

# Elaboration of a Critical Paradigm for Interpreting Modern Architecture: The Almost Intangible Essence of Luigi Moretti's Casa del Balilla at Trecate



Salvatore Damiano and Eleonora Di Mauro

**Abstract** Modern architecture is not, from a lexical point of view, uniquely definable. The heterogeneity of the twentieth century heritage is therefore a collective wealth that should be protected from the risk of falling into oblivion. In order to avoid this, it could prove fundamental to establish a process of the knowledge of these assets. This should not, however, result in a simple and passive recording of architectural facts: a deep understanding of the complexity of modern architecture, which has as its objective the protection of buildings, could be obtained, for example, through a real and proper decoding of signs, conducted by a critical use of the metalanguage most congenial to the architect: the drawing. This is what was attempted with Luigi Moretti's Casa del Balilla at Trecate. After the war, the building was seriously and repeatedly altered causing it to definitively lose its original structure. So, an investigation is proposed. When proceeding from the original project drawings as a starting point, the application of instruments of the science of representation are seen: drawing, relief, three-dimensional modeling and graphic analysis. These are the means to understanding the concept of modern architecture materialized at Trecate by Moretti. Digital technologies, therefore, would be fundamental to revealing/detecting the profound reasons of a lexicon with all its facets, be they morphological-structural or spatial, in a unitary logic of architectural design understood as an intangible process of ideas, here reconstructed according to an inverse trajectory with respect to that adopted by the designer. The desired goal is to render virtually tangible the essence of an architecture that has become intangible, due to the absence of knowledge.

**Keywords** Modern architecture · Luigi moretti · Tampering · Three-dimensional modeling · Graphic analysis · Drawing

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# 1 Approaching Modern Architecture by Means of an Example: The Casa del Balilla by Luigi Moretti at Trecate (*Salvatore Damiano*)

## 1.1 *A Critique of the Modern Architecture During the Modern Period*

This is a dissertation on an Italian story, or rather, an inevitably exegetical narration of a specific story, chosen from the numerous ones possible. This is because it is considered emblematic as it plastically represents that concept of modernity in architecture which flees from all intentions of a universalistic nature by distinctly declining itself as being far from what, in globalized language, is usually described with the term “mainstream”.

With this paper we wish to attempt to deal with the great historical-epistemological question, avoiding as much as possible a purely “general” approach to the aforementioned theme, in favor of adopting a key to interpretation which is capable of penetrating the very essence, the tangible manifestations of those current ones, or rather, constructed architecture. The choice of starting from concrete results, rather than from conceptual preludes, inclined us towards the study, as already mentioned, not of any modern building but of an architecture obviously from the twentieth century, the project of which was most probably a criticism of the pure conception of modern architecture as traditionally understood. The chosen case concerns a building constructed in Italy, at Trecate (a small town between Milan and Novara), at the beginning of the 1930s: *Casa del Balilla*, designed by one of the most important Italian architects of the ‘900, Luigi Moretti. Roman by birth, Moretti is most often described as one of the many competent designers attributable to what scholars commonly define as Italian Rationalism. The very name of this movement can help us understand what relevance official criticism has attributed to all those achievements that can be placed mainly in the four decades between the two world wars, that Italy can include in that vast and heterogeneous seat of international modern architecture. Although this is not the most suitable venue for discussing the complexity of historical events and all the related implications that characterized the course of Italian architecture in the twentieth century, it is believed that an account of Luigi Moretti’s professional career and his project plans, specifically in relation to Casa del Balilla at Trecate, may represent an extremely significant segment from various points of view that we will try to explore in this essay.

The Roman designer, in fact, was a lover of past architecture, an interest probably matured during his collaboration at the university Chair of Vincenzo Fasolo, a Dalmatian architect and engineer, one of the founders of the first faculty of architecture in Rome, historian, scholar of drawing, as well as, architect of the *Fabbrica di San Pietro* and academician of *San Luca* (considered, among other things, the inventor of the method of graphic analysis). It is no coincidence that Moretti in his writings speaks of “crossings” in the history of architecture, perhaps meant in an operational

sense, that is, a real reversal of the examples from the past into the problems of the present [1]. His sense of history, however, a characteristic constantly maintained throughout his forty years of design, never becomes mere historicism [2]: Moretti observes, studies architectural texts of the past, attempts a profound decoding, a sort of reduction of the abstract sign, of the mathematical law that governs its forms. For the Roman architect, the project is nothing more than the transposition of those principles found (which almost rise to the category of the spirit) in the most modern architectural construction possible at that time, his own.

The Borrominian Baroque probably constitutes for Moretti a sort of invariant guide that outlines the spatial concatenations of his buildings, as happens in the Casa del Balilla at Trecate, starting from the large double-height entrance hall – with the two parallel stairs and an upper gallery – already revealing the possible passage ways, subtending and introducing the other spatialities of the building, the gymnasium and the directional wing above all, in a logic of transitive co-linking. For Moretti, architecture is a balance of an inter-relational system of plastic, luministic, spatial and constructive values [1, 3], in which, however, the linguistic results are not of primary importance [1].

If the buildings of the very early 30s refer to an eclecticism then in vogue in the capital and the E42 Grand Theater (1938, never built) refers to Hellenistic architecture, so it is reasonable to assume those more or less evident similarities between Casa del Balilla at Trecate and the manifesto building of Italian Rationalism, namely the Casa del Fascio in Como by Giuseppe Terragni, the construction of which took place in the same period. Moretti may have seen perspective drawings of the Larian building at least in regime publicity, a fact that would support the thesis according to which the Roman architect, although the language did not really interest him, paid close attention to the debate on architecture in progress that moment in Italy and abroad [1].

The Casa at Trecate, unlike that of Piacenza, the Roman offices of the Opera Nazionale Balilla in Trastevere and Foro Italico (all by the same designer), is a compact building of which the restrained stereometric articulation of the exteriors contrasts with the idealistic juxtaposition, which Moretti himself defines several times in his writings as “negative volumes”, that is, the internal spaces in succession, understood as solids, conformed similarly to the material they oppose [1]. Surfaces thus play the double role of limit in which the energies that pervade the space condense and are perceived and, at the same time, as exalting elements through the transfiguration of themselves, of the “values” of the work [1]. This concern over space generates an indirect effect of no secondary importance; one of the fundamental characteristics of regime architecture, namely the celebratory theme, at Trecate does not appear to be so exasperated at the risk of seeming unreal, as perhaps happens with other designers, but is purified and reduced to the essence of the pure compositional principle, or rather to the dimensional relationships or to the juxtaposition of shapes or textures [1].

The facade on Corso Roma, in fact, while not renouncing a certain amount of grandeur and visual strength, is free from vain or sterile monumental austerities for two fundamental reasons: the first is attributable to the marked horizontality that

the building materializes in the street in which it stands, as if to ideally indicate a bi-directional flow; secondly there is the symmetrical question, not understood from the point of view of Euclidean geometry, “but as the focal point from which the formative force, seed, of space departs” [1, 4].

