

THE SLAUGHTER HOUSE, TIMIȘOARA, ARCHITECT LASZLO SZEKELY

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Abstract

Based on the plans designed by architect László Székely, in 1904, a slaughter house in Timișoara began to take shape. The ensemble consisted of eleven buildings set on the undeveloped part of the city between the two districts, Elisabetin and Fabric. The architect studied the German examples of the time and succeeded in designing a modern and well-equipped slaughter house in line with the national regulations established by the Animal Health Service. Due to the fact that the slaughter house designed by László Székely in Timișoara was admired and desired in other municipalities, it was no coincidence that Timișoara's architect was hired to design other buildings with the same functions in Zrejanin, Pancevo and Zombor, in today's Serbia, Kiskunhalas, in today's Hungary and in Arad. The decline of the slaughter house came in the 70's (the 20th century), once the new enterprise COMTIM started, at industrial scale, the slaughter and processed the meat into traditional products. In the 90's the slaughter house was completely abandoned and let to ruin.

The project started in 2005 during the "Restoration of architectural surfaces" Workshop held in Timișoara and organized by Unesco Venice Office – ROSTE. The research covered the mapping of present decay, materials – both original and of repairs for all the existing buildings, also the recognition of the decay causes, apart from vandalism. All the data were charted and described in drawings scale 1/100 and related to detailed photos. The conclusions of the research were kept in a complex report and a list of conservation-related recommendations was drawn.

Key words: *slaughterhouse, Hungarian origin architect, mapping decay, conservation.*

Brief history of the site

At the beginning of the 19th century, Timișoara covered the remains of a big military defensive structure. The medieval fortress and the remains of Vauban citadel were very clearly separated by their districts (Mehala, Iosefin, Maiere, Fabric) with a protected belt of 949 meters, free of buildings. The districts of Timișoara were dedicated either for dwellings or industry or both.

The second half of the 19th century brought radical changes in the urban development process. In 1868, the depth of the protected belt decreased up to 569 meters. This measure allowed the districts to expand towards the citadel. The destruction of the fortress built in 1892 would have a strong influence on the future urban development. The urban approach followed the Viennese model of concentric roads, called "rings", all around the old citadel. Timișoara underwent an extensive systematisation process resulting in the demolition of the citadel's walls and towers.

The urban plan of 1893 covered a big animal market between the two districts, Elisabetin and Fabric.

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Between 1901 and 1903, architect Laszlo Szekely proposed a new systematisation plan for this area. The architect designed two large boulevards tying better the districts.

In 1904, based on Laszlo Szekely's project, the first modern Slaughter House in Timișoara began to take shape. All the structures of the Slaughter House were built with public funds from the City Hall.

According to a comparative study of the urban plans, submitted after 1904, the Slaughter House was economically successful. It resulted in great employment opportunities. Until 1947, several dwellings were already built.

The main activity of the Slaughter House had been developed until the '70s (the 20th century) when another animal meat processing unit called COMTIM was set in Timișoara. The Slaughter House continued its activity, at a lower scale, until 1989. Following the old industrial equipment and pollution, the unit was shut down. The public property was sold out short after and some buildings were being pulled down very soon.



Image 1: Map of Timișoara on the eve of the 20th century

László Székely's architecture

László Székely was born in 1877, in Salonta, in the family of a building contractor. His grandfather, Mihaly Székely, was a successful businessman and foreman builder. László Székely graduated as architect from József Kiraly Technological University in Budapest, in 1900. One of his professors was Alojós Hauszmann who supported the movement for the renewal of Hungarian architecture and for the reinforcement of its national character by incorporating elements of folk art and details of medieval architecture; he also advised his students to use stone, as a noble material of architecture. He graduated with exceptional results in maths, mechanics, chemical technology, public building architecture, history of architecture and design. The Technical Institute offered him a state scholarship and sent him to Italy in a study visit. László Székely started working as an engineer during his studies in architecture; he worked for different companies in Hungary. As an architect, he partnered with one of his former professors – Gyözö Czigler.

