The state of Grand-Place houses at the end of the 19th century is the result of two hundred years of tumultuous history.

In 1793 the French sans-culottes removed practically all decorative elements from the façades and from the interior of the houses.

The buildings were sold as national property and they continued to deteriorate as the new owners cared little about preserving the decoration of the façades. Significant modifications like the suppression of the gables and the changing of the level of the floors were carried out.

Around 1850, the state of conservation of the façades was alarming. Pieces in danger of falling were repaired in a bad way or simply removed.

Although the City authorities calls the attention of several owners to the bad condition of their property and the need to start a restoration, only some repaint their façade or renovate decorative elements.

FIRST MEASURES

Under the mandate of the mayor Charles Buls, the services of the City undertake the first systematic restoration campaign on the façades of the houses of the Grand-Place. Negotiations with the owners were started in this direction; a convention was signed between the city and the owners.

The City finances and supervises the restoration of the façades. A tax was levied on the owners, based on the surface area of the façade. From then on it was decided that any changes to the façades would require the agreement of the City authorities.

In order to restore the original appearance of the façades, different types of works were carried out on the façades, from simple restoration to total reconstruction. The works were carried out between 1885 and 1923.

The restoration envisages the renewal of walls, the protection of masonry by applying a plaster, the protection of all horizontal surfaces with zinc, the application of white lead paint on the masonry wall and the re-establishment of the decorative elements corresponding to the state of the 18th century. The reconstruction of the façades used the same principles, but extended to the total replacement of the elements constituting the façade.

In order to define the kind of operation which each concrete case requires, a scaffolding is placed in front of the façades to be restored, from which surveys and readings are taken. The stripping of the plaster carried out during this preliminary work makes it possible to discover the original places of the disappeared ornaments, the mullions, muntins and lintels that were removed, and exposes the lower stones of the façade. This information is indicated in precise measured drawings, while copies are made of the existing damaged decorative elements so that they can be replaced.

Parallel to this archaeological research, the restorers do not hesitate to recreate the decorations,
which they considered missing, based on the analysis of the written sources and the old iconography documents in their possession.

Through these various approaches, the restorers of the 19th century try to rediscover the aspect of the façades according to the old iconography documents that have been preserved. To make these restorations, they introduce into the old structures irreversible technical changes using modern building materials.

**BUILDING MATERIALS**

A careful analysis of the façades in their current state, combined with the archived study, made it possible to identify the construction materials used by the restorers of the 19th century and to understand how they were placed.²

We can observe a significant change in the selection of materials. Mainly made out of Lédien sandstone, the façades were restored in Euville and Gobertange stone.³ The same happens with the old bricks, which are replaced by modern bricks, generally the klampsteen type. This change is explained by the gradual decline in the use of Lédien sandstone on the stone quarry and by the increasing demand for bricks which require faster manufacture, and the reduction of formats.

For specific repairs, the restorers use products such metal cement, also called Bertagna. This mixture is intended to close hermetically the joints of the stones, to repair the damaged parts and to even mask completely the defects.

In more extensive work, such as the rebuilding of façades or entire houses, metal elements —beams with a I shape, bars of square section, angle bracket, bolts . . . — are integrated into masonry walls, where they serve to reinforce the structure of the building.

The roofs are sometimes covered with tiles, sometimes with slates. For work on this part of the houses, the architects envisage the repair of the zones directly contiguous to the façades. It seems that, at that time, no questions were asked about the authenticity of the type of roof used. In addition, the complete restoration of the roof was not included. The technical prescriptions mention only the maintenance and repair of the roof.

