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PERSPECTIVE IN THE URBAN INTERIORS OF RESIDENTIAL COMPLEXES – EXAMPLES BASED ON CONTEMPORARY REALIZATIONS IN THE CITIES OF GERMANY

PERSPEKTYWA WE WNĘTRZACH URBANISTYCZNYCH OSIEDLI MIESZKANIOWYCH NA PRZYKŁADZIE WSPÓŁCZESNYCH REALIZACJI W MIASTACH NIEMIECKICH

Abstract

Perspective, as a term used in the fields of architecture and photography, describes a method of depicting three dimensional objects within a space. The designer has the possibility of creating attractive perspective views within an urban composition of a residential complex, as well as views that have aesthetically pleasing foreshortenings and openings towards open vistas of the surrounding environment, or the creation of such an environment within the public spaces of a complex. During the various stages of the real property development process, the composition of a sequence of urban interiors is one of key elements, one that does not often suffer from bad influence on the part of the client, local zoning law or the restrictions of the building code. The aforementioned composition of a housing complex is largely left in the hands of the architect. A precision tool for supplementing one's spatial ability is offered in the form of computer aided design programs, which can help in the creation of a pseudo-photographic image, which becomes the best possible carrier of information regarding the appearance of a housing complex to its future residents. The level of meticulousness with which an architect must balance out the requirements of the market against the need of a user-friendly public and private space that should be designed for the residents of a particular housing complex can prove to be a challenge. The article is thus an attempt at finding a set of rules to be followed by designers in the creation of interesting public spaces of housing estates, based on contemporary examples of residential complexes of Germany.

Keywords: *perspective*, *city space*, *residential complexes*

Streszczenie

Perspektywa jest to określenie stosowane m.in. w architekturze i fotografii, oznaczające sposób przekazu trójwymiarowych obiektów i przestrzeni. Projektant może stworzyć atrakcyjne pespektywy w kompozycji urbanistycznej osiedli mieszkaniowych. Ma też szansę wytworzyć atrakcyjne skróty perspektywiczne oraz otwarcia widokowe na otaczającą przestrzeń lub wykreować je w przestrzeniach publicznych osiedla. Podczas procesu inwestycyjnego dzielącego się na różne etapy kompozycja sekwencji wnętrz urbanistycznych jest jednym z kluczowych elementów, a nie jest poddawana dużej ingerencji poprzez inwestorów. Prawo miejscowe zależy od warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie. Wspomnianą sferę kompozycji osiedla mieszkaniowego w dużym stopniu pozostawia się zwykle architektowi. Precyzyjne wspomaganie wyobraźni przestrzennej oferują programy komputerowe, tworząc pseudofotograficzny obraz, który staje się najlepszym nośnikiem informacji na temat wyglądu osiedla dla przyszłych jego mieszkańców. Wyczucie, z jakim architekt musi balansować pomiędzy wymaganiami rynku a przyjazną dla mieszkańców przestrzenią publiczną, poniekąd także i prywatną, a wytworzoną dla mieszkańców danego osiedla, jest sporym wyzwaniem. Na przykładzie zrealizowanych osiedli mieszkaniowych w Niemczech podjęta zostanie próba odszukania reguł tworzenia interesujących przestrzeni publicznych ulokowanych w osiedlach mieszkaniowych.

Słowa kluczowe: *perspektywa*, *przestrzeń miejska*, *osiedla mieszkaniowe*

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1. Introduction

The housing complexes that are currently being built and designed in German cities are excellently balanced in terms of their energy efficiency, the use of cutting edge alternative energy generation technologies and the implementation of the policy of sustainable development that is the effect of a consequent approach towards implementing spatial policy. An important element of their appeal is their clear spatial composition, which is a result of implementing the tenets of urban design that allow the creation of a harmonious residential environment and, as a consequence, maintaining the proper proportions between the built environment and green spaces, the creation of urban interiors and linking them with open environments – to put it short, they preserve, and are a continuation of, the existing spatial harmony that can be observed in the majority of German cities. The average would-be resident of such a complex, both in Germany and in Poland, is most often first and foremost interested in the price per square meter of an apartment in such a complex. Only when this requirement is met, do other pros and cons come into play in the potential buyer's mind, including those of the surroundings of the potential place of living. The elements under analysis here include things such as: the distance to one's workplace, transportation access and the availability of basic and social services – their importance is rarely superseded by aesthetical factors. The entire sphere associated with urban composition, especially the visual quality of public spaces, the so-called first impression effect, is first and foremost dependant on perspective views, especially those from the pedestrian level, and is somewhere towards the end of the important factors list of a potential apartment buyer. The matters of the perception of these views of residential complex urban interiors are going to be the focus of the following deliberations.

