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Poetry and Architectural Concept in Restoration of a Property in an Advanced State of Degradation in C. A. Rosetti Street no. 5 Brăila

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Abstract – In definition, the restoration of an architectural object means to restore it, to reconstitute it, to bring it into good condition, to reinstate or reintroduce it as important, to restore its power; in a specific architectural sense, restoration involves the in-depth study of the historical evolution of a building, in the built system, urban or rural, in which it was born and in the context of the architectural styles and constructive techniques of the times it represents, taking into account as hypotheses the ethnographic component, the functional destination, the influence of the environmental factors, or the durability of the materials used in the work, and having a wider purpose, beyond the rehabilitation of the object itself, the recovery of the architectural heritage of the area or city to which the building belongs.

Keywords - conservation, recovery, rehabilitation, restoration

1. Introduction

The "Historical Centre of Brăila" is included in the List of Historical Monuments in Romania (LMI - approved by Order of the Minister of Culture and Religion no. 2314/2004, published in the Official Monitor of Romania part I, vol. I, no. 646 bis, dated of July 16, 2004, subsequently amended and supplemented by Order of the Minister of Culture no. 2828/2015), and has an area of approximately 141 ha and includes a number of over 2,000 buildings that require constructive measures aimed to ensure the conservation, consolidation and/or their restoration.

The property in an advanced state of degradation in C. A. Rosetti street no. 5 Brăila, this architectural gem situated in the select Hellenic / Greek neighbourhood in the Historical Center of Brăila is located in the vicinity and in the protected area of the historical monuments like the "Popeea" House (LMI code BR-II-m-B-02123) (belonging to the same owner), the "Manos" House (LMI code BR-II-m-B-02124), the former Palace of the Insurance Company "GENERALA" (LMI code BR-II-m-B-02111) or the Greek Church "Buna Vestire" (LMI code BR -II-m-A-02076).

The property is composed of an urban land with an area of 500 square meters from documents (526 square meters of measured area), use category courtyards-buildings, polygonal in shape, with relatively equal sides, with the street opening to the east, at C. A. Rosetti Street, along a length cumulative of 22.16 m and two housing constructions Cl and C2 in total built area of 308 sqm, respectively construction C1 – 165 sqm and construction C2 – 143 sqm.





Fig. 1 Positioning in the city

The year of construction of the two buildings C1 and C2 is before and after 1867, (stage I – the initial footprint of the construction C1 and stage II – the construction C2), based on the informations from the Historical and Architectural Study, written by Mrs. arch. M. Mihăilescu.

The two constructions, with structural walls made of simple brick masonry, date from 1875 in the current form, being built over the previous original foundations, but they are not historical monuments and have been in an advanced state of degradation and vulnerability for more than 20 years. The structure of the two constructions C1 and C2 is made of simple masonry with a stone foundation. The floor over the ground floor is made of wood, like the roof, which is made of wood with metal sheet coverings.

With serious and very serious damage, especially in the northern and eastern area of the C1 building due to infiltrations through the roof system led to the partial collapse of the building and the strong infiltrations over a long period led to the vertical deformation of the street facade so that at the current date, the two buildings are in poor physical condition, from the point of view of technical inspection and the conclusions from the technical expertise to the fundamental requirements of resistance and stability, consisting of structural precollapse and public danger of collapse, being non-functional. The C1 building is partially collapsed both towards the courtyard and towards the neighbourhoods and towards the street, with a high degree of vulnerability and imminent total collapse.







Fig. 2 C1 Details - Façade from C.A. Rosetti Street

Fig. 3 View of the back façade

The expertise of the parament and of the façade has highlighted the fact that the structure of the C1 building lined up to the street, on the main facade, has areas of construction with bricks of different formats, with overhanging elements, with window frames specific to the first half of the 20th century and which was later intervened by changing the geometric dimensions of windows, changes in their position. And the plasters have overlays – minimum 2 layers. The paints are simple and 3-4 layers can be identified.