Lead — a flexible metal not subject to corrosion but heavy and not so elastic — is the material usually used...
Le Saco 4, Grand-Place. Composed of many low-relieves and cartridges finely carved, the rich ornamentation of the façade of Le Sac was the object of detailed surveys in 1907. These drawings were made five years before the second restoration of the façade, under the direction of the engineer Jean Segers. Archives de la Ville de Bruxelles TP 97319

Figure 2

The Grand-Place of Brussels. The XIXth century restoration

...to guarantee the waterproofing of connections between the masonry and the roofs. Gradually, the 19th century restorers will prefer to use zinc, which is lighter, easier to put in work and less expensive. Because of its qualities, it is also retained for the realisation of certain decorative elements such as garlands of flowers and fruits and vases in the restoration of gables.

It’s precisely in the restitution of the ornamental elements that the restorers take the most liberties in the choice of materials. We saw that copies were taken of damaged elements. The models were made in terra cotta or plaster and submitted for appraisal by the contracting authority. And although the majority of the decorations were recreated in the stones already mentioned, a number of them were conceived out of zinc, copper, cast iron or bronze.

The fifty-three balusters, which decorated the 2nd and 3rd floor of the façade of the house Le Sac, were replaced by masonry before 1850. In 1858, they are replaced in cast iron according to the drawing of F.J. De Rons. At the same time, all the ornamentation of the gable is recreated in zinc.

In the house near by, La Brouette, the stone ornaments, which decorated the columns in the second and third levels disappeared and couldn’t be repaired with metal cement. They are done out of bronze on a proposal from the architect J Segers. The garlands and the shell which crown the niche of the same house are made out of hammered copper, as the vases which decorate the sides of the gable. Only the statue of Saint-Gilles, placed in the axial niche, is made out of white stone of Echaillon.

The main motivation for these modifications remains obscure. Reasons of economy or ease of realising the works are not sufficient to explain the options of these restorations. It seems that replacing original elements with copies and applying different materials on the façade were not incompatible with heritage preservation. It gives the impression that only the form and the visual aspect of the restored element were important for the restorers of the time.
Figure 3 3a
Archives de la Ville de Bruxelles PB D1
Gilding cannot be considered as a material in the strict sense of the term. But it constitutes a main visual element of the decoration of the façades. It underlines the principal sculptured elements and contributes to the aesthetic coherence of the decoration of the square. Judging from what the archives tell us about the state of the façades at the end of the 19th century, it seems that the application of gilding was based on a series of drawings of F.J. De Rons, supplemented by the observations operated in situ at the time of the restorations. In fact, it seems that it also met subjective criteria, guided by the concern of distributing the gilding in an equitable and harmonious way between all the houses.

The techniques of applying the gilding do not change according to the support; only the preparatory layer is adapted to each material. In the specific case of the houses of the Grand-Place, the principal supports are stone and metal. On the cleaned stone, three layers of oil paint were applied, and then the compounding and the paper gilding. As for metal, after stripping, a plaster with a layer of minium lead and white lead is applied and then the compounding and gilding.

**Partial Restorations**

For certain buildings, only a restoration of decorative elements and a repair of masonry have proved to be necessary. The building site of the *Maison des Tailleurs*, started in 1878 with the direction of P.-V. Jamaer, is a nice example of this kind of operation. The result of preliminary surveys leads to the conclusion that the façade did not present structural problems. The operation was limited to the consolidation of masonry with the application of cement plaster and the replacement of the sculpture decoration, on the basis of models carried out beforehand.

A second stage is reached with the restoration of *La Brouette, La Louve, Le Cornet, Le Renard, La Rose, Le Mont Thabor, La Balance, Le Pigeon* and *Le Heaume*. In these eight cases, the detailed surveys and tests encourage the restorers to limit the operation to the simple consolidation of the best preserved zones of the façade and to rebuild the most damaged parts, mainly the gables, and those parts were modified in an irreversible way, like the commercial ground floors.

Thus, the project of restoring the main façade of the house *Le Heaume* in 1919 results from this compromise between the rebuilding of certain parts in an identical shape and the conservation of the remainder. The masonry of levels three and four is maintained; on these surfaces, the intervention is limited to the stripping of the colour which covers the wall and the cleaning and the repair of the wall with white stone and *pierre bleue*. On the other hand, the first two levels, the entablature of the fourth and the gable are rebuilt out of Gobertange stone.