By using contemporary multifamily housing complexes in Germany as an example, this work illustrates the implementation of the idea of an integrated layout, which is a friendly urban interior that highlights the forms of buildings that are beneficial in terms of energy efficiency, in its structure. It also discusses the possibility of integrating visually attractive and subconsciously beautiful perspective views of urban interiors and whether they can be counted among the tools used to improve the quality of life by reducing the costs of maintaining greenery and the introduction of modern technologies of generating power from alternative sources to fulfill the energy needs of large scale urban layouts.

2. Interiors of urban complexes located in city centers

2.1. Killesberg residential complex, Stuttgart

The Killesberg housing complex is located in the city center and takes up an area of roughly 15 ha. Its buildings, in addition to the surrounding park, are located on the site of a former exhibition space. The project had its beginning in 2004 in the form of a competition for the development of a feasibility study. After the exhibition grounds had had their location changed, the project was accepted by the municipal council and introduced into the local zoning plan. Building quarters were designed by various different architects, with the common denominator being their volume and a high energy efficiency.

The architects were given free reign over the architectural form, however, once everything had been finished, one was able to discern an overarching similarity and cohesiveness in their work. The Killesberg complex is surrounded on two sides with open park type greenery. This urban design decision allows the simultaneous provision of privacy and an increase in the area's attractiveness. A picturesque "piazza", contrary to its classical counterparts which dominate Italian towns, was designed in a manner which integrates the lax green spaces that surround the complex, simultaneously providing a sort of identity to the new center by articulating a strict center characterized by a dense building environment with a mix of commercial and residential buildings. The effect of this approach to urban composition is intriguing, as the existing complex is composed of buildings that are similar in size and architectural convention, rich with modern architectural detail, with a surrounding park with varied terrain, that encroaches into its interior. The composition of the aforementioned urban layout has the effect of a better integration of greenery with the built environment. In the case of this residential complex, the view openings towards the surrounding spaces are examples of one of the rules that allow such a space to be enriched. Killesberg is a complex that possesses a unique identity, which is founded upon its open spaces.

2.2. Am Ackermannbogen complex, Munich

The Am Ackermannbogen residential complex in Munich is located on an area of 41 ha of former military grounds. The project had its beginning in 1998 in the form of a competition for the development of a feasibility study and, in a manner similar to that of Killesberg, was then incorporated into the local zoning plan after the military grounds had been relocated. The buildings, composed into quarters, had been designed by various architects, with some of the quarters having strict and coherent spatial requirements, regarding, amongst other things, high energy efficiency. It is worth mentioning that the complex has been located in the center of the city in the close vicinity of the Olympic Park and its sports facilities, which hosted the Summer Olympics of 1972. The placement of the complex necessitated the correlation of the existing architecture of the landscape of the Olympic Park with the developed urban layout of the complex. On the western side of the quarter, in the closest vicinity of the park, the shape of the terrain was altered into a lax landscape, which introduces interesting perspective views into the spaces between the quarters and buildings of this systematically designed complex. On the other hand, while looking from inside the complex outwards, especially to the west, the view and the perspective is an integrated picture of the Olympic park and the buildings of the complex. Furthermore, a non-collision transportation scheme was implemented between the park and the complex in the form of a pedestrian and bicycle bridge. More open spaces were introduced, keeping in mind the various needs of the residents. They are located both in the interiors of the complex, as well as in the areas surrounding it. The aforementioned urban design solutions have created the impression felt by its residents that the complex is surrounded by a lot of greenery due to certain particularly well placed urban openings.