The C1 building is totally degraded, with collapsed areas and other areas of high risk of vulnerability. It is found that the main cause of the reduced resistances is the excessive infiltration of water produced over time, the seismic actions corroborated with an inhomogeneous structure of the load-bearing walls, doubled by the negligence in the administration and maintenance of the water-carrying networks both for the street area and for the neighbouring buildings as well as the building's own installations, as well as the existence of possibly collapsed historical underground tunnel that cross the property diagonally.

The purpose of the technical analysis and the architectural survey consisted in the realization of a design theme, necessary for the owner in defining his intention of intervention and establishing its level, in order to recover the existing building and refunctionalize the two building, so that they are adapted to the specific requirements of the contemporary living and to use the characteristic indicators of the property located in the Historical Center, reference area SIR 1i, according to the Zonal Urban Planning of The Historical Center of Braila, for which the occupation of the land can reach a maximum percentage of 65%, and the use of the land at a index of 1.8, with a free land area of at least 50 sqm.



Fig. 4 Streetview with the facades of the buildings no. 5, 3 and 7, C.A. Rosetti Street



2. SEMNIFICATIONS

A suffering house located in the C.A. Rosetti street no. 5. Forgotten in other times and no longer finding its place in the eyes of people. Photographed, measured, with the building survey transferred to paper, but also as a result of the analysis of the facades and implicitly of the architecture, the identification of the materials and the work technique, it begins to reveal its secrets.

We believe in the invisible forces that a house has to last as long as it's inhabitants live in it. We believe in the beauty that a house has during its life, with the people who belong to it, with the rhythms of its times. Moreover, we believe that this house, dating from before 1900, a fragment of the city back then where now we live, belonged to a family like any of us: a compact house, open to the sun, with rooms arranged in a double tract, respecting the night / day or public / private principle, placed symmetrically on one side and on the other of a central, representative, reception hall, elevated, through an internal level break, of the access level from the outside - the street level. From the main house, directly from the yard, you could access separately, each of the outbuildings housed in the other building, subordinate to the main house.

The relatively small dimensions of the interior spaces and perhaps the lack of interior decorations, indicate the average level of the family that lived in this house. A functional element with a slightly decorative role - the skylight in the ceiling of the "dining room", which communicates with the bridge, reminds us of the attention paid to natural lighting and representativeness. All annexes are separated from the living space, including access to the high attic, certainly used, by an interior staircase that remains today suspended between the collapsed walls. The construction on the rear side, with the initial function probably of household outbuildings, later as low-level housing towards the middle, either as a superimposed structure on the original footprint recorded in the plans of 1856-1867, either as integral housing of the original construction, or as an extension.



Fig. 5 Detail of the façade intervention in a previous stage



Built around the square and solemn courtyard, the spaces unfold their importance, from north to west and always in dialogue with the large space that opens to the street. The rooms line up along the unbuilt space of the courtyard, corresponding as they were with the order of their use: living room, office, bedroom, dining room, kitchen, servant's room, bathrooms, laundry and oven room. For us, today the communication through an external space seems completely non-functional, but precisely this type of function gave life to the yard, the street, the city back then.

The joining of the two related buildings that were built independently and moreover, at a temporal distance from each other, seems unnatural in the conditions where the functional destination also separates them: one as the servants' quarters and the other - the manor house. Constructing a sober and imposing facade towards the street, continued with a matching fence, the house faces the courtyard, casting its gaze towards the neighbours and facing its own open space, which was probably once an urban garden or even with the view in the background of the opening to the Danube River? Because in 1834 on the plots in the area, clearly identified with fences at the alignment and isolated constructions are mentioned - at the time the studied location was free of constructions, while later in 1867 on the current location a building towards street with a significant footprint is depicted, similar to the present one. The buildings in the premises were built around 1867, with Ion D. Hangioff as owner, who is supposed to have had a social position and economic possibilities of at least an average level.