In April 1903, László Székely was appointed architect in Timișoara, on the recommendation of his former employer. He accepted the job provided that he would be allowed to continue to work as an independent architect. His request was accepted, so starting with his first year in Timișoara he had his private design office.

During his long career, he designed education, public services and commerce-related public buildings as well as private structures. He built large and small blocks in the central square of Timișoara – Piața Victoriei and the workers' houses in Fabrik district. He brought in his designs specific elements of Jugend style in monumental facades and in small villas. Even if he had many contracts outside Timișoara, he remained very much attached to the city that offered him the chance, at an early age, to reach maturity as an architect.

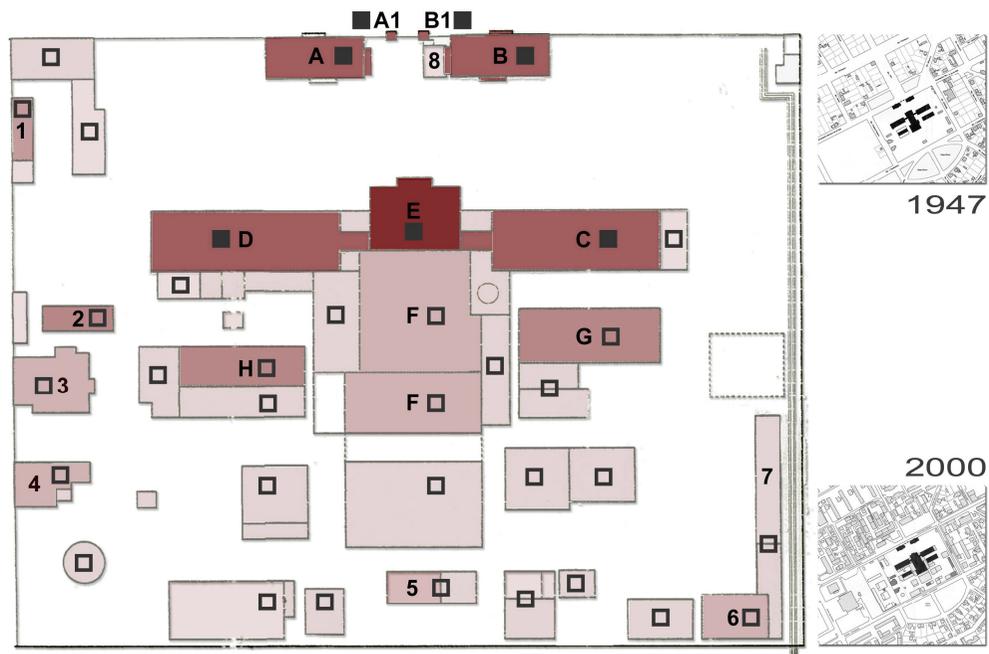
Description of buildings

According to the project, the Slaughter House ensemble had eleven buildings. Some German examples of such architecture programmes served as a model for Laszlo Szekely. The entire ensemble consisted of halls, offices and specialized buildings for production - deposits and refrigerators - and covered 37,000 sqm.

The plans of the buildings were drawn to help the slaughter process. The materials used inside and outside were selected in order to provide stability, hygiene and easy cleaning.



Image 2: The Slaughter House from Timișoara at the beginning of 20th century



	Year of construction	Function	Class of importance	Status
A1	1904 - 1905	decorative function, bordering the main gate the statue of the sacrificators with the bovine	II	existing
B1				existing
A	1904 - 1905	the residence for the headmaster	II	existing
B	1904 - 1905	administration area - office and laboratory building	II	existing
C	1904 - 1905	the hall for bovine's sacrifice and procession of the meat	II	existing
D				existing
E	1904 - 1905	the tower: • ground-floor - area for butchers • first floor - 4 apartments for office workers • tower - water tanks	I	existing
F	1904 - 1905	refrigerating area	IV	demolished
G	1904 - 1905	bovine's paddock	III	demolished
H				demolished