On the other hand, the sidewall presents a bad state of dégradation so that the possibility of rebuilding it is studied. After the coating is stripped in 1920, the old brick masonry, fissured in several places, reveals its weakness. The wall will be entirely rebuilt out of Paepesteen bricks and Gobertange stone, even before the restoration of the main façade.

Carried out in 1897, the simultaneous restoration of the houses *Le Cerf, Joseph et Anne, L'Ange* and *Aux
Armes de Brabant illustrates the radical technique of demolishing and rebuilding the façades, realised by the architect A. Samyn. The strongly transformed state of some of the façades does not seem to have constituted a sufficient reason to justify their rebuilding. And there is nothing to suggest that the surveys revealed the need to rebuild for structural reasons. The main motivations of the architect for the decision are not clearly indicated, so we can only make some assumptions in this matter. The desire to rationalise the operations and to conclude the building sites as far as possible probably explain this radical choice.

The choice of such an option of work implies the setting of relatively complex working techniques. If the façades of these houses were demolished in their entirety, all the binders and the floors were preserved. In order to make this operation realisable, scaffolding were simultaneously placed in front of and behind the façade. In the interior a partition wall was established 0.75 m back from the main façade. This partition wall was built in wood, the interior surface covered in wallpaper and the exterior one in bitumen cardboard. The frames of the doors and windows of the façade were dismounted and replaced in these wall partitions. On each floor, on the lower part of the wall partition a system of zinc pipes is placed to collect rainwater.

For the re-used cellars, metal beams are embedded in the masonry at the level of the cellar ventilators. This operation is intended to maintain a good connection between the preserved old structures and the new parts. This new element guarantees an adequate distribution of the load of the new façades over all the width of the foundations.

The pierre bleue is reserved for the thresholds, the steps, the framing of trap doors of cellars, the lintels, the mullions and the support of the reinforcing beams. The blocks of Euvillé stone of large courses used for the construction of the new façades were bored of holes and sealed by nailing. On each level, a steel beam is placed behind the window lintels and the floors plates, while an assemblage of metal beams and angles supports the existing binders. This method makes it possible to intervene only on the façades and guarantees the conservation of all the interior elements of the houses. This system was applied to preserve the privacy of those who continue to live in the house and not to safeguard the archaeological value of these interior spaces.

The specific problem of the buildings on the corner of the block is explained in particular for the restoration of the house Aux Armes de Brabant. In this case, the main and side façades were demolished simultaneously in February 1897. The destruction of the side wall showed the very damaged state of the ends of the beams at the height of the roofs, these parts were reinforced with steel angles of 0.12 × 0.12 m, before being put in the new masonry. The rebuilding implies moreover, the renewal of one part of the interior structures directly contiguous to the masonries, in particular the binders, the floors and the ceilings, the cross walls and the staircase. This façade is rebuilt out of brick and new decorative metal anchors are placed on the façade.

This interventionist method will be applied by the
Figure 6-6a
Saint-Barbe. 38, Grand-Place. Survey and restoration project of the façade drawn up by François Malfait, 31 January 1914. This project of Malfait reveals the grandeur of the rebuilding work of the façades. The re-establishment of the original number of spans and the old provision of the ground floor give, in the case of Sainte-Barbe, an idea of the work that was realised. Archives de la Ville de Bruxelles PB D16
architects of the City to all the buildings restored after the First World War. The reconstruction of the façades of the houses *Sainte Barbe* and *L'Ane* by F Malfait in 1918 is an example. All the old brickwork is replaced by the Gobertange stone while the thresholds, crosspieces and windows lintels are rebuilt out of *pierre bleue*.