We specify the fact that at the end of the 19th century only one third of the population of Braila was native, the rest was made up of Romanians coming from other regions of the country, especially Buzău, Vrancea and Transylvania, from Greeks, Jews, Lipovian Russians, Turks, Austrians, Germans, Italians, French, English, Serbian, Swiss and even Belgians. The causes of this massive arrival of the population of Greek origin are not only economic but also political, often the regional politics playing the main role in this migration. During the periods of confrontation with the Ottoman authorities, the immigration phenomenon intensified, entire families left for other areas looking for that stability that could offer them a quiet home, but also an environment conducive to business.

In this context, the trends of those times to connect the Black Sea and the Danube basin to the trade routes of the Mediterranean also intervene. The shipping lines from the Aegean and Mediterranean seas, connected to the trade houses in Constantinople and Odessa, extended to Sulina, Tulcea, Galati and, especially, to Brăila. Thus, many companies moved their headquarters to Western Europe, especially to Marseilles and London, names such as Draculis, Negropontes or Embiricos being found throughout the city of Brăila, towards the end of the XIXth century. After the historical sources, the reconstruction of the Romanian cities began with the most important of them and first of all with the former Turkish citadel, Brăila and Giurgiu, old and important medieval ports, strategic defensive locations on the Danube.

The C.A. Rosetti Street currently has buildings that belong to the end of the XIXth century and the beginning of the XXth century. The ethnic Greeks settled in the area of the Public Garden, Belvedere, Călărași, Vapoarelor, Traian Eperor streets. The "Buna Vestire" Greek Church (LMI code BR-II-m-A-02076) was built on this perimeter next to which the Greek Community settled. But at the beginning of the settlement of the Greeks in Brăila, they enjoyed an existing built fund developed mainly underground: underground tunnels, cellars, on top of which new buildings were, rebuilt that today form the urban, historical texture of Brăila.

Right next to the researched building, basements were identified belonging to a previous stage over which buildings were built at the beginning of the XXth century.





Fig. 6 Underground tunnel / cellar, C. A. Rosetti street no. 3

Starting from 1930, from the General Census of the Population and Buildings in Brăila brings additional information, the building in C. A. Rosetti Street no. 5 (formerly no. 3 in Italiana Street) is owned by Spiru Davis, Greek trader. (according to the Historical -Architectural Study written by Ms. arch. M. Mihăilescu).

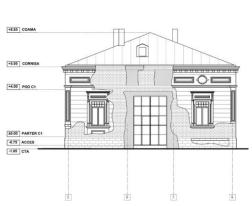


Fig. 7 Side façade

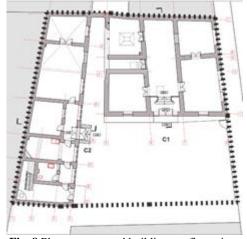


Fig. 8 Plot structure and building configuration

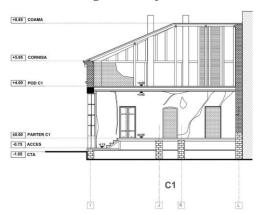


Fig. 9 Survey of internal degradation



Fig. 10 External degradation

The atmosphere of the houses situated in the Greek neighborhood, the name of this area at the end of the 19th century, is here preserved to a small extent, difficult to reveal under the layers of overlapping interventions. The architectural language is significant, with decorations characteristic of the epoch and the level of representativeness of the local social structure. Thus the Italian street (named after the first half of the 20th century as C. A. Rosetti) connected the residential neighborhoods around the harbor, that were inhabited by large estate owners, merchants, ship-owners and industrialists, crossing the area from south to north, from the Pietrei street, through the Poligon square and up to Domnsioara street. (The name of Goleşti street until 1885 - Goleşti street was, together with Polonă and Calea Galați streets, the first to receive electric lighting made by the Viennese company "Siemens Halske").



