

Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. Presentation in the CSAS meeting of color samples for the south façade, based on the Salvation Army flag colors. © Gilles Ragot, July 2013.

Renovation and Restructuring the *Cité de Refuge* by Le Corbusier & Pierre Jeanneret Preserving the Dual Functional and Architectural Identity of the Masterpiece

BY GILLES RAGOT

The *Cité de Refuge*, for the Salvation Army, was built in Paris by Le Corbusier and Pierre Jeanneret, in 1933. For Le Corbusier, it represented a formal, technical and mainly social architectural manifesto, as part of his idea of new society published in La *Ville Radieuse*, in 1935. Seventy years after, the building is deeply transformed because the everyday use is inadequate for the contemporary community standards for the reception of homeless and current climate standards. The challenge of the last restoration campaign (2007–2015) was to reconcile the current demanding standards while maintaining and upgrading the architectural qualities of the building.

The *Cité de Refuge* for the Salvation Army (an international Evangelic charitable organization), located at the intersection of *Rue Chevaleret* and *Rue Cantagrel* in Paris, built in 1933 by Le Corbusier and Pierre Jeanneret, has kept its original function: to shelter homeless people and help their social reintegration. Since then the building has undergone major transformations, three restoration campaigns, and suffered from lack of maintenance due to the Salvation Army's scarce resources. The organization had been eager to start major renovation works, when it joined the social housing developer 3F in 2008, which provided its financial resources and experience in project management, in return for a long-term lease.

The project management was entrusted to two architects experienced in social housing, François Gruson and François Chatillon, the latter was also Historic Monuments architect in chief. The design process was highly complex: to restore the building and its extension, built in 1975 — the *Centre Espoir* by Philippe Verrey and Georges Candilis; to adapt the building to the new missions of the Salvation Army; to optimize the functioning of the building; to adapt to fire safety standards and accessibility standards; to rationalize the way of functioning; and to be part of the *City of Paris Climate Plan*. All these goals needed to be accomplished whilst respecting the heritage value of the *Cité de Refuge*, partially protected by statutory listing since 1975. The studies began in 2009, despite the tension between *Fondation Le Corbusier* and the Historical Monuments Services, which was particularly intense due to the low consideration given to this type of heritage. Gradually a consultation process was set up within an Archaeological and Scientific Monitoring Committee (CSAS) bringing together all social and economic stakeholders. The search for a balance between social constraints and heritage issues resulted in

the restoration of the original qualities to a larger extent than the protected parts. Paradoxically, in spite of the new renovation-rearrangement modifications, the building is recovering authenticity but in a state that has never existed.

The *Ville Radieuse* Healing Machine

The *Cité de Refuge* takes its real dimension in the context of the *Radiant City* publication (1935), a functionalist city model, whose principles are stated in the *Charter of Athens* (1933–1943). In the publication, a messianic project was designed that summarized the Modern Movement Utopia: the response to society's ills solely by virtue of a new architecture and a reforming urban planning. For Le Corbusier, the *Cité de Refuge* was not simply social housing, but a healing machine that should provide “proof” of the superiority of modernity over academicism.

The building responds to the three Salvationists tasks: accommodation, meal distribution and social regeneration. The building resembles to an ocean liner aground in the heart of Paris. Behind a 1,000 m² glass curtain wall, the architects accommodated 500 beds in dormitories and small rooms as well as a nursery. In front of the glass prism, the sequence of the porch volumes, the gateway, the glass block rotunda and the lobby, solemnize the passage from the hostile city to the healing machine. Below *Rue Cantagrel*, the *Rue Chevaleret* secondary entrance opens to an interior street which gives access to the gardens, a meeting room and the liner machinery: kitchens, workshops, etc.

Le Corbusier envisage a hermetically closed controlled climate environment behind “a neutralizing wall”— Le Corbusier's terminology for the forerunner combined system comprising air conditioning and a sealed double glass wall where the panes were separated by an insulating air layer. However, behind the south glass wall, reduced to a single



01 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. South Façade Glass Curtain Wall in 1933. © L2-4-41-001 FLC/SPA.