No plaster was envisaged to protect the new façades. Certain preserved and restored façades were sometimes covered with a painting or a lime wash. This choice was probably connected with the bad state of conservation of these façades. Thus, for the house *La Chaloupe d'Or*, a new painting of the façade was recommended by the architect Jamaer but applied only in 1899.5

**COMPLETE REBUILDING OF HOUSES**

Restoration at its most extreme, i.e. the complete rebuilding of houses, can be illustrated by two different building sites—the first is the rebuilding of a small house *L'Etoile* destroyed forty years before during the enlargement of a street and the second the demolition/rebuilding of the house *Le Roi d'Espagne*

![Figure 7](image)

*L'Etoile*. 8, Grand Place. Main and side façades and plan of the house. The building was rebuilt respecting the original aspect of the house destroyed in 1853, with the exception of the ground floor. Nevertheless, the materials used are different: the structure consists of iron beams and the façades are entirely in Euville stone. Archives de la Ville de Bruxelles, Cartulaire de la Grand-Place 55

as part of a restoration operation—which are similar in the choices of materials and realisation.

The rebuilding of the house *L'Etoile* is directed by A. Samyn on a project conceived in 1863 by W Janssens.6 This building site, started in 1896, was included in the same rebuilding campaign of the façades of the houses *Le Cerf, Joseph et Anne, L'Ange* and *Aux Armes de Brabant* already mentioned.

The wall masonry of the foundations and the vaults of the porch are built in Klampsteen brick, the structure of the building is made of rolled iron beams and the roof structure is made of Northern red fir. Initially envisaged in Gobertange stone, the façade is made of Euville stone. This replacement of the kind of stone is explained on a technical level by the facility of extraction from the stone quarry and of squaring, the rapidity of delivery and the utilisation of large blocks. Those advantages were welcome in a particular historical context: the rebuilding had to be completed for the Universal Exposition of Brussels in 1897. The stones of the façades are interconnected with staples made of wrought iron placed lengthways along the stone layer and gudgeons are placed vertically. The mortar used for stone masonries is composed of two parts of hydraulic lime for one part of white sand.

The result is a building whose forms recall those of the house destroyed in 1853 but whose structure and aspect betray, to the eyes of the informed observer, an erudite intervention involving partial re-creation.

The construction at the beginning of the 19th century of the building on one corner, known as the *Roi d'Espagne*, is particularly well documented, as regards both the preliminary planning and the management of the building site.

Until the end of the 19th century, this site was occupied by two houses joined behind a unified façade. The state of this façade is the result of several transformations. Ransacked at the time of the passage of the sans-culottes in 1793, its sculpture decoration and inscriptions were destroyed. The modification of interior vertical divisions, probably at the beginning of the 19th century, disturb the architectural composition: the high windows of the first floor were transformed into two superimposed windows and the proportions of those and of the other floors were modified.

The restoration was discussed in 1897, with the
The aim of restoring the primitive decoration of the façade. In order to preserve a testimony of it, the existing state was photographed before the execution of the works. Then, scaffoldings were placed in front of the main and side façades. The plaster that covers them was stripped, a survey of the façades was made and the significant elements of decoration are copied.

The result of the examinations of the façades showed that simple restoration could not resolve all the problems of the house. Problems of a technical and economic order will end up leading to its total rebuilding. The first report established in this direction by architect A. Samyn is dated February 1898. It mentions the technical difficulties, in particular for the replacement of the cornices, which would require special support. It also mentions the difficulties related to the erection of scaffoldings that should support the enormous weight of the pillars during the demolition and rebuilding of the subjacent parts. Writing to the mayor in December of the same year, the chief engineer Putzeys mentions several problems: the present state of the façades is the result of successive transformations of the building and this situation seems to him incompatible with a return to the original aspect. Moreover, he affirms that the roof could not support the dome whose restitution is projected. For these reasons, he feels that the destruction of the building is inevitable.

