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ARCHITECTURAL PHOTOGRAPHS: TYPOLOGY OF ATTICS AND SUPERSTRUCTURES IN VIENNA

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Summary: The attics and superstructures affect every citizen who watches them from a pavement or a square. These structures participate in creating a new, aesthetically valuable pictures of the city space, regardless of styles and taste and including all necessary regulations and norms. The chronology and typology of attic constructions and superstructures in the past 30 years Vienna can be applied in other cities with similar history and urban structure.

Keywords: Vienna, Attics, Superstructures, typology, chronology

1. INTRODUCTION: HISTORY OF LIVING IN THE ATTICS OF VIENNA

Using the attics of the buildings for housing has a long tradition in Vienna. In the medieval city they were the cheapest, substandard space for living, during the summers too hot, and in winter extremely cold and almost impossible to heat. Heating the attic, made in wooden construction with an open fire place lead to a big number of fires which swallowed large parts of the city. These incidents lead the City Government in the year 1782 to the decision to forbid living in attics.

In the second half of the 19th century, the time of the emperor Franz Joseph, Vienna developed rapidly and at the beginning of the 20th century reached the number of almost 2 million citizens. In those days the most luxurious apartments were in the "Beletage" in the 1st floor.

Josef Frank, the famous Architect of Vienna modernism, was mainly focused at the social aspect of buildings, providing good and cheap living spaces after World War I. In 1931, in the publication "The House as Path and Place" (Das Haus als Weg und Platz), published in the magazine "Der Baumeister", he mentioned that the most privileged spaces for living are somewhere else in the building, in the attics and mansard roof. Frank suggested that the attics are offering a lot of light, fresh air and silence, and all the variety that we search for in the new house, in the middle of the heavily built up city structure. With new developed escalator technology this idea could become implemented.

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7. међународна конференција

Савремена достигнућа у грађевинарству 23-24. април 2019. Суботица, СРБИЈА

During the 1960th and 70th the inhabitants of big cities, including Vienna, started to move outside the city into the green areas around, leaving the well-preserved old city centers quite empty. With two new laws, the first one in the year of 1972 concerning the historic town conservation and the other one from 1984 relating to the residential building reconstruction, Vienna opened the doors for the usage of historic buildings attics and made the living in the city attractive again.

Until 1996 most restored attics stayed in the old shape of the roof in a type of renovation, with the roof inclination between 32° and 37° degrees. Constructing a new attic there was an option to increase the inclination up to 45° , the maximum allowing enough light for the buildings on the other side of the street. The existing buildings could not rise higher with superstructures, according to the existing development and planning regulations of the city plots (Bebaungsbestimmungen). The only way to get a bigger volume in the attics was by using maximum two dormer windows. All this point increased the number of frustrated architects and investors whose aim was to plan with more freedom offering more new square meters on the existing sites.

By adopting the amendment to the act on building in Vienna in 1996 the city administration opened the doors for building superstructures in the zone of the existing attics. The new, more liberal building regulations permitted that every existing old building in Vienna (except those who are sites of monument protection) could rise 1.50 m higher than the planning regulations of the site is. This nearly responses to the existing level of the attic floor above street level and reaches, relating to the typical buildings build between 1860 and 1913, a height between 16,00 m and 25,00 m. The new roof construction with the allowed maximum implantation of 45° could start from this specified height and arrive a 7,50 m higher level on the highest point of the roof. In some cases, the new superstructure could be 9,00 m higher than the street cornice of the existing old building. In most cases, bringing the project in connection with the planning regulations of a specific site the profile and height of the new building superstructures changed from 7,50 to 4,50 m and from 9,00 m to 6,00 m.

The dormer windows, previous just vertical windows in the roof, became new and independent shaping elements with a maximum length according one third of the whole street elevation length.

A new type of building superstructures in the zone of attics started to materialize in the old city structure in the following years. Solutions which were independent from the existing object, with amorphic or deconstructive form. At the beginning of the new millennium, this creative period was slowed down a bit. In year of 2001 the old city center of Vienna came under the protection of UNESCO. In Addition, all countries of the European Community started to bring the building standards to the same level.

In the years of 2007, 2016 and at last in 2018, new amendments to the act on building in Vienna, brought new planning points for building superstructures in the zone of the existing attics. These points are valid until nowadays.

The first one requires a very detailed static calculations on the existing building state under the attic. The construction issues have been tightened referring to possible earthquake impacts and considering this, the only way to build a new superstructure or attic is a lightweight skeleton construction, the massive construction walls have been forbidden since 2007.

$7^{th}_{\rm international \, conference}$

Contemporary achievements in civil engineering 23-24. April 2019. Subotica, SERBIA

The second point deals with a very big topic: the barrier-free constructions. Planning a new attic, the whole old building must be adapted to the barrier-free norms. It should be possible to reach the new apartments in the attic using a wheelchair, which requires for example an escalator with a minimum size of $0,80 \text{ m} \times 1,40 \text{ m}$. In the old existing building construction and floor plans its often a pre-challenge to solve this and all other barrier-free request.

The third shows the problem of increasing population in the densely built old city districts and associated with it the rapidly growing number of cars and required parking places. Therefore, the owner of each new 100 M2 of living space, including the attic zone, must either have its own parking space in the building (in the old buildings mostly some kind of garage in the ground floor or cellar), or he has to pay the amount of 12.000 \notin (48 WGarG 2008) to the fund of public garages in Vienna.