This attention testifies, in addition to the aforementioned lack of interest in language, to an absolute detachment from typological-formal themes. The Casa at Trecate is different from all the other Balilla buildings designed by Moretti. Each architectural work is a case in itself, devoid of any type of intentional serializing (a concept that can be extended to all his works) or of the desire to institutionalize any architectural genre, unlike what happened with other rationalist architects [2]. From this point of view, the comparison between the conception of Moretti and that of Giuseppe Pogatschnig Pagano could be quite eloquent, in that the proximity of the latter to the Gropiusian positions stands out, not only with regard to the attention to what is ancient and to history in general, but also to rationality, otherwise functionality, or that is, the component of the Vitruvian triad that takes the name of *utilitas*. In fact, when Moretti defined architecture as “both reality and representation”, he meant it as an expression of a need for “overcoming, not disavowal, of *utilitas*” [1, 4]. In fact, the Roman architect did not skimp on his harsh criticism of contemporary architecture of the time (rationalism), which he described as “conceived only graphically, like a pure and simple projection of the design”, whose character could only be “unreal” [1].

Today, with the multitude of studies published on the subject and with the instruments at our disposal, it should not be at all difficult to make a critique of modern architecture, but are we sure that in the 1930s, therefore ninety years ago, it was the same? Luigi Moretti certainly did so through his writings, enunciating his theories on the composition of spaces (which he would later clarify after the war with his studies on parametric architecture), but we could say that he carried out his convictions above all through his architectural projects. The Casa at Trecate, with its compositional-syntactic-spatial logics is in all effects a critique of modern architecture, that modern architecture which believed it was doing without the past, the treasure of experience accumulated by the great architects of past centuries, perhaps believing that architecture should only be functional, or that it was sufficient to create a “Mediterranean” variant of Teutonic rationalism. A criticism expressed not only through the verbal text (his memorable writings are the most evident testimony in this sense) but also and, perhaps above all, with the architectural text, that is, with his projects – and this probably contains all the extraordinary character of the work of Moretti – realized not in retrospect, or decades and decades later, but during the most prosperous season of modern architecture.

## 1.2 *A Possible Methodological Model for a Deep Analysis of Architecture*

The critical-interpretative approach that we want to adopt in studying Luigi Moretti's Casa del Balilla at Trecate gives to the Drawing, in its many meanings, a primary role in the general dissertation: obviously, it is not the intentions of the writer to reduce everything to a purely projective problem, although it should be noted that the transposition of the actual three-dimensional architectural phenomenon into a two-dimensional image may have constituted a not insignificant part of the research. It should also not be forgotten that in the re-drawing phase a selection was made of a limited number of data from all those collected during the observation of the original project drawings and images of the building (Fig. 3), both of that period and present (a very large part of the documentation mentioned is kept in the *Archivio Centrale dello Stato*, in Rome, in the EUR district). This work of cataloging all the elements deemed suitable to direct attention to the aspects already partially raised in the previous paragraph was essential for the subsequent phases of the investigation. Precisely for these reasons, also given the importance that the designer Luigi Moretti attributed to the concept of space in his architecture, it was considered almost imperative to study the Trecate building through a number of sections equal to at least the number of significant moments that characterize the spatial development (Figs. 7, 8, 9, 10, 11, 12, 13 and 14): as if they were real snapshots of a passage inside the architectural building, such sections (which we purposely propose both in orthogonal and perspective projection) as a form of the meaning of architectural space [5] restore to us the relationship between external covering and internal environments, as well as the play between light and shade. They also allow us to understand the spatial connections between the various levels and the relationship of the building with the ground and conversely with the celestial vault [6]. As far as the communicative effectiveness of drawings and images is concerned, a further aspect to which much attention was paid was also the choice of an adequate graphic code, or the way in which the results of the research are expressed: for example, the reasoning described above on architectural space must be corroborated by the virtual restitution of the digital three-dimensional model of the building, which in this sense is more than intelligible; or, in the case of graphic analysis, to understand the geometric-proportional matrices that govern a plan, it is necessary to be able to distinguish the sign of the regulatory graphs from the line that indicates a possible sectioned wall or the projection of a body placed in the background and not affected by the section plane. In other words, every concept that we want to recount with the drawing must correspond to the use of a congruous graphic language, which makes the concept itself understood to the observer. This reinterpretation of Luigi Moretti's building at Trecate is configured as a combined application of what are sometimes referred to as the "instruments" of the Science of Representation, namely Drawing, Surveying, Cataloging, digital three-dimensional modeling and graphic analysis. It is precisely the latter that we want to recognize a non-marginal exploratory potential, so much so that we consider it as an indispensable method for a profound understanding of

the work through an orderly decomposition of its parts, in order to be able to decode all the relationships that bind each of them to the other and to the whole [7].