Meanwhile the communal authorities try to come to an agreement with the owners of the two houses, Mr Van den Broeck at No 1 and Mr Vanderton at No 2. They give them an alternative: either they agree to be rehoused elsewhere during the period of the works, or the City proceeds to the expropriation of their property on the grounds of public utility. The owner of No 1 finally yields his house against a thirty year lease for the rebuilt house, on condition of not having to move; the owner of No 2 exchanges his building against two houses belonging to the City and recently built in the Place de la Liberté.

But the total demolition of the Roi d'Espagne presents some difficulties, because of the outdated structures and the nature of the ground. The work of demolishing the interior reveals that the common walls were in a very bad state of conservation, more serious than the preparatory surveys mentioned. The disintegration of masonry is such as that significant precautions will have to be taken in the realisation of the rebuilding work, the least slip can cause the collapse of the common walls and of the house near the foundations of the Roi d'Espagne, used as a support for the vault that covers the underground of La Brouette, are the object of particular care because compressing them could cause the fall of this significant masonry work and the collapse of the whole house. In order to prevent this possibility, the foundations planned for the interior walls are replaced by metal netting beams, embedded in a concrete plate, and the elements that are perpendicular to the gable wall passed under the common walls. The gable wall with two bricks of thickness will double the common walls of all the surrounding houses. The old façades of Le Roi d'Espagne will not be demolished before the construction of the new interior walls and of the binders.
The binder of the ground floor is realised in hollow blocks 0.25 m thick made of cement and gravel concrete of Quenast and that from the upper floors is realised in hollow *kleine* blocks filled out with gravel of Quenast with a total height of 0.20 m. To support these binders, while waiting for the construction of the new façades, metal pillars are established inside the building, against the piers of the existing façades. These pillars still exist, masked behind the interior decoration of the building. All the structure of the new building is in metal, including the floors. Higher than the value recommended from 3 to 5 m, the range of the beams is 6 m while the spacing between the profiles is from 0.65 to 0.70 m—bigger than for the wooden floors—corresponding to the standard used at the time.

The two houses, which will form only one after reconstruction, will be rebuilt in two periods in order to allow the occupant of No 1 to remain in place.

The phases are connected in the following way. The main wall of house No 2 is done up to the existing façade towards the *Grand-Place*; a provisional partition wall is placed on all the floors between No 2 and No 1. Once the rebuilding of the part corresponding to house No 2 completed, the building site of house No 1 is started. This working method means that the new façade is also built in two parts.

The work of demolishing the interior of No 2 starts in July 1900. In November, the foundations are established and the back façade is demolished. The work of rebuilding the interior can start. In 1901, the construction of the foundations of the new façade...
started before the dismantling of the existing façade. This very complex management of the operations is well described in the weekly reports of the building site. Thus for the week from 3 to 8 June 1901 it is mentioned that the new façade was built up at 0.90 m of the level of the ground floor while the binder of the attic was already placed. The works in house No 1 will not start before February 1902, according to same logic.

The reports of the building site preserved at the City archives reveal a series of details, which deserve to be mentioned for their complexity and their originality. Thus, all the old beams supporting the truss of the timber frame were initially to disappear but the contractors insisted on maintaining them because of their anchoring in the masonry of the gables of the surrounding buildings. They felt that these beams were a structural connection between the buildings, and their suppression could present risks, so they would have been partially preserved.12

The main façade is completely rebuilt in Euville stone. The architect Samyn justifies his choice with four reasons. The first concerns design of the façade: the support points are piers with a restricted section, the best form to place the stones, according to him, is the perpend.13

The second is related to the need for rebuilding the building in two phases: the multiplicity of horizontal joints could reveal an unsightly line of connection between the two parts of façade, a problem that the use of a stone offering a great height tends to minimise. The third reason is that the Euville stone allows redressing in place, which could prove to be necessary in order to eliminate the irregularities due to the compressing of construction. The fourth lies in the fact that Euville had already been retained for the sculptured parts of the façade and that the material homogeneity was then guaranteed.14

The sidewall is made out of Klampsteen bricks, except for the level of the ground floor, where the Euville stone is used. The back façades in brick are coated with white cement.