Fig. 11 Details of ornamental elements on the main façade

3. ANALYSIS OF THE FACADE'S FACINGS, MATERIALS AND WORKING TECHNIQUES, ARCHITECTURAL PLASTICITY

3.1. Construction C1

As for the research of the façade elements and facings, due to the current physical state of the building, together with the multiple degradations that have brought it to the state of pre-collapse, numerous areas with uncontrolled exposures, numerous conclusions could be drawn regarding the stages of the interventions upon the building.

The footprint of the current building, as previously mentioned, seems to be the same as the original one, as it can be seen on both façades facing the courtyard, as well as on the façade facing the street, the base made of stone masonry (calcareous sandstone from Dobrogea area), on the processed surfaces you can observe the traces of the processing with the garden (Figure 12), over which in another stage, was applied a brown paint. Later (probably in 1912, with the change of the owner), the restoration of the plasticity of the façade is carried out, and the base receives a plaster of imitation stone, processed in assizes and finished with a wide soffit. (Figure 13)





Fig. 12 Traces of processing on garden façade

Fig.13 Evolution of façade restoration through time

The original façade of the building is made of plasters filled with lime and sand mortar (binder/aggregate ratio approx. 1/2 according to the Physical-Chemical Analysis Bulletin, by Dr. G. Niculescu). In the area of the excavation, there was found the existence of a simplified lime plaster decoration drawn with the template, finished at the top by a stone belt profile that marks the level of the window parapets. Both the field of full plaster and the decoration drawn with the template show traces of hammering, executed at the same time as the intervention to restore the architectural plasticity of the façades, probably in 1912. (Figure 14).



Fig. 14

The current façade of neoclassical influence preserves the vocabulary of architectural plasticity despite the substantial degradations determined by the current state of pre-collapse and the inadequate and invasive consolidation interventions (like the concrete portal of the main access).



The façades have a base made of similar stone in the assize and finished with a wide soffit, being marked at the corners by pseudo-basins that end in the upper belt. The facing in the field is made of full plasters, decorated with a patterned groove. The window frames are elaborate, being made up of linear elements drawn with the template and prefabricated elements, being finished by an entablature supported by two consoles decorated with vegetal ornaments, pearls and volutes. At the bottom, the window parapet is marked by a pronounced cornice, under which there are made simplified boxes. The double windows are made of softwood, being made in two or three sashes, with a skylight made of glass mesh arranged in a wooden grid. The upper register contains the openwork panels of the the attic vents, between which are arranged simplified boxes drawn with the template, above which the cornice unfolds with the same linear decoration, being rhythmized by a succession of denticles made of plaster. The downspouts perforate the cornice for the connection with the gutters, discharging the meteoric waters directly to the pavement, but currently only their upper segments are preserved.

Stratigraphic survey

The survey was made in an area of uncontrolled exposed plaster, which however preserves traces of the old plaster (1856-1867) as well as subsequent layers of painting. Mechanical tools (scalpel, chisel and hammer) were used to execute the survey. The paint layers were progressively roughened with a fixed blade scalpel.

Observations: The stratigraphic survey on the south façade highlighted the layer of plaster and paint to mark the stone belt profile. In this way, two layers of color applied to the secco can be observed, in different stages: ochre and blue, the first being applied directly to the lime mortar.



Fig. 15 Layers of the south façade

At a careful visual analysis of the exposed facing of the façade with the main entrance (toward the courtyard), it can be noted with relative ease that the facing presents a different material on the upper part (starting with the cornice of the façade frame). The bricks used in the lower part have a format of $34 \times 16.5 \times 4.5$ cm, and the ones used in the upper part have the dimensions of $28 \times 13.5 \times 6.5$ cm. Moreover, it can be observed that the facing of the upper part has a single layer of plaster, from which also resulted the profiles drawn with the template.