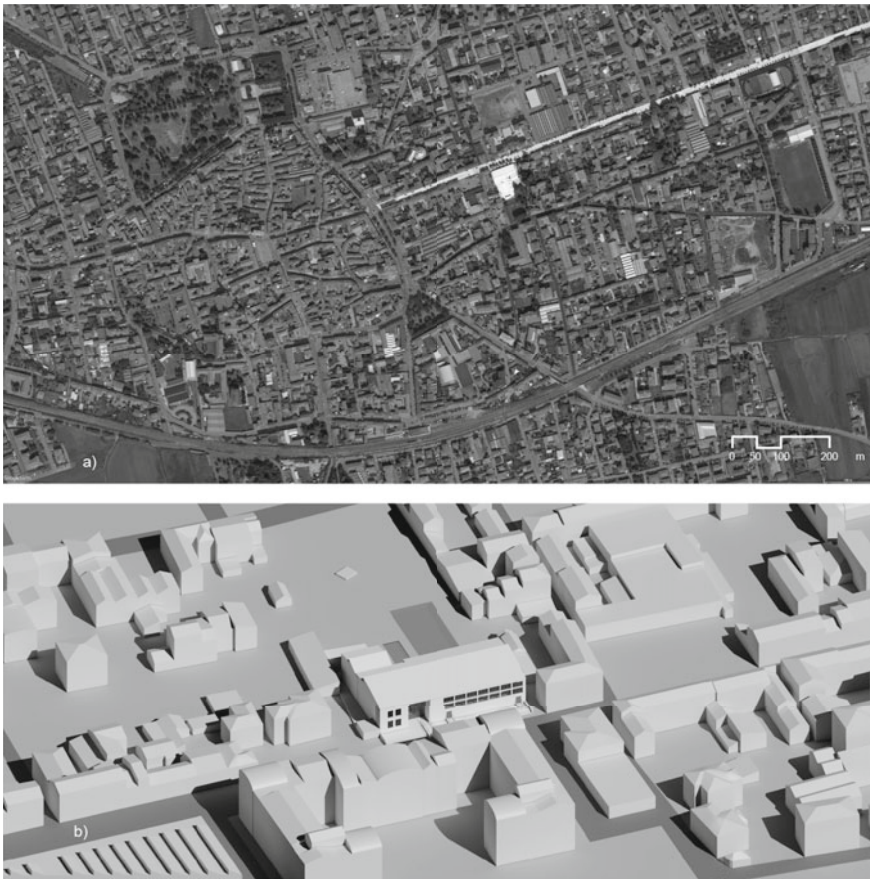
### 1.3 *Genius et Locus*

The public body that commissioned the building, the subject of this essay, was the aforementioned *Opera Nazionale Balilla* (for whose detailed history, please refer to other publications), a state institution created ad hoc in the late 1920s to organize physical training of young Italians, with the ultimate aim of educating them to the ideals advocated by the fascist regime [8]. To ensure the proper performance of all gymnastic-didactic activities provided for in the ministerial educational program, about ten buildings throughout Italy had to be newly built. Such an impressive undertaking required the creation of an internal technical office to supervise and oversee every single construction. One of the best known and most capable architects of that period was chosen to guide the new organization: Enrico Del Debbio [8]. During the years of his management, he was able to organize an efficient bureaucratic machine for the management of projects that arrived from all over Italy, as well as for the internal design of the buildings themselves in the most complex situations. He even published a manual for the design of balilla buildings, in order to standardize as much as possible the linguistic results of this ambitious construction program spread throughout the national territory [8]. This process of typological standardization came to a halt when in 1933 Enrico Del Debbio was succeeded by the young, not yet thirty-year-old Luigi Moretti [9]: The Roman architect, probably eager to demonstrate his skills in design, wanted to take over some dossiers personally (perhaps unsolved due to administrative disputes or procedural defects) that lay on the desks of the technical office at the Opera. The pending projects affected almost all areas of the country, from the south, with the cases of Messina and Bitonto, passing through the center, with Perugia, Urbino and the two Roman buildings (for the Trastevere district and for *Foro Italico*, the latter otherwise known as the *Casa delle Armi* or *Accademia di Scherma*), to arrive in the north with the buildings for Piacenza and Treccate. The latter, unlike most of the other places mentioned, is a provincial town located almost on the border between Lombardy and Piedmont. Undoubtedly a minor urban center, especially when compared to the nearby cities of Milan and Novara, but no less rich in history and tradition. The name Treccate, in fact, from an etymological point of view could indicate an ancient presence of three huts, or houses, which over time developed into an actual estate: hence the suffix *-ate*, very widespread among the toponyms of northern Italy.

The current historic center is clearly identifiable, thanks to a system where a certain hierarchy of spaces and paths echoes what could refer to a typical medieval urban matrix. Proof of this could be the presence of the large central square named after Camillo Benso Conte di Cavour, a true space-relational fulcrum of the entire city due to the tangency located between the square itself and the main artery crossing the

entire urban aggregate, or the road system formed by the succession of *ViaNovara-ViaAntonio Gramsci-ViaGiacomo Matteotti-Corso Roma*, projection, within Trecate, of the large suburban road system that connects Milan to Novara and vice versa.

The older nucleus contrasts with the modern age urban expansion, implemented according to an essentially radial criterion compared to the ancient part, favoring the west, north and east directions due to the presence of a provincial road located immediately south of the historical center. And it is precisely in the most recent urban expansion towards the east that the authorities of the time decided to locate Casa del Balilla by Luigi Moretti, specifically on a plot of land located at the terminal part of the aforementioned road system that crosses the city longitudinally, in correspondence with the first half of Corso Roma (Fig. 1).



**Fig. 1** a) Orthophotographic view of the city of Trecate, with the highlight (in lighter gray) of Corso Roma and the Casa del Balilla by Luigi Moretti (image taken from Google Earth, software owned by Google LLC); b) Virtual axonometric view of the urban surroundings of the Casa del Balilla, current layout (graphic elaborations by the authors)



## **2 From Project Drawings to the Virtual Model: Analytical Reconstruction of the Vanished Spatial Essence** *(Eleonora Di Mauro)*

### **2.1 Casa del Balilla of Trecate: An Example of Neglected Modern Architecture**

One of the basic features of modern architecture is that it can be decomposed, and it is precisely on this concept that we want to set up an analytical methodology capable of detecting any emerging components that particularly characterize Moretti's architecture of the 1930s. The first step in reading the architectural artifact is to virtually introduce the reader to an architectural promenade with the aim of bringing the version of the project to life remaining as faithful as possible to the original idea. Arriving from the historical center, you can see the compact block of the building, free on all four sides and placed at the apex of a flight of steps that runs along its entire length, probably a reference to a crepidoma, which Moretti initially imagines with inviting semicircular steps (Fig. 2) and then rectified in its realization.

The main front, set back from the curtain wall that defines the road limit, as if to create a sort of parvis from which the observer can perceive the building in its global entirety and with a more congruous visual relationship in its surrounding context, is marked by a large wall with openings which corresponds to the gym and is interrupted at the entrance hall. There is a deep shaded area due to its retraction with respect to the edge of the building, as if to configure a modern pronaos in which the expressive-spatial role of the classic columns with relative entablature is ideally assumed by the beam-pillar angle system that then encloses the main front of the building, and which invites the observer to linger, immediately discovering the words in large letters "OPERA BALILLA", making explicit the function of the building itself.

This is unlike Moretti's Roman architecture, where the incidence of sunlight brings out a chiaroscuro effect due to the stereometric articulation and the calibrated presence of simplified moldings, with precise Borrominian reference, at Trecate, "to guarantee the chiaroscuro, it is necessary to profoundly apply impact on a pure surface, avoiding unnecessary awkwardness, violating instead integrity, knowing how to rediscover and pacify Borromini's fixation of continuity of vision with the measure and extension granted to the building by the scale of the intervention" [10].

What the attention is focused on, is therefore no longer the detail but the architectural object as a whole and how it is articulated in space according to a play of light and shade. This general tendency towards simplification in view of the affirmation of a modern language, also affects the representation that sheds ornamental virtuosity, typical of liberty for example, to concentrate on volumes and plastic masses, which leads, in purely technical terms to use first charcoals or crayon, followed by the representation in pen. The purpose was to make the building objective, that is, completed in itself.





The O.N.B. was one of the particularly fertile applications in which various experiments were carried out in this sense, producing, from the second half of the 1920s, a whole series of representations free of any “picturesque” intent and aimed at an objective description of architecture [11]. This is how Luigi Moretti’s graphs for the Casa del Balilla at Trecate present themselves, limited to those consulted at the *Archivio Centrale dello Stato*. The plates for the most part in ink, except for three with the furnishings left in pencil, show the building with its fundamental components without lingering on any ornament, as well as the sans serif font, used in the titles and captions, clearly indicating the structural frame system, distinguishing it from the sectioned walls and projections, while in the sections there is a hint of a possible wall decoration foreseen for the stairwell, but which was never realized, as neither was that foreseen for the flooring of the atrium (Fig. 3).

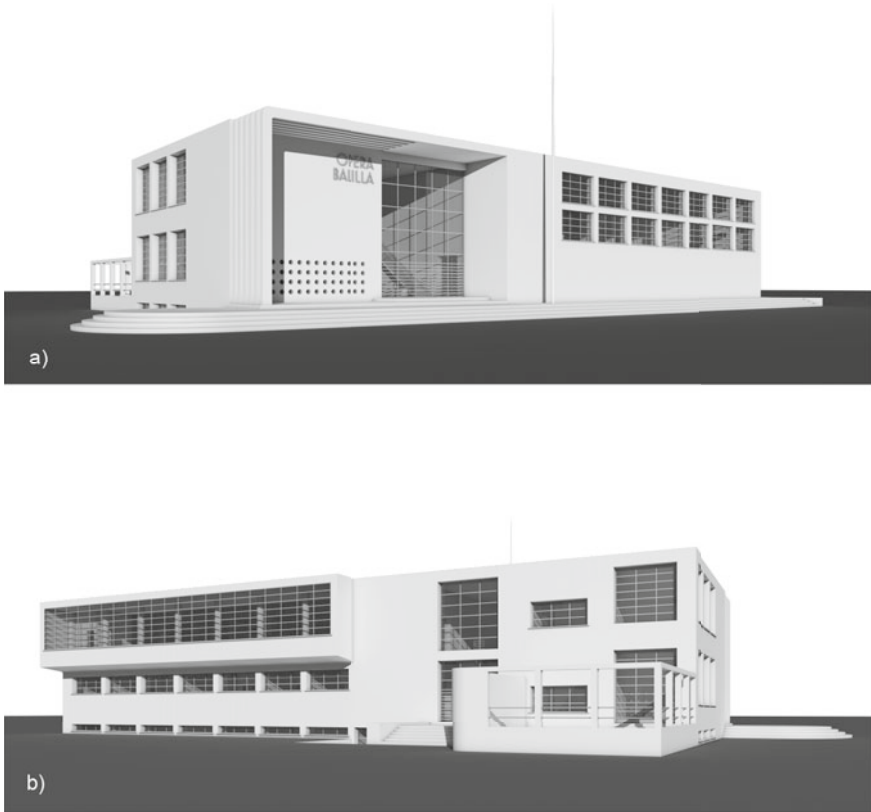
On grading table at 300 is shown the area of the site of the Casa, located at the end of a trapezoidal-shaped lot where the building has an external functional extension, a playground that occupies the entire rear area. In the actual construction, instead of the field, there is a swimming pool, demonstrating the fact that Moretti applied progressive and continuous refinements to the design which terminated, after frequent progressive changes, only when the construction phase was concluded [12]. The plans, as well as the elevations, have two versions, therefore we proceeded with a critical redesign of the same, assuming as the final variant that which best conforms to the building realized and shown in photos of the time.

