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Reconstruction and rebirth strategies in post-earthquake Central Italy: Amatrice, Norcia, Camerino

Abstract

The works of architecture presented here, the subject of teaching and research work carried out with students during an Architectural Design Workshop at the Polytechnic University of Milan, show various interventions and projects for the reconstruction of some of the municipalities in Central Italy laid waste by the summer-autumn earthquakes of 2016: specifically, the Municipalities of Amatrice, Norcia, and Camerino. Through these projects, various reconstruction strategies were verified, differentiated according to the specific settlement, historical and structural characteristics, in order to pinpoint distinct lines of intervention consistent with the recognizable and recoverable potential of each individual context.

Keywords
Earthquake — Reconstruction — Amatrice — Norcia — Camerino



Fig. 1
Amatrice: photograph taken during the first inspection on October 26, 2017 of the rubble next to the complex designed by Arnaldo Foschini. Photo by M. Frisinghelli.

In line with a long case history of earthquakes in Italy (Messina 1908; Belice 1968; Friuli 1976; L'Aquila 2009; Romagna 2012), also the earthquake which struck the territories of Central Italy in the summer-autumn of 2016 caused damage on many different fronts: to monuments, the urban residential fabric, scattered private buildings, production facilities, education and service systems, the infrastructure system, and the road access networks

In all of these sectors, beyond the non-negligible and indispensable distinction between the moment of the emergency, to be tackled with immediate reversible interventions, and that of reconstruction, which, on the contrary, requires structural and prospectively stable interventions aimed at restoring and relaunching the form and life of the towns and territories affected, the reconstruction strategy can be, and often has been, addressed not only win terms of pure reparation, but also with virtual intentions of innovation and a relaunch that differs according to the situation» (Canella 1978)¹, in line with a targeted strategy which, once again, differs on a case-by-case, context-by-context basis.

In regard to the earthquake in Central Italy of 2016, and restricting the field to the municipalities of Norcia, Amatrice and Camerino, the diagnostic analyses and the reconstruction strategies were necessarily different. By means of various projects, and a dialectic interaction on the various realities, we tried out different reconstruction strategies that could develop new driving forces, distinguished according to the specific settlement, historical and structural characteristics of the contexts in question, and fittingly identifying multiple intervention strategies.

If, in Amatrice², drastically affected by the earthquake, so much so that





Fig. 2
Amatrice: "Il nucleo antico di Amatrice: dov'era, com'era?". Planimetry. (Thesis by: L. Bonardi, A. Valvason; Supervisors E. Bordogna, T. Brighenti, June 2020; Politecnico di Milano).

practically nothing remains of the ancient nucleus, the reconstruction of the outlying areas can only proceed properly by taking into account certain significant pre-existing buildings such as the civic complex built by Arnaldo Foschini, the most urgent complaint seems to be that of the integral reconstitution of the historical nucleus and of all those civic and residence services located in the Old Town; in Norcia³, apart from the monumental buildings in the centre for which a philological restoration is conceivable, the most urgent sector for reactivation and relaunch seems to be that of the widespread fabric of small production and commercial units linked to the agri-food sector, together with elementary and secondary education facilities, hard hit by the earthquake; in Camerino⁴ it seems that a possible intervention cannot ignore the historic university and cultural structures present, while addressing the recovery, safeguarding and restoration of works of art affected by the earthquake, also in consideration of the presence of some courses linked to the local cultural heritage and the historic University.