Fig. 16 The elevation stage in the evolution of the building – Entrace façade

Thus, we can conclude that at the time of the restoration of the plasticity of the façades in the neoclassical style, the building was elevated, changing on this occasion the gaps to a certain extent (on the façade facing the street, one can observe the flattened arches of some gaps closed over time). As a construction technique, for the foundations there was used stone, the lower part of the elevation being made of masonry from stone piers (arranged in six asises), followed by an arrangement made of one and a half bricks, thus resulting in a thickness of approximately 55 cm for the external walls, the binder used being a lime and sand mortar, with a binder/aggregate ratio of approx. 1/2 - according to the Physical-Chemical Analysis Bulletin, by Dr. G. Niculescu.



Fig. 17 The closure of the flattened arches – Street façade



3.2. Construction C2

The construction C2, built probably in 1875, presents a facing of the façade that very probably dates from 1912, using the same vocabulary of architectural plasticity similar to the C1 construction, but poorer: the entablature and consoles on the windows, the cornice plaster denticles are missing, and the attic vents have openwork panels modest compared to those of the C1 construction. In addition, the two entrances of the building have canopies made of ornate wrought iron and glass, in an advanced state of degradation, which protect the packages of three steps arranged between the masonry parapets plastered in imitation stone. The softwood double doors in two leaves and the skylight have boards at the bottom and three glass windows each. The double windows, also made of softwood, are made in three sashes, also having a skylight. The field facing is treated similarly to that of construction C1, having horizontal patterned groove drawn in fresh plaster. The mortar used here is of a lower quality compared to the one used in the construction C1, with a composition of lime and sand (binder/aggregate ratio approx. 1/3.5 - according to the Bulletin of Physical-Chemical Analysis, by Dr. G. Niculescu).

Following the analysis of the decorative plasticity of the two buildings, where the same stylistic vocabulary and very possibly the same "working hand" can be observed, we can conclude that the façades of the buildings were made in the same stage of intervention.



Fig. 18 C2 Building

It is important to note that under the current facing of the façade of the construction C2 there are no traces of old plasters as in the case of the construction C1 (Figure 18), which leads us to consider two hypotheses regarding the building stages of the two constructions C1 and C2, starting from the premise mentioned above: 1) the construction C2 was built in 1875, a stage that also includes the restoration of the facades of the C1. At the same time, we must take into account the aspect according to which the construction C1, built between 1856-1867, shows, according to the stratigraphic survey, a sequence of interventions at the level of the façade (at least two) until the moment when the façade receive the neoclassical decorations, interventions that are unlikely to have taken place in a short period of approx. 15 years. 2) Another hypothesis - starting from the same premise (the construction C2 was built in 1875), is the one according to which the exterior finishes were made much later, in 1912 (unlikely, as it is a difference of about 40 years).

In conclusion, the construction C2 was built in 1912, the period which included also the restoration of the façades of the C1, with the change of ownership, and what is mentioned is the source according to the Historical - Architectural Study written by Ms. arch. M. Mihăilescu (the General Census of the Population and Buildings in Brăila – Municipality of Brăila, d .18/1966 – Sheet for the delimitation, numbering and measurement of buildings - no. 3), according to which "the buildings in the premises were built in 1875" regarding the construction of C2, is most likely a reference to another building, substantially modified in 1912, resulting in the current shape of the construction C2.

The construction technique is the one used in the era, using brick masonry for the foundations, the elevation also being made of brick masonry with the equipment made of one and a half bricks (format 28 x 13.5 x 6.5cm), thus resulting in a finished thickness of approximately 46 cm for the exterior walls, the binder used being a lime and sand mortar, with a binder/aggregate ratio of approx. 1/3.5 - according to the Bulletin of Physical-Chemical Analysis, by Dr. G. Niculescu.

4. THE ARCHITECTURAL APPROACH

How could the built, the full, the construction be without the spirit of the present to last? Where does the architect find it written, in the collapsed walls or in those that stubbornly resist? Could it insinuate itself past the line of walls, rebuilding what is missing or completing what would serve it further?