	Year of construction	Function	Class of importance	Status
1	between 1905 - 1947	dependency	IV	demolished
2	between 1905 - 1947	bovine's paddock	III	demolished
3	1933 - 1934	administrative area: offices and pay office (secondary gate)	IV	demolished
4				demolished
5	between 1905 - 1947	maintenance area	IV	demolished
6	between 1905 - 1947	dependency	IV	demolished
7	between 1905 - 1947	dependency	V	demolished
8	between 1947 - 1980	gateway	V	existing
Rest of the buildings	between 1947 - 1980	enclosed areas (dependencies)	V	demolished

The class of importance

- class I - the most important building
- class II - buildings with architectural value considering the ensemble, and with no value as single buildings
- class III - buildings with no special value, containing common details of the ensemble
- class IV - buildings with no value, containing a few common details of the ensemble
- class V - buildings with no value at all (appendages)

Image 3: The works for the Slaughter House began in 1904 and ended in 1905. The inauguration took place on 1 June 1905. In 2000 the degradation of the ensemble became visible

Laszlo Szekely's Slaughter House project was considered a success even from the start. For this reason, he was asked to design other structures in its kind in Zrejani, Pancevo, Zombor and Voevodina, all in today's Serbia, Kiskunhalas, in today's Hungary and in Arad (Romania).



The present research started in 2005 due to the "Restoration of architectural surfaces" workshop. This programme was financed by the Unesco Venice Office – ROSTE and held in Timișoara at the Faculty of Architecture within The Polytechnic University.

The aims of the research were:

- identification of the existing buildings, their former functions and the conservation level,
- identification of the original surfaces and the inventory of the original details and accessories,
- identification of the causes of decay
- conservation-related proposals.

The project team consisted of: Arch. Ileana (Zbîrnea) Kisilewicz - scientific coordinator and Arch. Marius Miclăuș - the site coordinator and the workshop participants: Arch. Roxana Cârjan, Arch. Daniela Florescu, Arch. Marek Kopp, Arch. Luchian Nedad, Arch. Julia Marcinkova, Arch. Răzvan Negrișan, Arch. Ovidiu Nica - which recorded the information on the place and made the drawings.



Image 4: Details of decorative sculptures made in artificial stone

The research was based on direct observation in site. The information was kept on sketches, photos and reports using non-destructive techniques on the buildings. The mapping of materials and features of the decay were kept on drawings in scale 1/100 using the method of Rolf Snethlage.

Visual inspection pointed out several weathering forms kept on drawings and photographic surveys.

The facade surfaces were visually systematically studied. Moreover, the surfaces were touched and tapped on very carefully in order to recognize also material detachments that were not visible.

The individual weathering forms were recorded on individual drawings and large photos, illustrated in images 5, 6, 7, and 8. Weathering forms developed individually or one above the other - as in the case of microbiological colonization developed on top of roughening surfaces or on surfaces with detachment on contour scaling, basically on the two sculptures of the main entrance - were noticed.