The historical nucleus of Amatrice: where it was, as it was?⁵

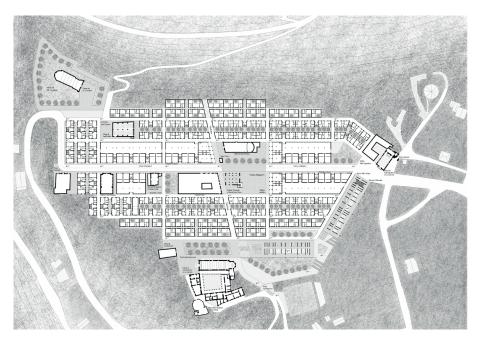
Among the municipalities affected by the 2016 earthquake in Central Italy, Amatrice is patently among the most severely damaged, a fact which has triggered a heated debate over the reconstruction strategy to be adopted (Fig. 1). Any intervention on the ancient nucleus will be extremely complex, given the condition of a genuine clean slate, with the almost complete elimination of the built fabric but the same original morphology as the ancient pre-earthquake centre. Currently, only the central road axis remains recognizable, which structured this typical ridge settlement diagonally from gate to gate, west to east.

In this context, the strategy adopted aims at confirming the perimeter area of the ancient nucleus by way of a morphological layout faithful to the original settlement, with a longitudinal conformation arranged on a northwest-southeast axis, and a road network based on an orthogonal grid with a straight main axis and two crossroads. The pattern of the blocks is re-proposed to conform with the existing fabric through was system inscribed within an almost rectangular perimeter, according to characteristics not dissimilar to the tradition of the Florentine "New



Figg. 3 a-b-c

Amatrice: "Il nucleo antico di Amatrice: dov'era, com'era?". Ground floor plan of the reconstruction project of the historic core; view from Corso Umberto I of the central square with the view of the new broletto and the new civic tower; reverse view from Corso Umberto I del Broletto with the church of Sant'Agostino in the background. (Thesis by: L. Bonardi, A. Valvason; Supervisors E. Bordogna, T. Brighenti, June 2020; Politecnico di Milano).

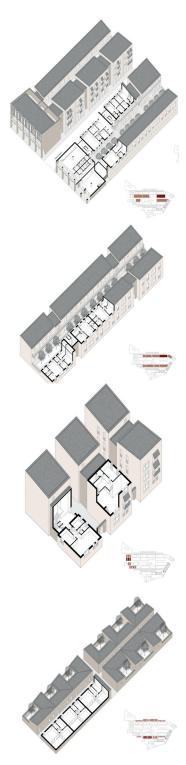








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Figg. 4 a-b-c-d

Amatrice: "Il nucleo antico di Amatrice: dov'era, com'era?". Axonometric cross-sections of the typical blocks of the reconstruction project of the historic core. (Thesis by: L. Bonardi, A. Valvason; Supervisors E. Bordogna, T. Brighenti, June 2020; Politecnico di Milano).

Lands" (see the example of Arnolfo di Cambio's San Giovanni Valdarno) or to contemporary "foundation cities" in the French Midi». (Bordogna 2019)⁶ (Figs. 2-3a).

With this project, we wished to investigate two intervention themes developed on an architectural scale.

The theme of the first project concerned certain civic structures and the configuration of a series of public spaces. In particular, in a central position with respect to the urban grid thus defined, the project envisages a partially porticoed square, located on the northern side of the main axis, the current Corso Umberto I, and proposes a complete reconstruction of the Church of San Giovanni along with the conservation and valorization of the Civic Tower, which is among the few buildings not destroyed by the earthquake. On the opposite side of the street, is the Palazzo del Comune - the Town Hall, a building which adopts the typological tradition of the broletto or mercantile loggia, porticoed on all side on the ground floor to recover and reconstruct the original base dating back to the medieval period; on the floors above are office spaces, available to the Municipality of Amatrice, and a large council room/civic hall for exhibitions, conferences, and recreational events. The various floors are accessible thanks to a tower located at one of the corners of the volume, envisaged as a new civic tower, a figurative and symbolic element which recalls the turreted appearance of the medieval town as well as becoming a symbol of the reconstruction (Figs. 3b-c).