02 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. South Façade Glass Curtain Wall in 1933. Interior Street in 1933, the renovation in 2008–2015 restored its original state. © L2-4-60-001 FLC/SPA.

pane due to budget restrictions, the poorly designed air conditioning system failed to prevent the inevitable greenhouse effect what made the building uninhabitable during the summer. After two years of stubborn resistance, facing the obvious malfunction that questioned the expected “proof”, Le Corbusier had to conform to opening a few windows to provide natural ventilation to the overheated building.

Despite the ambition that drove this experimental work, there were a number of faults: summer overheating, noisy ventilation and heating systems, fragile equipment and bursting glass blocks. The situation worsened on 25 August 1944, the day of Paris’ liberation, when a German bomb blasted almost all the glass still in place. Due to the lack of resources, timber boards and a provisional hollow brick wall, which were built behind the glass-curtain metal frame, replaced the glazing.

Half Century of Alterations and Partial Renovations

During the second half of the 20th century, the *Cité de Refuge* had three restoration campaigns in the periods 1948–1953, 1973–1977 and 1986–1991. None was either based on a consistent methodology or accurate historical and material knowledge of the work³. They profoundly altered the original materiality and blurred the intelligibility and overall coherence.

Le Corbusier and Pierre Jeanneret were in charge of the first work campaign that definitely altered the building’s image. As the Salvation Army rejected the idea to rebuild the glass curtain wall, Le Corbusier designed a conventional façade protected by a *brise-soleil*. This renunciation shows an inflection of his messianic positions as well as his inclination to explore a brutalist aesthetic that completely reversed the building’s original purist image. The intervention also covered the replacement of some metal window frames by wooden windows, gutters repair, water drain-

age, lobby repaving, replacement of glass bricks and the abandonment of the glass curtain wall facing *Rue Chevaleret* in favor of a façade divided into spandrels, sliding windows and hopper windows.

Behind the *brise-soleil*, the design and construction of Le Corbusier’s polychrome façade leaves scarce material traces to record, reducing, even today, its interpretation to hypothesis. The architect abandoned the purist palette of the interwar period in favor of the Salvation Army flag colours: dark red, dark blue and yellow ochre. In March 1952, Le Corbusier imagined a color scheme close to the Dutch principles of geometric abstraction. Though, some time later and before he went to India, he gave up the first color layout due to economical reasons in favor of a monochrome ochre facade. On his return, the yellow was painted but the color did not correspond the one he had chosen⁴. Inside, the pillars and doors were in painted faux wood and marble, and the glazing in faux stained glass⁵. Le Corbusier felt betrayed to the point of breaking off relations with the Salvation Army.

Nevertheless, in June 1960, he advised the new director of the institution who wished to restore the hall to its original colors. The work was carried out to the satisfaction of the director who in 1961, asked the architect for advice to color the *Rue Cantagrel* façade. In any case, the first color stratigraphy proved that the color scheme in white, gray, blue, yellow and red, dates from this period.

It seems that no major maintenance work was then undertaken from 1953 to 1970. In response to the concerns about a new restoration campaign, assigned to Ph. Verrey, the facades and roofing of the entrance hall, as well as the stairs linking the hall to the interior street, were protected by statutory listing on the 15 January 1975. The building’s condition was devastating; the work of this second campaign concerned in particular the restoration of parts altered during the war, the replacement of French style win-



03 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. South façade in the early 1970s with a *brise-soleil* installed in 1952. The volumes of the two upper floors were to be restored in the construction works of 1973–1977. © L2-4-43-001 FLC/SPA.



04 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. South façade before the last restoration work. On the left-hand side the slice of the original 1933 glass facade and the balconies redone at an unknown date, though after the death of Le Corbusier. © Gilles Ragot, 2012.

dow frames, the cleaning of the *Rue Cantagrel* façade colors, rebuilding the glass block walls, replacement of many chassis, and changing terraces railings. The volumes and the general appearance of the upper part of the building were reinstated. The 1952 brutalist façade was already the subject of changes: some fixed parts were replaced by casement windows and the faded polychrome painting had to be redone. In the absence of meaningful archival traces, and any serious study or survey, the 1975 colorful face lift lacked legitimacy and authenticity, but it lasted as the building's image. The most important change, however, concerned the façade color (facing *Rue Chevaleret*), which had never been previously painted any color other than white. At the same time, Ph. Verrey and G. Candilis were in charge of the *Centre Espoir* extension, designed without pastiche in a Corbusian spirit and with polychrome painting consistent with that of the *Cité de Refuge*, a source of misperceptions to uninformed visitors.