There are some more new aspects, such as the building physics with the calculations for the Energy ID. This is requested for every new planning or renovation, including even the selling of apartments. The requested profile and height of the new building superstructures on a specific site affords nowadays a precise calculation, the drawn result and profile of this is in typical city center street situation, quite like the planning regulation from 2007.

2. TYPOLOGY OF ATTICS AND SUPERSTRUCTURES

Considering all mentioned aspects, norms and regulations which influence the planning in the zone of attics different types and solutions developed in the street vies of the existing buildings.

A. Integration of an attic floor in the roof profile of maximum 45°:

This kind of attic planning is a common access relating the building class and approved building height and volume on a typical Viennese city site.

A1. Dialog:

The new attic floor elements are in dialogue with the entire object façade. This solution can be mostly found in the areas standing under monument or UNESCO protection in the very city center. The attic usually holds the existing slope. It has some new roof or dormer windows all situated in the axis of the façade windows below. Sometimes there are terrace incision or towers, special on the corner of the buildings.

A2. Contrasts:

Within the existing or new inclinations, the roof gets accents that stand in contrast with the façade of the object, in the selection of materials or shapes. The whole building with the attic gives a new, exciting and yet harmonic appearance.

Савремена достигнућа у грађевинарству 23-24. април 2019. Суботица, СРБИЈА



Figure 1. A2. Attic, contrasts, 1060, Gumpendorferstr.11, Arch Zeytinoglu+ Klerings

A3. Autonomy:

The roof zone has been designed quite independently from the existing façade, in the form and color of the shaping elements. There is no dialog at all between the existing old building facade and the attic. This independence is most frequently arrived with towers and unusual shaped dormer or roof windows. In the cityscape, these solutions are easy to remember.



Figure 2. A3. Attic floor, autonomy, 1170, HernalserHauptstraße182, Arch. Karre

B. Superstructures (Upgrades) in the former attic zone:

The superstructures including one or two new floors and a new attic planed on an existing old building, can be build only if the building class and approved building height and volume allows it, and that's not the general situation in Vienna.

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Contemporary achievements in civil engineering 23-24. April 2019. Subotica, SERBIA

B1. Dialogue:

Between the upgrade and the existing part of the façade there is a dialogue. This dialog is given with design elements like, for example, a continuous glass line between the street cornice and the beginning of the new roof, or it fits to the existing facade by using the same proportions materials or colors.

B2. Contrasts:

The upgrade is isolated from the existing part of the object using modern materials or other colors and forms. By keeping the proportions applied on the existing façade, the harmony in the contrasts is achieved.



Figure 3. B2. Superstructures, contrasts, 1040WiednerHauptstaße12, Arch. Lorenz.

B3. Autonomy or "The house on the house":

The existing object is upgraded with a new one that is shaped in a quite independent manner. This boldly designs are mostly done in a nowadays architectural styles like deconstructivism, modernism or high-tech architecture.

Савремена достигнућа у грађевинарству 23-24. април 2019. Суботица, СРБИЈА



Figure 4. B3. Superstructures, autonomy, 12MeidlingerHauptsr.15, Arch. Lutter

B4. Pseudo:

The entire façade, including the attic or superstructure is like a new one, the existing Façade takes the appearance of the upgrade. In this manner they give a harmonious impression of a completely new building, although it is the camouflage of the existing part of the object.



Figure 5. B3. Superstructures, pseudo, 1160 Enenkelstr.16, Arch. Schwarz

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Contemporary achievements in civil engineering 23-24. April 2019. Subotica, SERBIA

3. CONCLUSION

Taking about the attics and superstructures there are aspects we can't really prognose, that apart from the mentioned, will furthermore influence the appearance and implementation in the future. The main one is the financial, the building in the attics became an attracting potential market for investments. This point changes the existing city inhabitants' structure, the prices on the real estate market and makes some parts of Vienna too exclusive, and this was not the common city politics until nowadays. On the other hand, there is a movement among the architects and in the city, government traying to bring a stronger social value into the new planning in the zone of attics. This highest, most privileged spaces in the city could be a benefit for everyone. It would make more sense to offer this volume to all generations living in a building. This community space could involve functions like learning, crafting, free time, recreation and entertainment reinforcing the communication between the house residents.

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ARHITEKTONSKE FOTOGRAFIJE: TIPOLOGIJA POTKROVLJA I NADZIDJIVANJA U BECU

Pesume: Kako potkrovlja i nadzidjivanja deluju na posmatrača koji ih opaža iz uobičajne perspektive negde sa trotoara ili trga? Da li učestvuju u stvaranju novih, estetski vrednih slika gradskih prostora?

Na primeru Beča pokusava da se odgovori na ova pitanja nezavisno od stilova (posmoderna, moderna. dekonstruktivizam) i ukusa. Pri tom su obradjeni tipologije i razliciti arhitektonski elementi karakteristični za izgradnju potkrovja zadnjih 30 godina u Becu. Ova tipologija se lako moze primeniti na bilo koji grad sa slicnom istorijom i urbanom strukturom.

Kljucne reci: Bec, potkrovlje, nadogradnjas, tipologija, hronologija