthorized outsiders occasionally gain access to the pools, which leads some residents to police and enforce the rules at the otherwise unsupervised areas – confronting those visitors (allegedly) recognized as outsiders through clothing or unfamiliarity. While such practices on one hand safekeep poolside order and consolidate in-group identities, they do so by ostracizing outsiders and shutting off the estate from its environment. At times, even newer residents are accused of foreignness, which can create an unwelcoming atmosphere that causes some neighbours to abstain from using the pools.

To enable the social dynamics outlined above, the pools’ proximity is paramount: With seven rooftop pools throughout the complex, residents are never more than a few minutes of a weather-protected stroll and elevator ride away; thus, usage patterns are coined by spontaneity and brevity, and most residents even traverse the hallways in swimwear after changing clothes in their apartment. Moreover, several architectural choices affect social functions. The limited surface area combined with a low water depth of 140cm at most, invite playful uses more than ‘serious’ swimming, and similarly, inlets that line the sides of four of the seven pools create explicit space for conviviality at the pools’ edges. Around the pools, residents usually position themselves right by the water, allowing for frequent interactions with bathers. A lack of pre-installed seating is met with residents bringing their own sun loungers; thus appropriating the space for their own needs.

Regarding research question R1.2, the study finds that strong local SC leads to some degree of self-sufficiency, in turn pointing towards a certain level of alienation of the complex from the city. This presents itself in spatialised conflicts between insiders and outsiders such as by the pools as elaborated above, as well as in mobility and social patterns of some residents who rarely

ever leave the estate. Additionally, some physical design elements constitute boundaries, for example massive, separating streets and a lack of practical accessways from or to the outside (Figure 3). Together, mental and tangible factors lead some respondents to believe that the estate appears almost as a gated community, surrounded by a ‘virtual fence’. Furthermore, alienation presents itself in diverging perceptions of life in the complex between residents and outsiders, and in a lack of presence of non-residents in the estate’s social clubs.



Figure 3: Rooftop Perspectives from Alt-Erlaa (author’s own)

Simultaneously, Alt-Erlaa’s physical and intangible edges have porous elements, with the estate integrated in its environment in multiple ways: social networks of many residents extend beyond Alt-Erlaa, and the extensive offer of services, shops and hospitality attracts outside visitors, just as greenspace, schools, church and sport halls can be and are used by non-residents – constituting a gradient of varying levels of publicness (Figure 4). Similarly, associations extend outwards both through events and membership structures, as they do accept non-residents who thus can also establish a sense of belonging to the estate. Lastly, recent media and academic fascination with the estate can be interpreted as an element of reconciliation of the (Viennese) public and Alt-Erlaa after initial scepticism. Concludingly, fieldwork painted a nuanced picture of Alt-Erlaa as an

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estate with elements of both a closed system with impermeable boundaries and an open system coined by interactive borders.

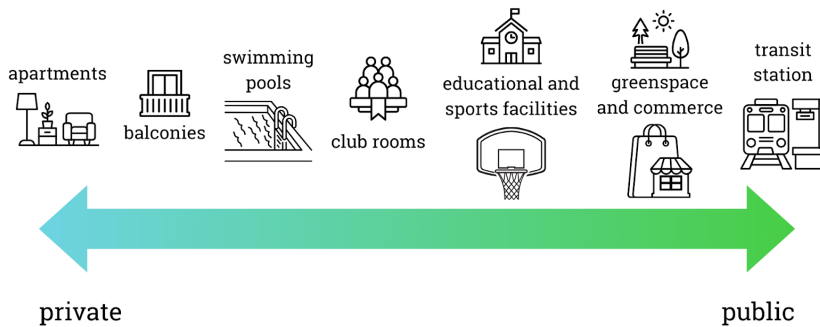


Figure 4: Alt-Erlaa’s Relational Settings from Private to Public (author’s own)

4 Discussion and Conclusion

This study accentuates the conceptualisation of swimming pools as SI by adding to the emerging field of literature through the description of various dynamics and social functions, some of which are highly specific to the pool setting. In the context of mass housing, it corroborates research that stresses the relevance of communal spaces that are accessible, well-designed, and taken care of (Nguyen et al. 2024, 2025). Furthermore, the study expands on SI literature by foregrounding understudied aspects of design and architecture, which were found to play a crucial role in some of the identified dynamics. Second, Alt-Erlaa’s pools are a well-suited illustration of the “tension between the accessibility and intimacy” (Enneking et al. 2025: p. 10) of SI: On one hand of the spectrum, their semi-public character was said to explicitly foster intimacy and trust among the residents, who benefit from the unmatched proximity and accessibility of their pools. On the other hand, outsiders who are attracted by the unique amenity and try to gain unauthorized access, for example by tailgating residents, can be seen as contesting the restrictions in place (Horton & Penny 2023), which raises questions regarding the fairness and justifiability of access restrictions. This is

especially true in a context where municipal swimming pools in many cities of the Global North have been impacted by renovation needs, rising ticket costs, or outright privatization or closure (Ana 2022, DIE ZEIT 2025, Lewi & Nichols 2014, McShane 2009).

Alt-Erlaa's high SC can be considered a form of privilege (Méndez et al. 2021), with multiple elements of the complex manifesting edge effects that, in Sennett's (2020, 2023) terms, work as impervious boundaries, prohibiting interaction with its environment. Hence, the study also underlines critical contributions that challenge the conditions, contents, and consequences of social cohesion.

In sum, the study raises varying questions that are relevant for recent urbanist discourses: how are access and exclusivity negotiated in urban contexts, whose responsibility it is to provide leisure and relaxation, and how can proximity-centered concepts like 15-minute cities be implemented in ways that alleviate instead of deepen socio-spatial injustices? In any case, it might be true that in swimsuits, we may indeed all be equals. It ought to be considered, however, what that implies for those still in their everyday wear.

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