Less than ten years later, the third reconstruction phase, performed by Ljubomir Nikolic from the ARENA practice, consisting of an upgrad due to new regulations, substantially affected many aspects and the materiality of the building. The construction work focused on: the replacement of the timber structure to *Rue Chevaleret* with aluminum structure; the substitution of *Rue Cantagrel's* timber casement windows with aluminum sliding windows over a light timber spandrel; the painting of the *brise-soleil*, and the reconstruction of the entrance gateway. Only when the works had been finished, did the *Fondation Le Corbusier* realize what had happened.

Routine maintenance and sporadic renovations took place one after the other from 1992 to 2001: including the reception desk alteration; stairwell closure; fire doors installation. In 2001, the Salvation Army launched a new upgrading program comprising *Cité de Refuge* and *Centre Espoir* with the purpose of improving the residents' living

conditions. A team of architects with little experience in the field of modern heritage renovation was hired⁶. The proposed scheme didn't accomplished the best conservation practices, which the *Fondation Le Corbusier* strongly deplored. Finally, the project was aborted, not because of the criticism, but because the Salvation Army could not afford the expense alone. For this reason the Salvation Army joined the 3F group.

Towards the Application of Good Practice

During the 2009 competition for prime contractor selection, Chatillon Gruson noted the "understandable" concern of the Salvation Army "not to see the 'social action depleted by the' heritage protection action"⁷. The winning architects assumed this concern as a priority. Nevertheless, the social project underlies the Heritage project for which there is no funding. As the *Cité de Refuge* retained its original function it was possible to direct social housing subsidies to the renovation of the heritage-protected areas, and even further.

Firstly, the project management refused to divide the *Cité de Refuge* and the *Centre Espoir* into "minor spaces that can be sacrificed to comply with regulation and renowned major spaces which should not be touched, only conserved"⁸. Due to the number of regulation constraints — environment, fire safety, disabled access — they shifted from a comprehensive approach in favor of sacrificing the *Centre Espoir* in order to preserve the *Cité de Refuge*.

The architects refused a doctrinal approach. Their reasoning was based on a hierarchy of priorities, the first being to know for whom the restoration-reconstruction is directed towards. In the first place, comfort, respect and dignity for the inhabitants as well as the provision of good working conditions, guided all the decisions. Secondly, the hierarchy of priorities varied according to the situation in order to highlight materiality, the visual aspect and the spirit of the masterpiece. Gruson and Châtillon were prudent about the



05 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. Dormitory before the last restoration work. © Gilles Ragot, January 2012.



06 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. Presentation of samples of glass tiles, during a CSAS meeting. The tiles were made according to a 3D scan of the 1933 pavement. © Gilles Ragot, January 2012.

terms “reference state” and authenticity, especially because it is a building that had been profoundly changed, including by its original architects. However, two reference states appeared to be legitimate: the building configuration after completion in 1933, and at the end of the first renovation, which was entrusted to Le Corbusier and Pierre Jeanneret. These two reference states have slightly different designs and are overlapped in a complex way, namely at the south façade facing *Rue Cantagrel*. That façade had been substantially rebuilt in 1952 but there still remained there a slice of the 1933 glazed façade and the balconies that had been redone at an unknown date. The architects practical reconstruction approach thus combined: invention in order to meet the new standards of care, particularly for accommodation; restoration to the original form of the parts from 1933 or 1952, including parts that were thought to have been destroyed and that were rediscovered during the construction work; and interpretation when archives and surveys did not provide a clear answer to a question, as in the research for the exact nature of the polychrome facade of 1952. This pragmatic approach resulted in the creation of a state that had never existed, not an ideal state under Viollet-le-Duc’s sense of the term, but a state resulting from the desire to reconcile the restoration of heritage values with social issues, regulations and the client’s budget.