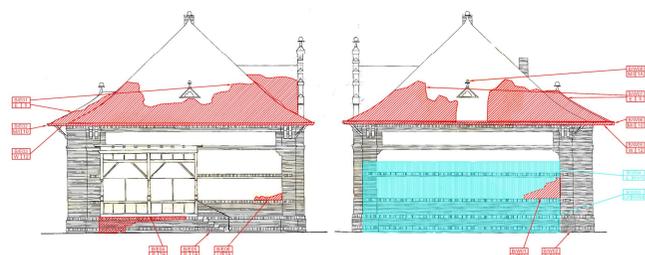
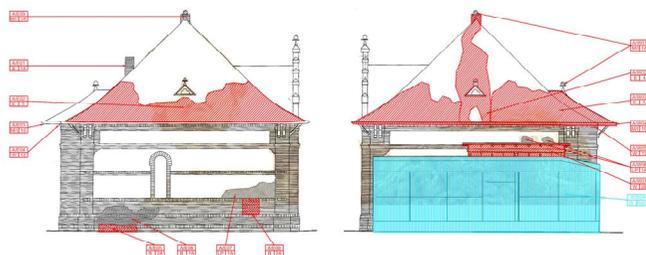
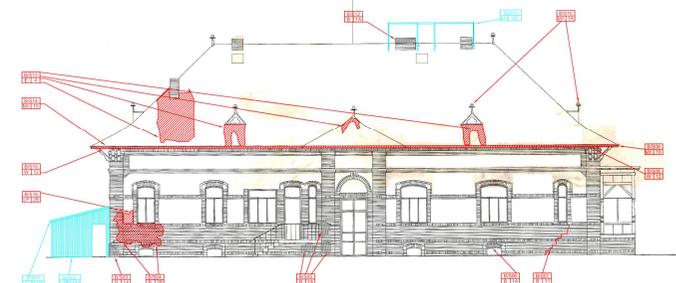
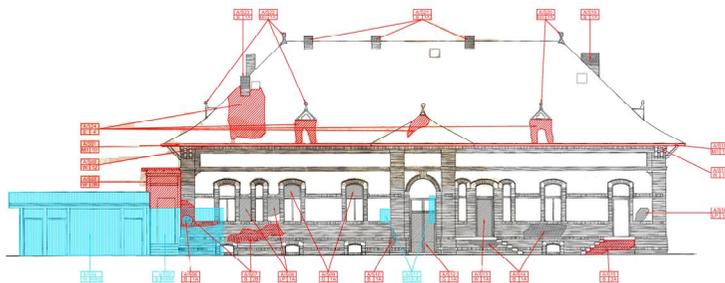
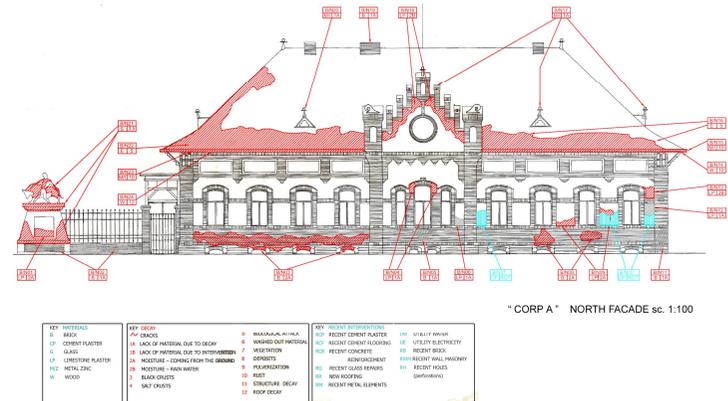
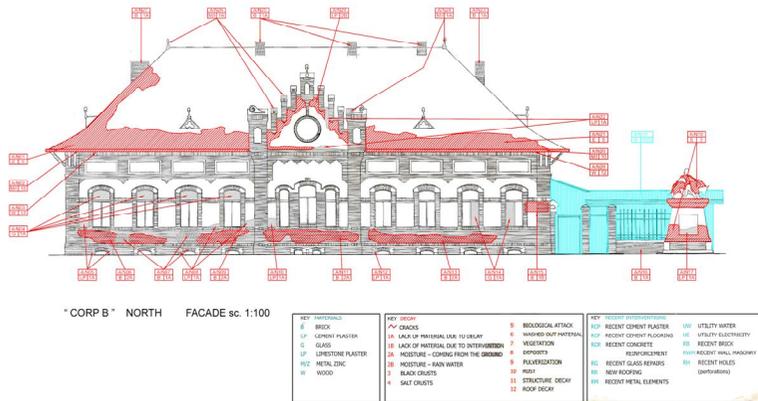
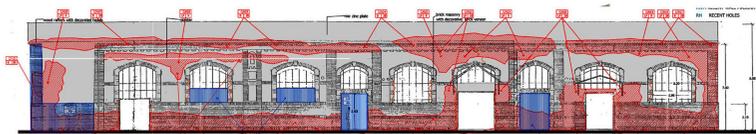
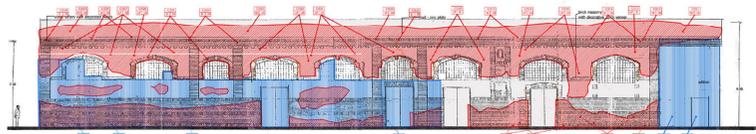
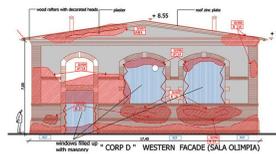
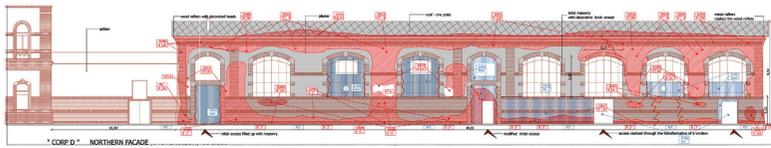
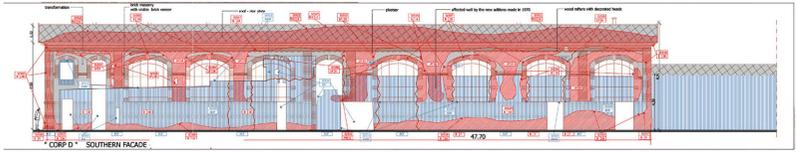