Proceeding from the ground floor, the first element that is presented to the observer, after crossing the entrance, is the stairwell which is configured as a junction of the passage ways, becoming a true pivot from which, it is possible to access every part of the building. It could be said that it suggests, and almost accompanies the visitor, the possible modes of access to the various rooms of the entire building according to a system of orthogonal paths. For this reason also, it can be easily understood.

In fact, from the aligned openings, in a perpendicular direction to that of the stairs, it was possible to access the gym and changing rooms on one side and the library on the other.

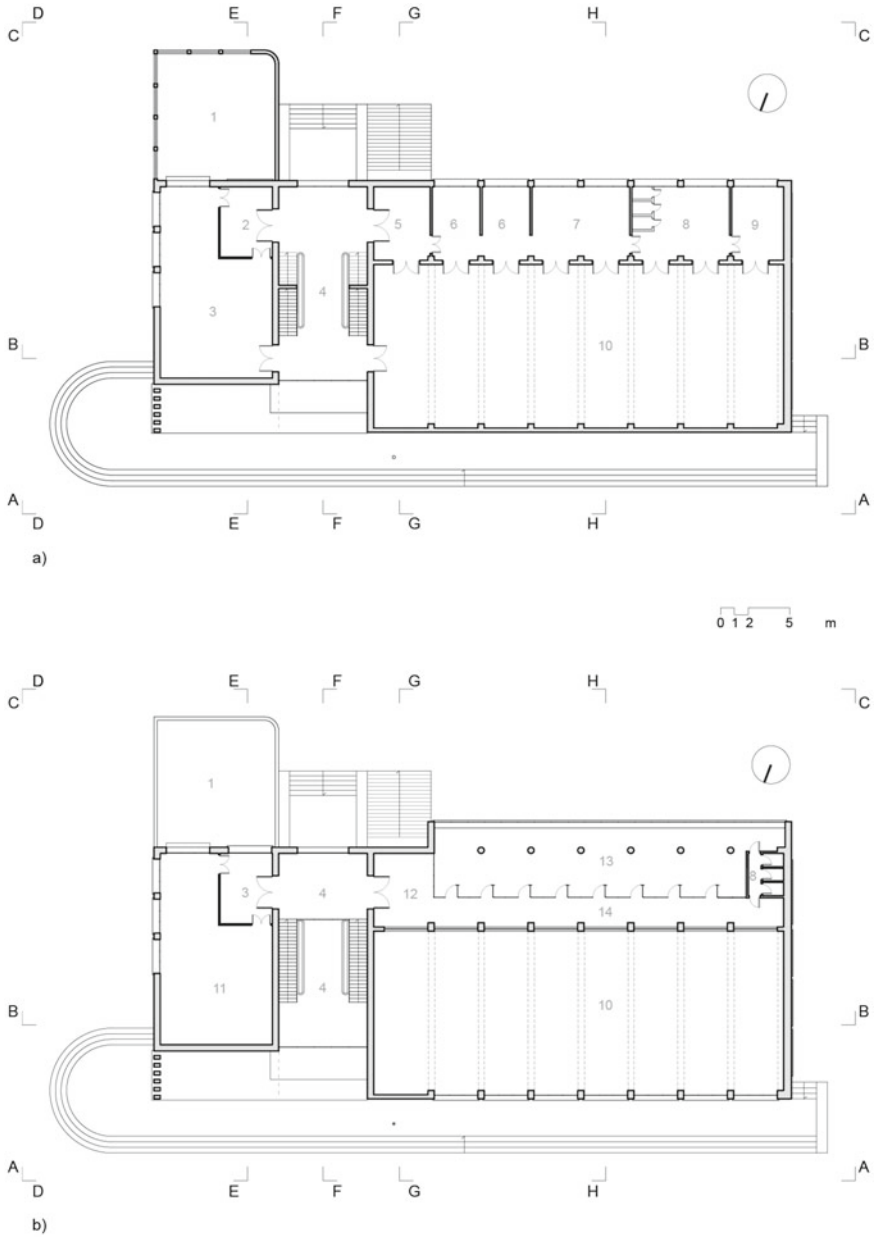
The gymnasium seems to re-propose the beam-pillar system characterizing the main front, which in this case, rotated at 90 degrees and free for expansion, marked the double-height space internally and the windowed wall that flooded the room with light externally. The library, on the other hand followed a sense of fruition, presumably parallel to the stairwell and progressively luminous which allowed a view of the winter garden, a particular element for a Balilla building, that could be a reference to the winter garden of Villa Cicogna, a distinctive place in the town of Trecate. If, on the other hand, you proceed along the stairwell in a planar way, you would reach the park at the back hosting the swimming pool, otherwise you would reach either the basement or the first floor via a system of twin ramps.

The basement floor, illuminated by narrow openings on three sides of the building, was accessible both from the main entrance and from the rear entrance and was developed according to a rather simple tendency with a junction at the stairwell that led on one side to the large refectory, with the annexed services, and on the other it allowed access to the medical clinic and the legions command (Fig. 4). Climbing the



**Fig. 3** Luigi Moretti, Casa del Balilla, Treccate: **a** north-western perspective view; **b** south-eastern perspective view (graphic elaborations by the authors)

stairs to the top, one thus reached the first floor, hosting the administrative offices located along the gallery that overlooked the gym and on the other side the presidency and the committee, and one sees in the light a kind of modeling instrument, given the multiplication of windows (Fig. 4). The choice of separating the administrative offices, not with an opaque divider, but with a glass wall suggests the idea that the light itself tends to dematerialize the traditional wall face and to transfigure it into pure energy, curbed by the metallic profiles of the fixtures. It seems that here the architect puts the lesson of the ancients to good use: “Ancient architecture almost always conceived the trans-figurative tectonic structure in a world of ideal forces and atmosphere, where all the possibilities and expressive thrusts of a civilization converged and determined it. This transfiguration had only to be in-keeping with the needs of the physical environment and an enumerated functionality of the building; once exhausted it left freely for the boundless charms of the soul and culture that drew it. That is, the form transited accurately into the concrete rational of technique



**Fig. 4** Luigi Moretti, Casa del Balilla, Trecate: **a** ground floor plan; **b**) first floor plan (graphic elaborations by the authors). Legend of the intended use: 1. Solarium; 2. Legion command; 3. Library / Entertainment; 4. Stairwell / Hallway; 5. Instructor room; 6. Changing rooms; 7. Showers; 8. Bathrooms; 9. Warehouse; 10. Gym; 11. Committee room; 12. Reception; 13. Offices / Administration; 14. Gallery

and *utilitas*, to reach the purely abstract rational, which was and is its kingdom, and within it transfigures and becomes petrified” [13].