The last reconstruction phase was based on the full knowledge of Le Corbusier’s archives, the Salvation Army archives, and public archives, which had been explored during the preliminary study (2009–2010). However, it had lacked a thorough analytical survey of the three previous renovation works and countless modifications or alterations introduced over time due to maintenance and user requirements. The absence of this survey was one of the reasons for the mistrust in the relations between the project stakeholders and the sponsors in the period 2009–2011. These relationships evolved when, at the request of the City of Paris⁹

and on the recommendation of the *Direction Régionale des Affaires Culturelles* (DRAC) (Regional Directorate of Cultural Affairs), the *Commission du Vieux Paris* (the Commission of Old Paris) and the *Fondation Le Corbusier*, 3F set up the CSAS. Its purpose was to provide room for debate among a group of experts on heritage conservation and on the work of Le Corbusier to mediate the different options for conservation and restoration of the building. Even the architects in charge of the project admitted the CSAS was instrumental in the establishment of good practices of restoration and renovation. The CSAS moderation was entrusted to Vanessa Fernandez, consulting architect, already co-author in 2010 of research, which was complementary to the preliminary study, on the climate aspects of *Cité de Refuge*¹⁰.

In order to maintain the residents’ accommodation during the construction work, the work was organized in two phases, the first starting with the renovation of the *Centre Espoir* in December 2011. This phasing, as well as the delay caused by the discovery of asbestos in the two buildings, extended the time for reflection on the *Cité de Refuge* and for a real dialogue within the CSAS. In 2014, a “route” sub-committee was created, long before the opening scheduled for late 2015, to consider another category of user — the public visitors — in full respect for the dignity and anonymity of residents. Thus the *Cité de Refuge* renovation is not the result of an established doctrine or the setting up of a project based on a systematic prior analysis of archival sources and building, but the result of a constant adaptation to the actual construction site conditions and of finding solutions to the problems that the archaeological findings posed.

Create • Renovate • Interpret • Restore

In recent years, the two buildings have been grouped under a single name: Center for Accommodation and Social Reintegration (CHRS) of the *Cité de Refuge* — *Centre Espoir*. Thus the contractor legitimately considered the two buildings as



07 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. The building is cleared, behind the *brise-soleil*. © Gilles Ragot, January 2015.



08 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. The construction work on the 7th and 8th floors permitted a return to the original interior and exterior volume of the director's apartment. © Gilles Ragot, January 2015.

09 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. To restore the profiles of metal frames of the 7th floor, as closely as possible to the original, a solution of invisible interior vertical stiffeners was adopted. © Gilles Ragot, January 2015.



10 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. Installation of timber window frames painted in yellow. © Gilles Ragot, January 2015.

a single entity. During the design process, Gruson and Chaitillon concluded that the social and legal constraints were incompatible with the safeguarding and restoration of the *Cité de Refuge* heritage values, so they chose to preserve the work of Le Corbusier and Pierre Jeanneret, protected as a historical monument and with worldwide historical recognition, to the detriment of the building designed by Candilis and Verrey¹¹. This decision, contrary to the original strategy advocated after the 2009 consultation, helped to free *Cité de Refuge* from the environmental Climate Plan constraints and as well as the constraints related to disabled access¹². This solution fully assumed by F. Gruson, who was responsible for this part of the CHRS, led to a significant change to the internal organisation and facades of the *Centre Espoir*, despite tense discussions with the Architect of the Buildings of France and criticism from the *Commission du Vieux Paris*, and some architectural periodicals¹³.

The desire to restore a functional coherence to the whole CHRS resulted in the redistribution of functions and in the

improvement of the passage from one building to the other by creating a new staircase volume, facing *Rue Chevaleret*, to link the corners of both buildings. The two entities are now, functionally speaking, a single unit, though from a heritage and architectural point of view, the gap is widening between the two main buildings of the CHRS.

The design of single bedrooms provided with bathrooms in the *Cité de Refuge* is the most invasive and destructive action undertaken in the original spaces, including the demolition of some original parts. The reconstruction work permitted the clearing out of the building, providing views similar to those of the construction site of the thirties, where bare slabs and concrete frames evoked the potential contained in the concept of the “free plan”. The rehabilitation of the *Cité de Refuge* accommodation benefited from this potential once again in the redesign of the bedrooms that provide each resident with the comfort and dignity they are entitled. In response to the constraints relayed by the CSAS — to conserve the corridors and original distribution of doors and to



11 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. The staircases are opened to provide the original spatial fluidity. © Gilles Ragot, 2015.