Strangely, it is the wish to return to the original aspect of the house Le Roi d'Espagne which justified its demolition. But if the means used to realise the works seem to have denied the objectives, namely the conservation of a patrimonial asset in its physical integrity, the reason should be sought in the evolution of the idea of heritage conservation rather than in an error of judgement by the restorers of the time. Once again, it is the aesthetic aspect of the building on which they intervene which worries the specialists charged with the building site, and not any other consideration.

Thus, the visual homogeneity of the Grand-Place hides a great diversity of materials and structures. The programme of restoration of the 19th century and the beginning of the 20th century had as a consequence the replacement of several façades by new structures and a very heavy intervention on a number of others. The philosophy of these choices was primarily guided by the desire to restore the aesthetic aspect of the façades; priority was given to the restitution of the
decoration elements of all the façades of the square. The preservation of the authentic materials and of the original structures apparently did not form part of the concerns of the restorers of the time. In spite of these reservations, it should be stressed that this vast campaign of restoration returned the splendour to the façades of the houses and the square regained the image of an ensemble that had been lost.

NOTES

This article was published for the first time in:
Cordeira, Paula; Hennaut, Eric; Heymans, Vicent; Lambert, Cécile; Laoureaux, Denis; Soenen, Micheline; Vanrie, André. 2001. Les Maisons de la Grand-Place de Bruxelles. CFC - Editions, collection Lieux de Mémoire. For the reference list see at the end of the same publication.

1. Examples of very precise surveys of the sculptures decorations from the houses La Brouette and Le Sac were found in the archives, as well as the photos of the models done for the bust of Saint-Aubert from the house Le Roi d'Espagne and the statues of the façade of the house Le Renard.

2. The notes which will follow are the result of the confrontation of the archive documents with the visual observation of the façades carried out during the inspection campaigns in June and December 2000.

3. The Euville stone is oolitic limestone originally from France, very much used in Belgium during the second half of the 19th century. The Gobertange stone is calcareous sandstone from Brabant, also known as bruxellien sandstone. Both are used in the façades and in the sculptural elements.

4. Invoices for the white stone supply for the new sculpted decorations of the façade (capitals, volutes, and garlands) were found in the archives of the house La Maison des Tailleurs (AVB TP 97388).

5. The exact colour of this painting containing white lead or zinc oxide is unknown. Its application was delayed by fear of possible degradation to the cement plaster caused by a very fast application of the colour (AVB TP 97387 and 97388). Beside, the façade of La Chaloupe d'Or, the façades of the Paon, the Petit Renard and the Chêne were plastered with a cement roughcast covered with an oil paint (AVB TP 63899).

6. The description presented in the tender for the rebuilding of the house gives an idea of the type of materials used (AVB TP 8611).

7. The archives do not give any information on the kind of plaster that was applied on the façade.

8. «Cement composition: one part of sand, one part of cement; one part of lime, three parts of gravel of Quenast; coat of 0.10 cm of thickness », report of the enterprise Carsoel that realised the works, 29 January 1901 (AVB TP 57644).

9. Geophysical measures were made in August 2000 to verify the existence of these metal pillars. Grégoire C., Halleux L., Van Balen K. »Mesures géophysiques au Roi d'Espagne, Grand-Place de Bruxelles« Katholieke Universiteit Leuven, 29 août 2000.

10. The metal floor made its appearance in the construction industry during the second half of the 19th century. In 1890, it had already conquered a large share of the market.


12. Report of A. Samyn and M. Carsoel, March 22, 1901 (AVB TP 57644). The two front beams (towards the Grand-Place) would have been dismounted while the two posterior beams would have been left in place. Information should be checked at the time of the disassembling of the ceilings of the 2nd stage.

13. Element crossing all the thickness of masonry; thus having two faces in the wall.

14. All the sculpture decoration is made out of Euville stone, except for the bronze statue, which crowns the dome.