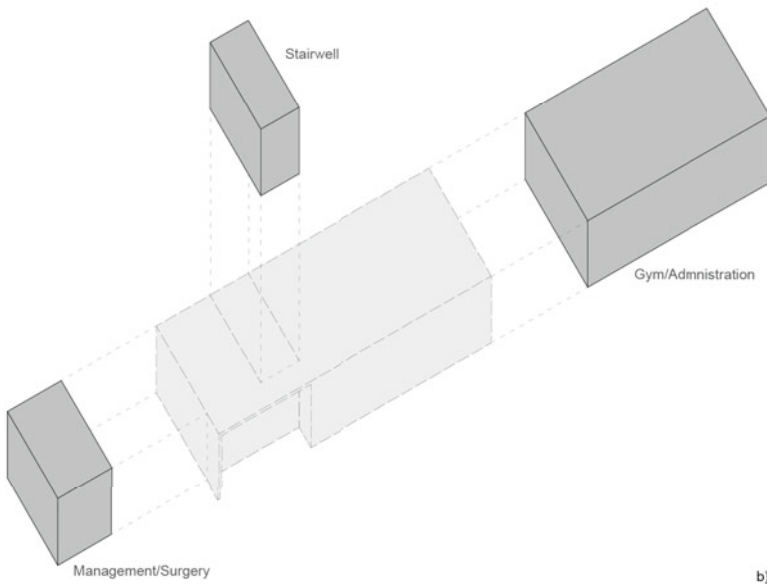
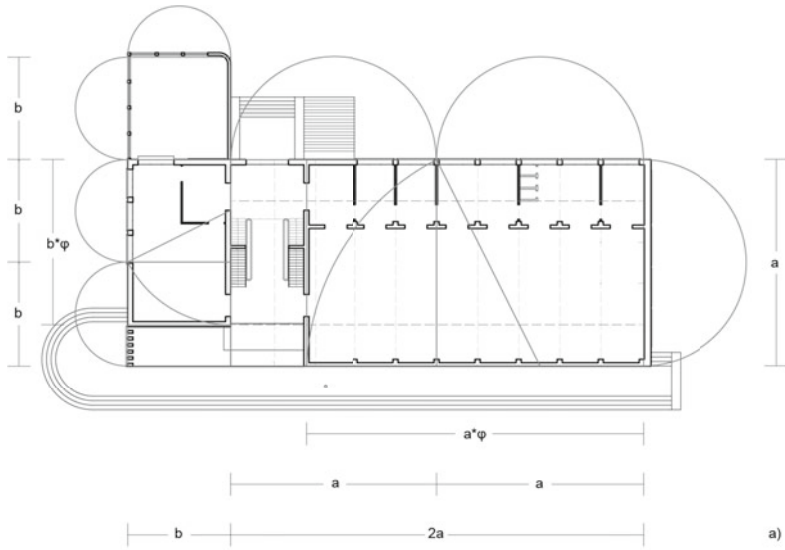
A surface ascended to “abstract spatiality” precisely because it had an autonomous function, was detached from the structure—as in the case of the divider—and therefore free to follow its own rule [13].

The autonomy of the internal partitions with respect to the frame structure was also evident in the use of glass concrete, as in the case of the changing rooms, or even in the interruption of the height of the partitions themselves in order to not block the flow of light energy coming from outside, that harmonizes the environment by uniting it in a flow of passages ways based on relationship. The structure, understood in a broad sense, in fact, for Moretti is nothing more than a system of relations of all the components of the architectural organism: “if a structure reveals itself in a form that, in its figure, has a complex of relations A (rhythmic relationships, connections, etc.), a certain presence of this order A must exist within the structure, as a pure constructive value, in the most intimate relationship of its constructive mechanics. It must exist as a representation, that is, even in appearance only” [14].

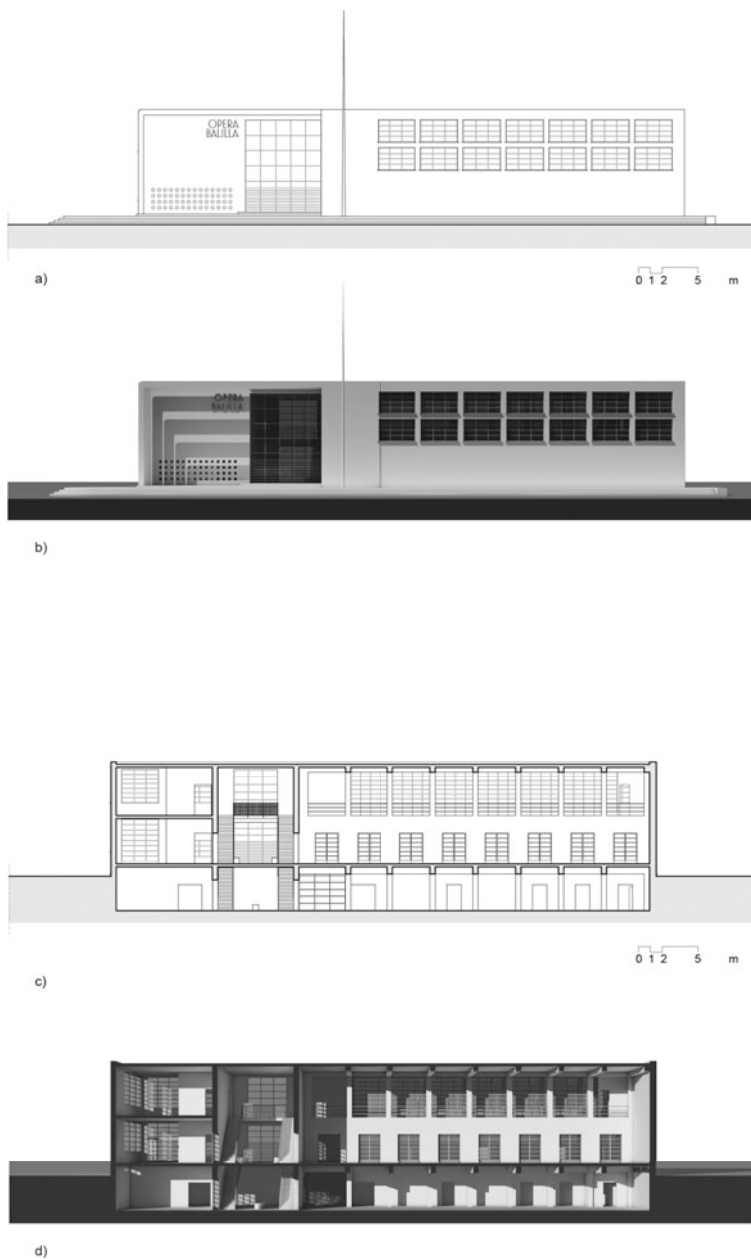
But how to identify such relationships? Our analysis has shown that the building can be decomposed into three blocks that see the stairwell as a unifying element, fundamental for the endogenous communication between the various parts of the architectural organism, as well as exogenous, with the exterior and which merges with the “administrative-library/medical”, restoring a character of stereometric unity to the exterior. The last block is that of the gymnasium, which differs from the other two both for its greater extension and for its volumetric articulation. It protrudes with respect to the entrance at the main front, while on the rear elevation only the first floor corresponding to the offices protrudes.