The second theme concerns the residential fabric, with three blocks to be flexibly adopted in the reconstruction process as needed: this block type becomes two further variants depending on whether it is standing on the main street (with three storeys above ground) or on the side streets (two storeys above ground) structured internally with a central stairwell which gives access to two apartments per floor which overlook the street (Fig. 4 a-b); a terraced type (with one or two storeys) which has a configuration of two buildings separated longitudinally by an internal garden (Fig. 4c); or a patio type, a single-storey suitable for the outermost blocks of the town, consisting in a series of dwelling units characterized by an internal roadway and views mainly of the internal patio (Fig. 4d).

Hotelier Institute and Cooking School for a New Urban Centrality at Amatrice⁷ In a second hypothesis presented here, it was decided to work on the suburbs. On the same axis heading south-east just outside the centre, we can still find, entirely recognizable despite the substantial damage suffered, an urban area created by Arnaldo Foschini⁸ between the 1930s and '60s, a unitary complex with an orphanage, hospice, and separate church, of a clear morphological definition and a sober expressive quality, to which was subsequently added lower down, on an orography characterized by significant changes in height, a series of sports facilities (a football pitch and an indoor gym) (Figs. 5 a-b-c).

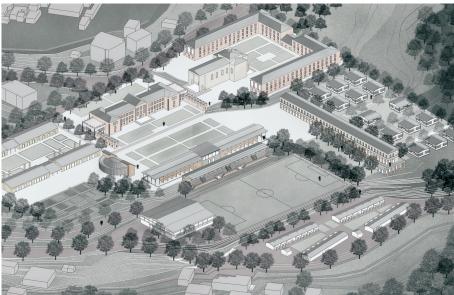
Instead, between the Old Town and Foschini's complex, the buildings of an elementary school and a hotel school which was important for the economy of Amatrice were razed to the ground. The hotel school, which was attended by around one hundred and thirty students, mostly from outside the town and the province, was temporarily transferred to Rieti after the earthquake. In the same way, in a contiguous area, four simple pavilions arranged in parallel, with one storey above ground, forming a partially disused barracks, were totally destroyed. In this scenario, by re-

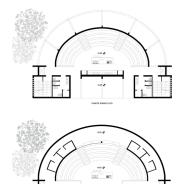


Figg. 5 a-b-c

Amatrice: reconstruction project of the extra moenia area near the buildings designed by Arnaldo Foschini. General ront view; View proposal axonometry; Drawings of the "anatomical theater": plans, elevation and section. (Students: V. Boffo, L. Bongiolatti, A. Bugatti, A. Giamboni, C. Landoni, A. Sposetti; Prof. E. Bordogna, T. Brighenti; AY 2016-17 and 2017-18; Politecnico di Milano).











sorting to certain Muratori-style antecedents, in particular the square of the Cortoghiana workers' centre in the mining district of south-west Sardinia, the project has focused on configuring a new urban centrality, arranging, in correspondence with Foschini's buildings now restored and given new destinations (a municipal seat in the former orphanage, healthcare services and special residences for the elderly, students, and young couples in the former hospice), two orthogonal squares arranged as an "L", with, on the one side, an in-line block with two and three storeys for council housing overlooking the piazza which slopes downwards, featuring a portico on the ground floor and continuous eaves, and, on the opposite side, near the area of the former barracks, the hotel and cookery school, as an ideal extension and completion of Foschini's scheme. Meanwhile, on the lower side overlooking the former orphanage, there is a double in-line block for commercial use, and below it a stand and changing rooms for the existing sports field.

The cookery school re-proposes the plan of the former barracks pavilions, with teaching spaces and external roofed environments for services and a restaurant. Then, for the specific needs of a cookery school a new building has been inserted, in front of Foschini's church but separate from it, with a central plan which incorporates the evocative typology of the anatomy theatre, here reconverted for culinary education (Fig. 5c).

Norcia: a campus for basic education and sports facilities as a part of the town⁹ At the end of 2016, around 800 students of the Municipality of Norcia, from nursery to secondary school levels, found themselves deprived of the opportunity to take advantage of their school buildings which had been destroyed or seriously damaged by the earthquakes. In addition, the seism had above all damaged the widespread fabric of small production and commercial units linked to the agri-food sector which characterized and supported a large part of the local economy.