12 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. The staircase leading from the lobby to the large meeting room on the ground floor, protected by listing as a historical monument in 1975, was restored to its original form in February 2015. © Gilles Ragot, 2015.

13 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. Unblocking the stair opening between the entrance hall and the ground floor below. © Gilles Ragot, 2015.

14 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. Unblocking the stair opening between the entrance hall and the ground floor below. © Gilles Ragot, 2015.

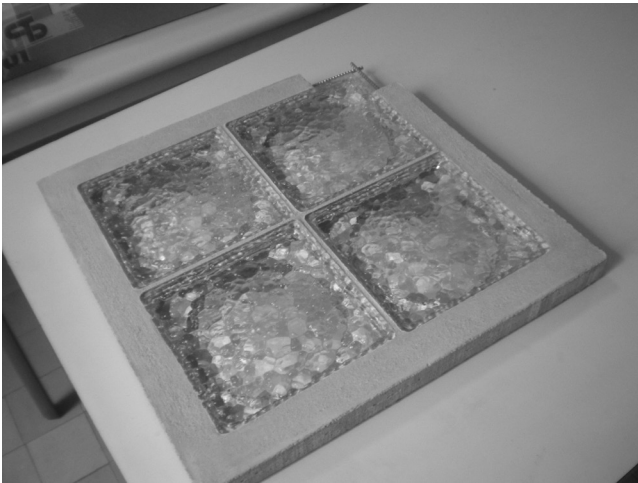


maintain the concordance between the partition walls and the south facade of 1952 — a deviated partitions solution is adopted to fix the partitions to the façade components.

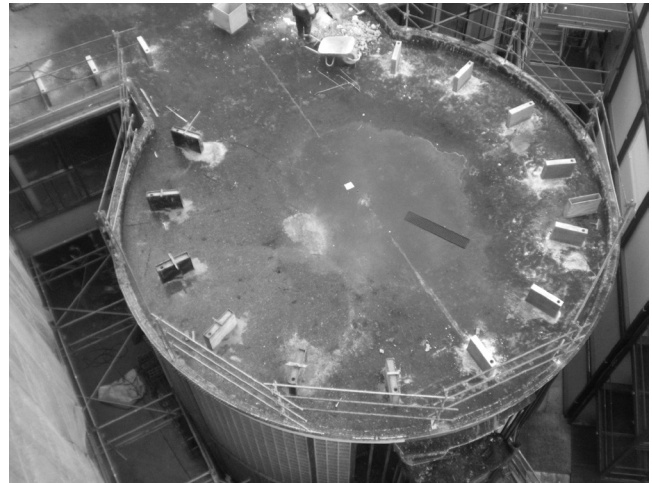
These components are entirely remade in timber — the material adopted in 1952 by Le Corbusier and Pierre Jeanneret — according to the original design whilst incorporating double glazing. Renovation and interpretation are combined to maintain the proportions of the frames and restore a polychromy, about which there was no certainty, except that there was no documentation or investigation that justified the 1975 color scheme. In addition, not a single original painted item of the 1952 facade remained in 2008. Chatillon assumed the responsibility of proposing a color palette inspired by the Salvation Army flag colors that Le Corbusier wanted to use. However he explored a third way consisting of an interpretation of the tones of the flag, with the purpose of harmonizing them with the raw entrance porch colors and adapting them to the perception that we would have in the brise-soleil shadow¹⁴.

Outside and inside, the restitution of protected parts was important. A study conducted by V. Fernandez and Bénédicte Gandini, a consulting architect from the *Fondation Le Corbusier*, helped to reproduce the polychrome Desagn glass tiles which gave bright and vibrant colors to the porch; rebuilt an identical replica of the access gateway; systematically replaced the non-original and non-complying rotunda glass with reproductions obtained from 3D scans of the original pavement; repainted the original colors in the hall and stairs, on which there were recent archival and stratigraphic studies; cleared the skylights and demolished the staircase walls leading to the lower ground floor level, thus giving back the fluidity of space in accordance with the spatial qualities of 1933.

On the first floor above the lobby, the reading room area, unprotected in 1975, regained its original appearance as well as the patios, which had been gradually filled in by subsequent additions. Other unprotected sectors can also be found in a condition close to their initial configuration state,



15 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. Presentation of samples of glass tiles, during a CSAS meeting. The tiles were made according to a 3D scan of the 1933 pavement. © Gilles Ragot, 2012.