Image 5: Units A & A1 – mapping of decay, construction materials and works

Image 6: Units B & B1 – mapping of decay, construction materials and works

KEY MATERIALS		KEY DECAY		KEY RECENT INTERVENTIONS	
F	BRICK	CR	CRACKS	ICP	RECENT CEMENT PLASTER
CP	CEMENT PLASTER	1A	LACK OF MATERIAL DUE TO DECAY	ICF	RECENT CEMENT FLOORING
G	GLASS	2A	LACK OF MATERIAL DUE TO INTERVENTION	ICR	RECENT CONCRETE REINFORCEMENT
LP	LIMESTONE PLASTER	3	MOISTURE - COMING FROM THE GROUND	IR	RECENT GLASS REPAIRS
MZ	METAL ZINC	4	MOISTURE - RAIN WATER	IRN	RECENT METAL REPAIRS (perforations)
W	WOOD	5	BLACK CRUSTS	IRN	RECENT METAL ELEMENTS
		6	SALT CRUSTS		
		7	BIOLOGICAL ATTACK		
		8	WASHED OUT MATERIAL		
		9	VEGETATION		
		10	DEPOSITS		
		11	POLLUTANTIZATION		
		12	RUST		
		13	STRUCTURE DECAY		
		14	ROOF DECAY		



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		8	WASHED OUT MATERIAL		
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		13	STRUCTURE DECAY		
		14	ROOF DECAY		

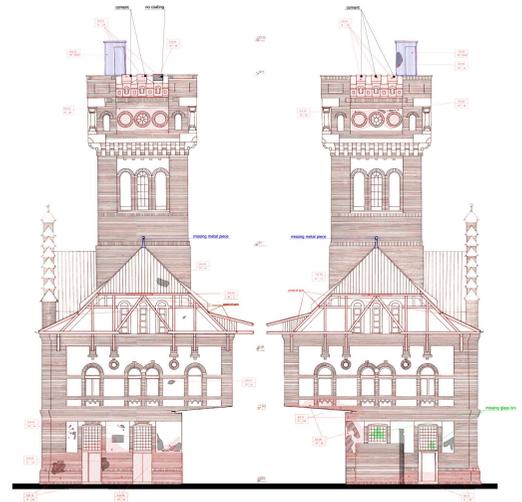
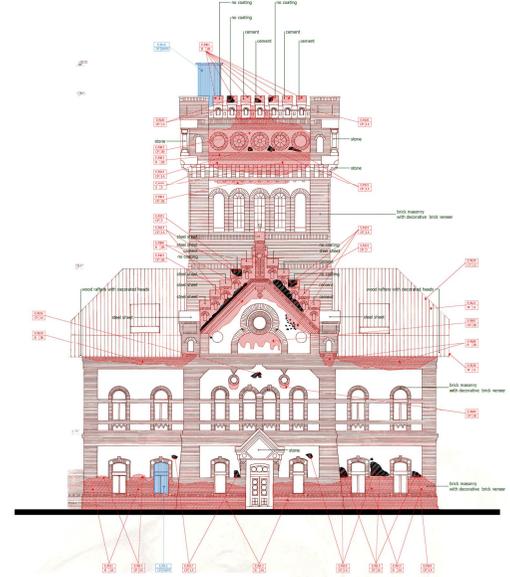