A further study was carried out through graphic analysis with which it was possible to identify, from the plan, two geometric matrices that regulate the size and distribution of space and that clearly mark the separation of the three aforementioned blocks. Emblematic is the block of the gymnasium with the attached services, which is nothing more than a golden rectangle whose construction is based on the 3,6 m module regulator layout that extends up to the stairwell block noticeable in the volume of the gymnasium via the emerging pillar beam system. It is precisely the golden sections of the two modules, the gymnasium and the library that trace the building system boundary at the main entrance, precisely defining its dimensions (Fig. 5).

Decomposing a building does not therefore mean disassembling it mechanically, but the term is understood in the sense of “dissecting”, that is, isolating a partial view to focus on a certain aspect, because the very design is nothing more than the projection and section of a three-dimensional object on a surface [15]. In the specific case of the Casa at Trecate, the sections focus attention on the formative elements of space, in particular: on the system of passages that connect the spatial system of the compact office block and that of the more dilated gymnasium, clearly shows the frame structure (Fig. 6c–d); on the connecting system between the various floors (Fig. 8c–d); and on the relationship between the offices on the first floor and the gym, connected by means of the glass wall that allows you to see the location of the openings in the gym placed in line with those of the offices, as if to reaffirm an idea



**Fig. 5** Luigi Moretti, Casa del Balilla, Trecate, graphic analysis: **a** study of the geometric-proportional matrices that govern the ground floor plan; **b** breakdown of the building by functional volumes



**Fig. 6** Luigi Moretti, Casa del Balilla, Trecate: **a** section AA; **b** perspective section AA; **c** section BB; **d** perspective section BB (graphic elaborations by the authors)



of spatial unity (Figs. 6, 7, 8 and 9) which is not exhausted only within the confines of the building system, identifying a constant play of references between the inside and the outside.

Generally speaking, it is considered normal, as well as a duty, to preserve architectural artifacts clearly relating to current architecture and ideas of the past, such as baroque or gothic cathedrals. Why hasn't the same attention been paid to twentieth-century architecture?

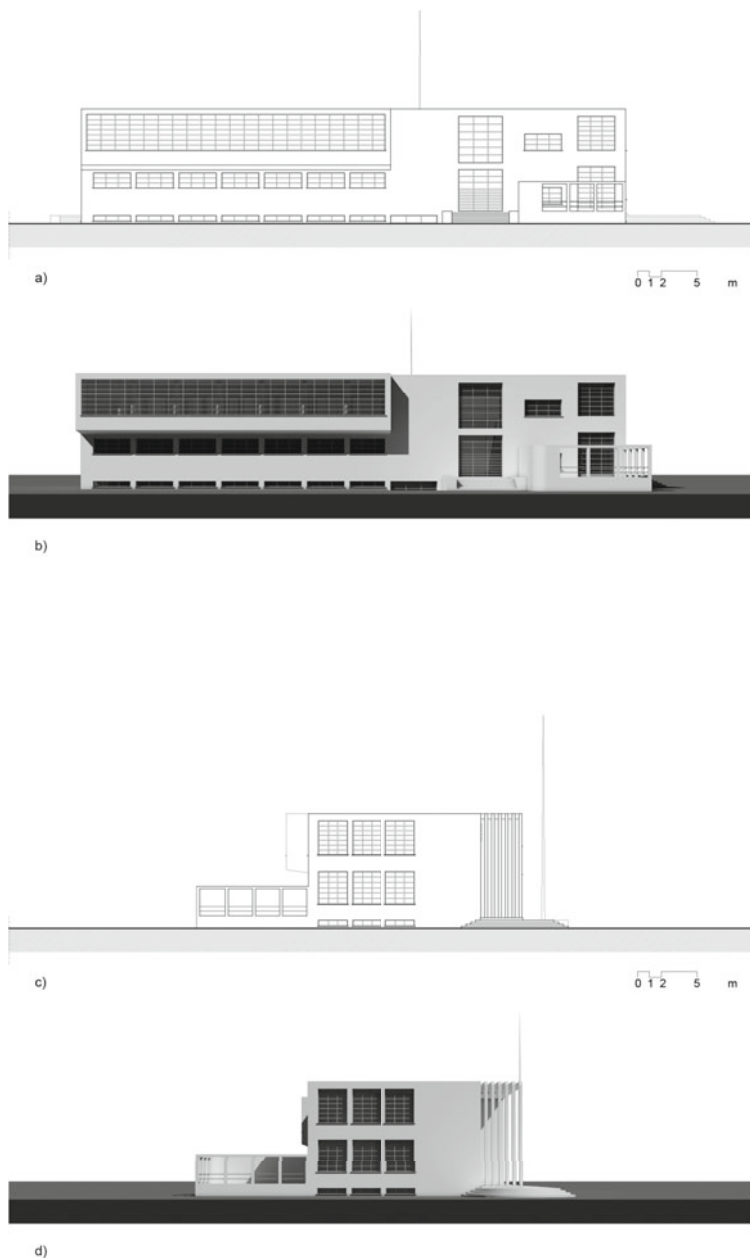
Although today, compared to the past, the sensitivity and awareness of the modern architectural heritage has increased, we often witness phenomena of total abandonment or, worse still, the introduction of incompatible functions that involve modifications or fractioning that profoundly alter the buildings that house them, as happened in the Casa del Balilla at Trecate. Little is left of the original construction (Figs. 11 and 12) which has seen a phase of decline since the second post-war period, when the first problems of stability of the roof were encountered which, not having adequate waterproofing, caused water infiltration causing detachment problems also to the flooring [12].

The changes and additions implemented on the building, from 1960s to almost 2000, have profoundly changed both its use and passage ways, as well as its volume. A particularly striking example is represented by the construction, in 1968, of a pitched roof over the original one, followed in 1996 by the increase in volume to serve the swimming pool, as well as an elevator shaft in the atrium (Fig. 13a) which significantly alters the compositional balance [12].