16 Le Corbusier and Pierre Jeanneret, *Cité de Refuge*, Paris, France, 1933. The rotunda roof will not be open to the public in order to avoid the installation of railings that were originally not there. However planters are rebuilt identically. © Gilles Ragot.

especially the “interior street” of the lower ground floor where the construction works uncovered the old kitchen walls with their original metal window frames behind the layers introduced in recent decades. Deformed by successive transformations but also by the use as a garbage room, the interior street praised by all architects and historians as a modern highlight of the interwar period, recovered a high level of authenticity, by pushing away the obstructing containers which are now stored in the *Centre Espoir*.

Compliance with fire safety regulations was one of the toughest battles between the architects and the CSAS. The enclosure of exits, the installation of fire doors or smoke curtains in the halls, stairs, or in front of the reading room, would have destroyed the desired spatial fluidity created by Le Corbusier and Pierre Jeanneret, which Theo van Doesburg and Jean Badovici labeled “space/time” and that Le Corbusier renamed simply “architectural promenade”. A precise study of the smoke extraction and the commitments made by the CHRS manager on the use of certain public areas, helped avoid invasive solutions that were contrary to the preservation of its architectural properties. Finally, many details of heritage value to the building could be saved by defining, with the client and the authorities, all those elements that could escape the requirements of the ten-year guarantee, considering a fair assessment of the risks involved.

The restoration-restructuring of *Cité de Refuge* was not the application of a doctrine but a negotiation between all the involved stakeholders. To change the original assignment of this building, which is known around the world for its architectural values, in order to faithfully reproduce its 1933 state, or that of 1952, would have been a nonsense and contrary to its primary significance: to be a “machine to heal”. The purpose of preserving the original function meant reaching a compromise, which does not mean an absence of convictions, but the ability to sustain strong ideas in a responsible, civil and democratic debate. ■

Notes

- Essay translated from the French by Joana Gouveia Alves.
- 1 François Gruson Opéra practice was the architect in chief of the entire operation.
 - 2 The Plan Climat is a program whose purpose is to promote energy efficiency in new and renovated buildings and was adopted by the Paris Council in October 2007.
 - 3 Nevertheless since 1981 there is an excellent monograph by Brian Brace Taylor, *Le Corbusier. La Cité de Refuge. Paris 1929/1933*, L'Équerre, collection «Repères», Paris 1981.
 - 4 Le Corbusier's letter to Irène Peyron from the 31st July 1952, FLC J2-10-25.
 - 5 *Idem*.
 - 6 Pierre Iranmher and Béatrice Laroque architectural practice.
 - 7 F. Gruson et F. Châtillon, *Proposition d'Étude. Note d'intention, manuscript*, 03/03/2009, p. 4.
 - 8 *Idem*.
 - 9 The creation of the CSAS Committee was a requirement of the building permit requirement, in July 2010.
 - 10 Vanessa Fernandez, Emmanuelle Gallo, *La Cité de Refuge de l'Armée du salut à Paris — Le Corbusier. Rapport sur les Problématiques Climatiques de la Cité de Refuge; Parois Vitrées et Systèmes de Chauffage & Ventilation*, Study commissioned by François Châtillon, architect in chief of historical monuments and Opéra/François Gruson, arch., Paris, December 2010.
 - 11 For a period of time the idea of demolishing the *Centre Espoir* was on the table, but soon it was abandoned since a new consultation process would have been required.
 - 12 This solution restricts equitable access to the ground floor areas.
 - 13 See the minutes of the plenary session of the *Commission du Vieux Paris* 16/12/2010, p. 2–9; the article by Jeanne-Marie Dumont, “For the Cité de Refuge”. *Archiscopie*, No. 123, June-September, 2013, p.23–24; and that of Hubert Lempereur, “La réhabilitation préoccupante de la cité de refuge et du centre espoir”, *AMC*, No. 221, February 12, 2013, p. 18-19.
 - 14 The intermediary solution was approved by the CSAS, against the opposition of the *Fondation Le Corbusier* that preferred a restoration according to the principles of 1952 based on recent research. See the CSAS meeting minutes 12/12/2013, p. 2.

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