Image 7: Units D & C – mapping of decay, construction materials and works

Image 8: Unit E – mapping of decay, construction materials and works

Material	Code	Description	Images
LIMESTONE PLASTER	LP	Used for decoration of interior walls.	 
MOULDING (gyps)	Mg	Used for decoration in administrative building.	  
CEMENT PLASTER	CP	Used as material in recent interventions.	  
OIL PAINTS	OP	Used for paints in several spaces.	  
BRICK	B	On the interior walls, used for decoration (similar with the facades).	  
GLASS BRICKS	GB	Used for recent interventions on the windows.	  
FAIENCE	F	Used in rooms of processing the meat.	   
METAL	M	Used for original columns (cast-iron), new columns (steel), beams (steel), water tank from the tower (steel).	      
WOOD	W/ Wp	Used for trusses, ceiling, windows and doors. (Wp –painted wood)	  

Image 9: Table 1a - The construction materials identified within the site

BRICK	B	On the facades, bricks (painted in red) were used as decoration for base / socle, window's framing, cornice.	   
LIMESTONE PLASTER	LP	Used for decoration of facades. Color is white.	  
CEMENT PLASTER	CP	Used for the foreground of the facades.	   
GLASS	G	Used for windows and doors, and in the entrance hall of the administrative buildings.	   
GLASS BRICKS	GB	Used for recent interventions on the facades, for filling some holes.	   
METAL	M	Used for decoration of the railings, skylights on the roof, gates, crenelles.	     
ZINC	Z	Used for roof covering in several buildings.	  
STONE	S	Used for decoration of the door's framing (on the tower), of the consoles that sustain the tower and of the small columns on the upper part of the tower	  
WOOD	W/Wp	Used for rafters, for windows' and doors' framing, exterior decorative roof. (Wp -painted wood)	    
CERAMIC TILE	CT	Used for roof covering in several buildings.	  
SLATE	SL	Used as a roof covering (the original material).	  

Image 10: Table 1b - The construction materials identified within the site

Original surface

The following materials were identified within the existing buildings, as shown in Table 1:

- artificial stone - on the top of pilasters A1, B1. The two statues symbolizing the sacrifice of bovine,
- natural stone – within the A, B, C, D, E buildings, as architectural details on doors and window frames, small consoles decorating the big tower,
- hard red bricks - with a decorative role on facades, and brick structure,
- cast iron and iron – the columns and the roof structure in the production halls, fences of stairs,
- wood – decorative finishes of roof and verandas, fences of stairs,
- ceramic tiles – for the cover of the roof,
- asbestos tiles - for the cover of the roof,
- plaster finishes – for the secondary facades,
- ceramic finishes – interiors: walls and floors,
- cement floors.

High humidity and low temperatures triggered the decay of brick and plastered surfaces.

The artificial stone surfaces faced biological, chemical and physical decay, in different percentages. The biological decay resulting in microbiological colonization is permanent and very active, with large extension. The chemical decay is the result of the natural reactions of the material under the rain. The physical decay noticed did not affect the general stability of the statues. The most extended pathology recorded was the roughening followed by the microbiological colonization as a result of the non-homogeneous nature of materials as plaster, wood and ceramic tiles. Very well preserved as a material, but not as a surface on facades are the hard-red bricks.

According to Snethlage, the damage impacting upon the decorated surfaces classified in:

- A. Severe damage entailing first prevention measures:
 - a. cracks on the walls following structural damage;
 - b. rust on the metal structure;
 - c. roof decay and missing parts as a result of vandalism and fire.

- B. Moderate damage impacting upon the aesthetical side of the buildings:
 - d. lack of material on the facades following decay and occasional transformations and repairs;
 - e. disintegration into powder of plaster on the facades;
 - f. microbiological and macro biological colonization outside and inside the buildings;
 - g. salt crusts as a result of rising damp.