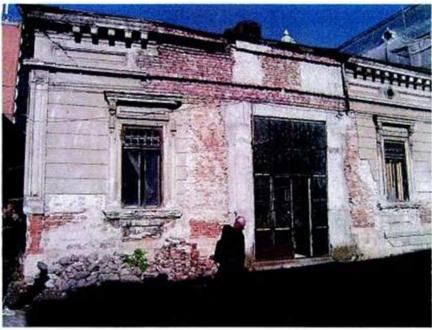


Fig.19 The current Side façade with interventions made in time



The lost canopy above the original portal door, replaced by the current industrial-type metal structure, suggests the possible failure of some subsequent intervention of no value.

Concerned with the declared symmetry of the original architectural layout, the architect seeks to give the ensemble a built impression that is subordinate to the identified compositional principle. The question is where can he set the limit of the new intervention? At what distance from the street façade or perhaps with what architectural expression? Can the physical distancing of the new intervention from the existing be enough to keep the latter alive? Or should the architectural gesture become manifest, to express itself through any accepted stylistic means, with only the stated purpose of resurrecting a building whose only chance is?

Today nature has grown inside the house, between the bricks of the walls, as if protecting the structure from erosion or even from collapse. I would like to be able to honor nature, preserve the ruin, protect the wall and build something "new" for the next generation.

"Building from the ruins represents the past and modernity embracing each other, making a promise never to betray each other. One of them turns into the other and no one is erased from history. I love the idea of the return to ruin made possible - so the new cannot be denied. This possibility gives us the opportunity to respect the past, to declare our heritage. I want to align with the original constructive gesture as a primary gesture and for this purpose mimicry helps me to reproduce the silhouette and mass of the originally existing building or the details of the decorations." [7]

Many times the project is bigger than the author. We stop and listen: the many demands of the various specialties (perhaps with a diverse educational background but certainly participants of a late show, now that the building is depressed raise their eyes to some recognition tendencies as if they now saw it for the first time with the valuable meaning conveyed for years, but, asking for the impossible), they fail to cover the voice of the house, its intention to live for the next stage, the one after the intervention, so necessary and for which its real "doctors" owners of rehabilitation treatments, architects and engineers are no longer able to save her.

In the end it is about the capacity of the existing spatial structure to absorb the newly proposed function. The original architectural concept of the house is based on the structural expression of the function and its implementation directly, in a form that results at that time, in accordance with the style of the era. The resulting spaces are part of a typology: late XIXth century housing in this specific, essentially multicultural space. To us, overtime, today, spaces seem abstract, easily adaptable, of random dimensions, even non-functional in a similar destination. We need to intervene, and the method is modern, it gives the space function and form at the same time and is able to express itself as an image in the contemporary sense, willing to reinvent itself in the event of a change of scenario, enriching the architectural part and the existing architectural elements.

5. CONCLUSIONS

The architect thinks in percentages and urban indices, changes the scale of the building, fills in the gaps, intervenes on the street profile, streamlines the calculations, and changes everything. The relationship between the empty space and the built footprint is reversed, as the architect completes the built area. The initial walls, of considerable dimensions of the ground floor, engaged in a defragmented structure, evolve vertically towards a large free space, with exclusive closures on the built limit and multiplied by the height with the maximum number allowed. The idea of the project is not defined by a single architectural gesture, taking into account, in a flexible approach, both the historical context of the building, the understanding of the historical evolution of the existing structure and the practical adaptation to the present moment, thus generating a distinct intervention strategy: the consolidation and the restoration of the existing building as an original structure, emphasized in its spatial context, with its original materiality.



Fig. 20 Ensemble view from the street – current state

Thus, the architectural intervention includes the rehabilitation of the existing, the spatial reorganization of the built footprint in terms of accessibility and use by introducing a necessary vertical circulation and expansion – a new architecture. The intervention seeks not to impose itself but to complement the whole and reiterate the architectural integrity of the buildings that existed for 150 years, in a place so representative of the city of Brăila.

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