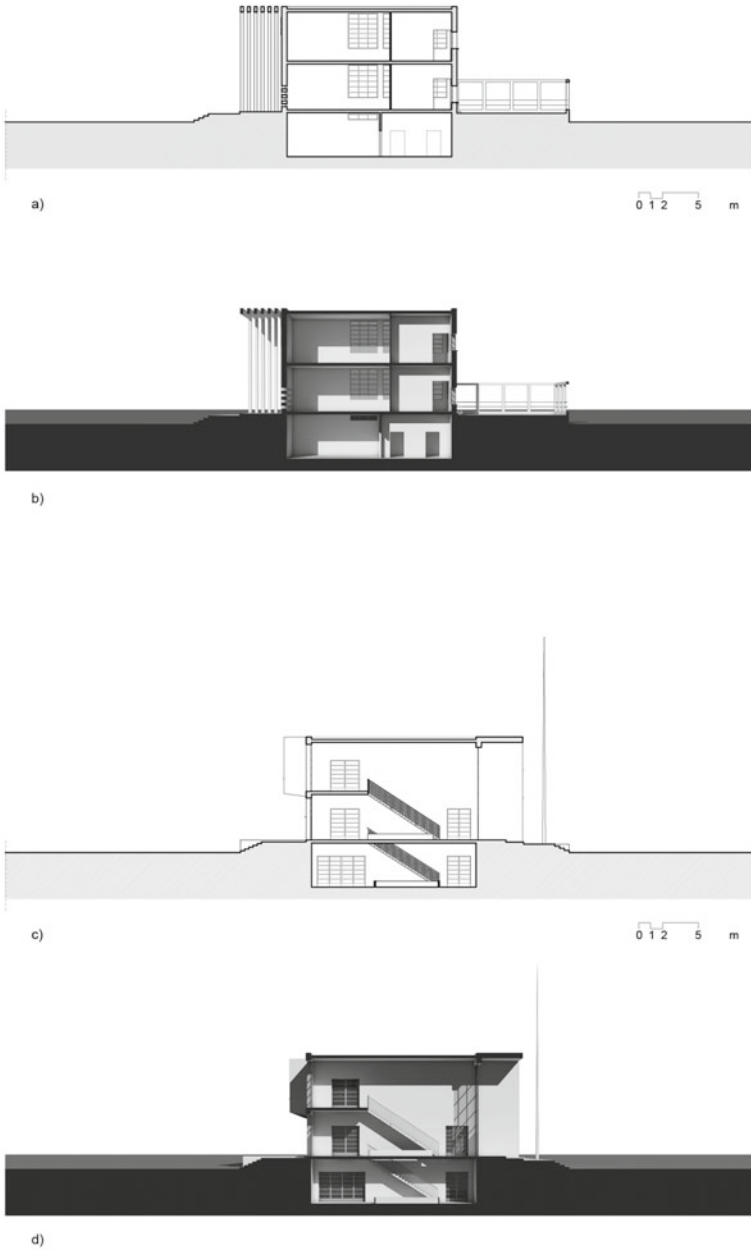
Currently, the use of the building has less destructive repercussions, hosting among various activities, a musical academy and a rock-climbing gym, the latter located right in the space occupied by the original gym, which remains almost the only reminder of what the Casa once was. In fact, there is no trace of the fluidity of the spaces desired by Moretti: the glass wall on the first floor has been replaced by an opaque infill (Fig. 13b–c), the emerging beams of the gymnasium covered by a false ceiling, the pillar beam system of the entrance suffocated in brickwork and the rear elevation loses the winter garden and the long ribbon window of the offices on the first floor. In addition to this, the color scheme that characterized the various spaces of the building has also been lost. It ranged from dark tones in the library and office block to brighter tones in the gymnasium, while the entrance was most likely Pompeii red [12]. The building as a whole has lost its stereometry having undergone an uncontrolled aggregation that has distorted the essence its creator had impressed on it.

## ***2.2 Beyond the Drawing: Conclusions as a Possible Prelude to New Reflections***

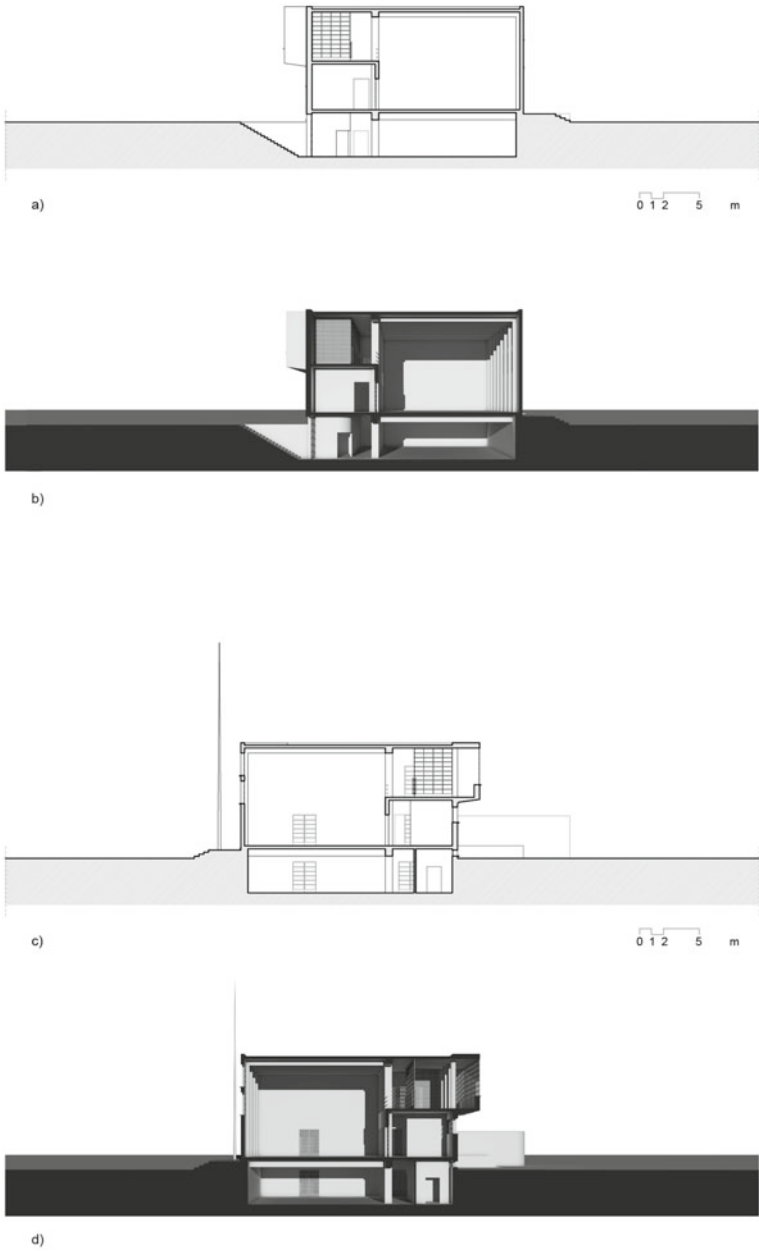
What is tangible today no longer reflects the intangible idea that Moretti had transposed onto paper, defining his project. However, the Casa can still be found with its