- C. Mild damage causing little effects on the site:
 - h. black crusts on artificial stone;
 - i. deposits of dust and smog.

Conservation-related proposals

The survey revealed the existence of new pieces of brick, filling up gaps or replacing parts of the damaged facades. The quality of these bricks was different than the original ones' but matched well in point of colour. The pathology resulted from roughening to microbiological colonization. Setting up these new pieces did not damage the original pieces from the neighbourhood. The inspection revealed that both new pieces and the mortar used around them caused no new damage in the last years within the site.

Before rehabilitation, the appropriate products, with the least harmful effect on the surfaces, similar to the original materials, had to be chosen. All products had to be tested before on small surfaces chosen by the architect.

a. Consolidation of brick and metal structure and insurance of roofs.

Decay	Code	Description	Images
CRACKS		Decay presented as discontinuity lines on the architectural surfaces.	
LACK OF MATERIAL	1A	Due to decay	 
	1B	Due to interventions	 
MOISTURE	2A	Coming from the ground - causes salts deposits and washed-out materials.	
	2B	Rain water (coming from the broken roof) - causes salts deposits and washed-out materials.	
BLAC CRUSTS	3	Hard deposit of dust, combined with the chemical altered original surfaces of the material.	 
SALT CRUSTS	4	Salt deposits left on the surfaces, by the evaporation of the water and chemical reactions of water with other elements.	
BIOLOGICAL ATTACK	5	Existence of microbiological organisms, due to the constant presence of humidity and light.	 
WASHED OUT MATERIAL	6	Damaged areas due to rain water and water infiltration.	
VEGETATION	7	Superior plants growing on the deposit of organic materials on the surfaces.	
DEPOSIT (dust, smog etc.)	8	Superficial deposits on the surfaces not exposed at rain water.	 
PULVERIZATION	9	Disintegration of the exterior layer of plaster.	
RUST	10	Rust on metal elements, due to environment condition.	 
STRUCTURAL DECAY	11	Damages on structural elements, that can affect the building.	 
ROOF DECAY	12	Structural damages to the roof and to the finishing of the roof.	

Image 11: Table 2 - Identification of decay types

b. Restoration of the original parts separately, using specific treatments adjusted to the materials' features. Previously, a pre-consolidation process of the surfaces in danger to lose material would be implemented. Following the moderate extension of the pathology recognized within the site, the areas in danger to loose material would be temporarily protected during the procedure applied on large surfaces. During each step of the rehabilitation process, these areas would be treated one by one carefully. It was not necessary to apply specific substances to ensure these surfaces.

c. Control of microbiological colonization. The recommended treatment for the brick surfaces and artificial stone covered with algae and lichens were biocides, having a long-term inhibiting effect on re-colonization. The solution would be sprayed on the entire surface, in small quantities. The first brush with smooth nylon brushes would be made paying attention to the surfaces affected by fissures and roughening. Then the treatment would be repeated again until the algae and mussels layer would be removed completely.

d. Washing the surfaces and mouldings starting from the top. Before starting this operation, sensitive surfaces should be protected by covering them with rigid panels. It was a step-based operation involving different materials as: simple sprayed water and neutral pH soap solution in order to remove the atmospheric layer of pollution. A limited amount of water would be used. The operation would cover only the surfaces affected by dust and film of soiling.

e. Removal of old fillings of cement mortars. This operation would apply only in the case of opened joints or in case of mortars detached from joints. All the gaps would be cleaned up gently in order to reduce damage. This operation required time and attention. All loose dust should be removed with clean water. If organic growth was involved, the water might contain biocide. Then the gaps would be filled up with controlled quantities of mortar at a time. The mortar used for re-pointing would contain: 1 part lime, 2 and ½ parts of sand (and optionally, 1/8 parts of white cement). All the original fillings surrounding the red bricks would be kept and conserved.

f. Consolidation of artificial stone surfaces. After testing at least 3 products within the site, the most compatible one would be chosen, taking into account its visible effect on the surface.

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