3. Interiors of residential complexes located on the outskirts of cities

3.1. Messestadt Riem, Munich

The Messestadt Riem complex is located in the suburbs of Munich. It occupies around 555 ha, with around 200 ha of its area being a park that surrounds the complex proper. The concept of the urban layout of the Messestadt Riem complex is the integration of residential, commercial and public functions within a ring of green parks. The project had been initiated in 1990 with the preparation of a feasibility study, which was later approved by the municipal authorities and implemented into the local zoning plan. The building quarters had been designed by multiple architects, who designed them with a certain compositional similarity and cohesiveness, as well as high energy efficiency in mind. An interesting development in their design process were the very detailed and in-depth specialist concept designs, including aspects such as environmental impact, energy use and the influence of these factors in relation to the spaces of playgrounds and parks. In short, the program and concept for Messestadt Reim called for the preservation of the balance between the various types of areas. This balance was as follows: a third of the overall area had been designated for commercial and exhibition buildings, another third for residential buildings and another third for parks and green areas. The master plan of Messestadt Riem called for the concentration of non-residential buildings in the northern part of the complex. The intensity of the built environment was to decrease away from this point in the direction of the open landscape to the south. The residential buildings dominate the southern part of the complex. The information material regarding the complex contains a statement that it provides around 17 m^2 of public green areas per resident, and 15 m^2 of private green areas per resident. In the case of this complex, we can see the effect of consequently implementing a sequence of semipublic green urban interiors which create an optimal climate within the complex, that are located within the quarters of buildings. In contrast to the Killesberg complex mentioned earlier, the green areas are rather flat with a dominance of geometric layouts. The Messestadt Riem complex is a composition of sequentially repeated urban interiors and view openings from each of the two main squares of the complex towards the other fragments of the layout. The perspectives from these openings are varied - from the opening towards the surrounding greenery to the fountains near the main transportation hub square of the complex. This allows the creation of friendly and private spaces in between each quarter in the form of urban interiors and to enrich the paved public spaces with a variety of view openings.

3.2. Scharnhauser Park, Ostfildern, Stuttgart suburbs

The Scharnhauser Park complex is located in the suburban area of Stuttgart and has an area of around 140 ha. Its inception was carried out in a manner analogous to the other examples in the article. In 1992 the project was initiated by the development of a feasibility study, followed by the implementation of the local zoning plan. The area was previously occupied by the military. In a manner similar to that of Messestadt Riem, the complex sports a series of urban interiors between the quarters of buildings, which provide a feeling of privacy in these semipublic spaces. The dominating compositional axis is a public space composed of large green terraces laid out in the form of a kind of flight of stairs, which

form the main element of the urban interior, providing it with a sort of green floor and an opening to the far away landscape. This layout forms an array of wonderful perspective viewpoints not only to the nearby mountain range which can be seen on the horizon in clear weather, but also within the urban composition of the complex itself.

It is interesting to note that the analysis of these examples yielded the observation that the complexes of Stuttgart tend to provide a much larger variation in terms of function than those of Munich.

4. Conclusions

1. The „Creed" of modern architecture – the proper relation between the interior and exterior open spaces of contemporary residential complexes, with the simultaneous preservation of the privacy of its inhabitants and the use of cutting edge technology in order to achieve a high level of energy efficiency was observed in the listed examples.
2. The examples in the article, in the author's opinion, possess green public spaces that are friendly to their residents, which is at varying levels perceived as a private space.
3. A successfully implemented urban composition can create attractive foreshortenings and perspective viewpoints towards the surrounding spaces, or introduce them into the public spaces of the complex. The examples depicted in the article possessed not only attractive spaces that created sequences of urban interiors, but also played other roles. Retention tanks were placed underneath green spaces, which were used to rationalize the management of rainwater in Killesberg, for example. An important difference here is the holistic approach to creating green areas that can be attractive not only in a visual manner, but which can also be feasibly employed on the technical level.
4. The dual use of the areas of the complexes is one of the more important aspects that play a part in the overall energy efficiency of a residential complex. The examples illustrated above are currently in their late phases of construction or have just been built in Germany. Through the observation of how they are being used, one can arrive at interesting conclusions – in regard to how they are perceived on the visual, sensual and strictly technical level.

Ill. 1. Am Ackermanbogen. Munich. View from an artificial hill containing a heat storage tank. (author's collection, 2015)

Ill. 2. Am Ackermanbogen. Monachium. View of downtown housing (author's collection, 2015)

III. 3. Killesberg. Bench located within a public garden. (photo by author, 2014)

Ill. 4. Killesberg. Półpubliczna przestrzeń ukształtowana jako ogród typu francuskiego. Stuttgart. (fot. autora, 2014)

Ill. 5. Messestadt Riem. Munich. A strip of greenery with a perspective viewpoint towards the faraway horizon, separating two rows of buildings (author's collection, 2015)

Ill. 6. Messestadt Riem. Munich. Perspective of the semi-private space with playground for children. (author's collection, 2015)

Ill. 7. Scharnhauser Park. Stuttgart. Main public space (grand stairs) with green terraces. (author's collection, 2013)

Ill. 8. Scharnhauser Park. Stuttgart. The prospect of semi-private space. (author's collection, 2013)

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