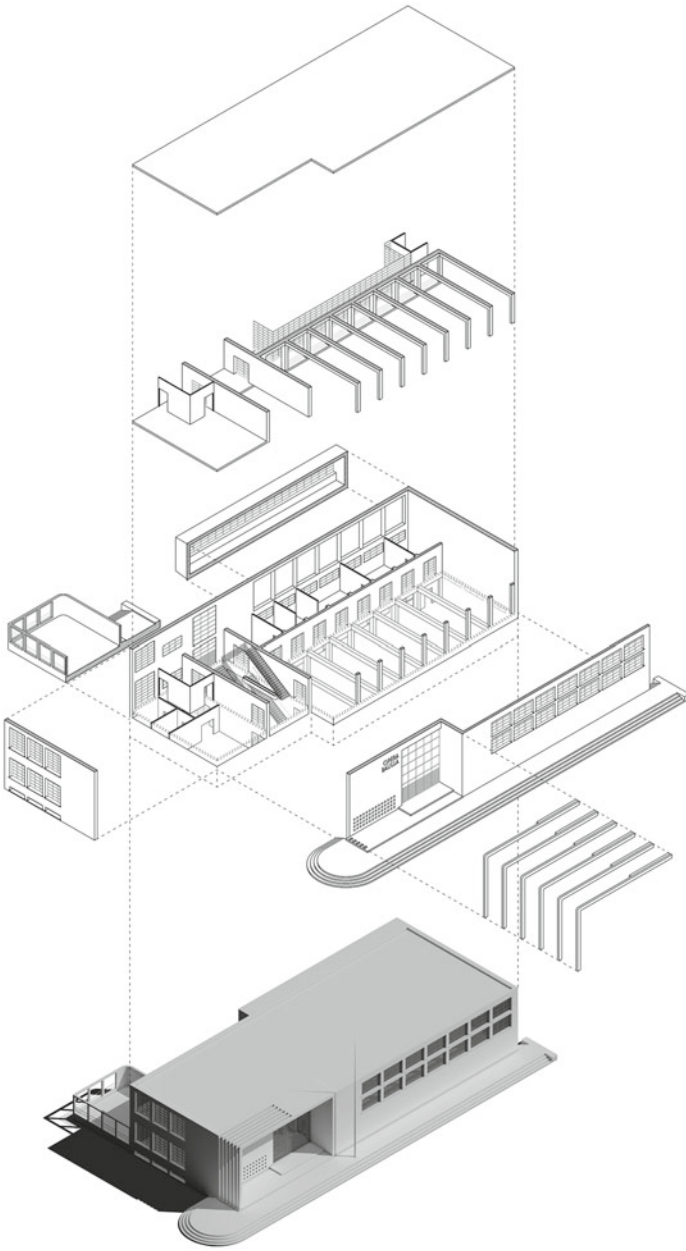
**Fig. 7** Luigi Moretti, Casa del Balilla, Trecate: **a** section CC; **b** perspective section CC; **c** section DD; **d** perspective section DD (graphic elaborations by the authors)



**Fig. 8** Luigi Moretti, Casa del Balilla, Treiate: **a** section EE; **b** perspective section EE; **c** section FF; **d** perspective section FF (graphic elaborations by the authors)



**Fig. 9** Luigi Moretti, Casa del Balilla, Trecate: **a** section GG; **b** perspective section GG; section HH; perspective section HH (graphic elaborations by the authors)



**Fig. 10** Luigi Moretti, Casa del Balilla, Treccate: exploded axonometric (graphic elaboration by the authors)



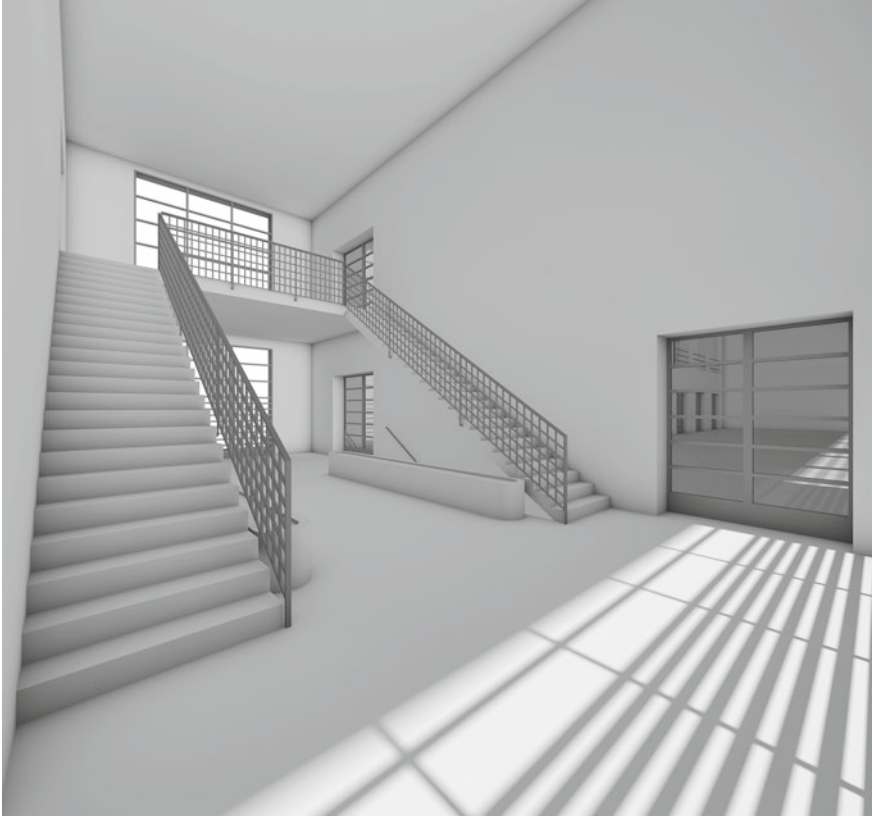
**Fig. 11** Luigi Moretti, Casa del Balilla, Treccate: interior of the three-dimensional virtual model, gym (graphic elaboration by the authors)

original meaning, in archive drawings, publications, photos of the time that make it present and tangible in a condition that, however, goes beyond the physicality of reality itself and its alter ego is no less concrete for this. The representation thus becomes a simulacrum “of what exists, of what has existed and what no longer exists, of what is no longer as it was at the beginning of its existence or in some other phase, and which wants to be returned to its primary image” [16].

Representation, for Moretti’s contemporary architects, was the only way to express themselves, replacing it for reality and what in the design plan involved separating themselves from the building which became, according to the architect, a simple projection of the graphic and not vice versa. Rational architecture was born and would die on paper. Paradoxically, it is thanks to the graphics that it was possible to study and trace the matrices and geometric relationships that govern the project, since the artifact had been irremediably altered.

Today more than ever those “papers” are alive and through a hermeneutic process that sees the project tables as a starting point, which is enriched with meaning when studying the texts of an architect, it was possible to virtually reconstruct the building, in order to show how representation and its instruments can be crucial in addressing a critical analysis which, in this case, can be defined almost in absentia.

The strong rejection with respect to the regime, resulting in a tendency at times iconoclastic towards everything that was somehow an expression of it, even before assailing the figure of Moretti although widely redeemed in recent decades, has allowed some peripheral works to be tampered with, such as the Casa del Balilla at



**Fig. 12** Luigi Moretti, Casa del Balilla, Trecate: interior of the three-dimensional virtual model, entrance hall (graphic elaboration by the authors).

Trecate. They were masterpieces of a creative and “rational mind that was not afraid of going beyond rationalism” [17] and for this reason they deserve, like the author, to be rediscovered and investigated in every aspect of their realization and ideation. Such an investigation attributes to drawing a crucial role as a critical instrument, not only capable of being understood by everyone, independently of the figurative codes used, but also to give rise to associations and relationships from which research ideas can arise, demonstrating that drawing transcends the simple graphic that is represented, becoming a portent of a whole contemporary visual culture [18] to be handed down to posterity, ready for a new exploration.





**Fig. 13** Luigi Moretti, Casa del Balilla, Trecate, photos: **a** current photo of stairwell and entrance hall exterior (courtesy of Tommaso Sabella); **b, c** Office gallery, in the 1930's (archival references: Roma, Archivio Centrale dello Stato, Archivi di Architetti e Ingegneri, Fund Luigi Moretti, Opere e Progetti 1930–1975, definitive order number 48, “Casa del Balilla di Trecate”, photo no. 00139; by permission of *Ministero per i beni e le attività culturali e per il turismo* of Italy; authorization no. 1630/2021; any further reproduction or duplication by any means is strictly prohibited) and today (courtesy of Tommaso Sabella)



**Fig. 14** Luigi Moretti, Casa del Balilla, Trecate, current photo: exterior, facade on Corso Roma (courtesy of Tommaso Sabella)

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