The existing school system had a layout that was markedly bipolar: one

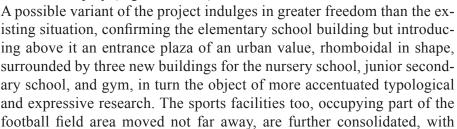


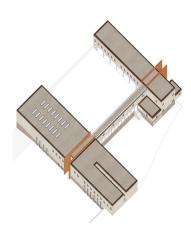


Figg. 6 a-b-c-d Norcia: Primary School. General plan; Ground floor plan; Axonometry; Phisical Model. (Students: S. Angeli, S. Angrilli; Prof. E. Bordogna, T. Brighenti; AY 2018-19; Politecnico di Milano).

school complex located immediately beneath the ancient town walls, just outside the main gate allowing access from the territory to the Old Town, given over to an elementary school, a junior secondary, and a comprehensive series of sports facilities; a second complex, further north, in a vale just outside the walls, entirely dedicated to secondary education¹⁰. All in all, a small, well-organized "campus for education and sport", probably built up over time without an explicit original design, but of indisputable quality and with its own identity, which the 2016 earthquake seriously maimed but did not completely destroy, although it did leave the elementary and junior secondary school buildings unusable.

In this context, the project choice was to confirm, with greater strength and a wealth of facilities, the existing campus system to the right of the main entrance axis to the town. To this end, the elementary school building has been restored, its plan and measurements being taken as the generating element of the proposed morphology, while the junior secondary school building has been replaced since it was deemed no longer recoverable, like the small anonymous pavilions for the gym and related services. The two arms of the C-shaped elementary school building have been extended with two in-line blocks interconnected by a path covered by a portico, the latter also acting as a retaining wall while delimiting the internal open space by creating a court partially left green, more reserved but intentionally permeable, so as to also function as a small urban square. Within this court, a small outdoor wooden theatre can accommodate dramatic and musical performances by the students, and other activities and events of the entire school complex as well as the community. Inside the larger in-line structure is a gym and a swimming pool, while in the narrower structure two storeys above ground house the junior secondary school. On the side of the C-shaped building facing south, lying along the internal pedestrian axis which crosses the whole of the campus, is a small infant school including a nursery school and a crèche, with a square ground plan arranged around a small courtyard overlooked by the classrooms, and communal outdoor spaces where the children can play (Figs. 6 a-b-c-d).

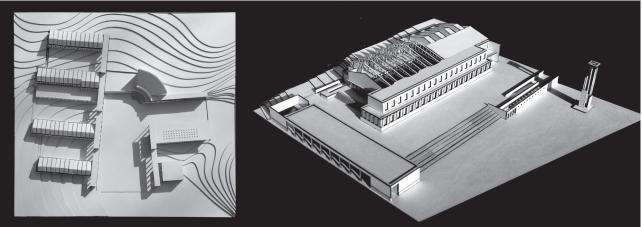






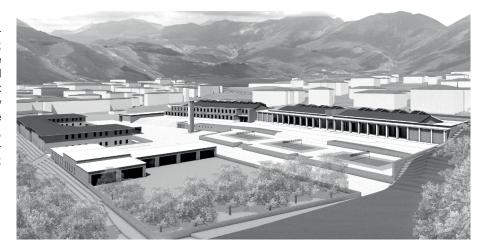






Figg. 7 a-b-c-d

Norcia: school complex for Primary School. Volumetric plan; Ground floor plan; Model of the school complex to the north and model of the school complex along the route of access; View of the school complex from the valley. (Students: M. Colombo, P. Escoriza, M. lotti; Prof. E. Bordogna, T. Brighenti; AY 2018-19; Politecnico di Milano).





Figg. 8 a-b-c

Norcia: Exhibition center and treet market. Street market elevations prospects; Axonometric view of the exhibition halls and market; Volumetric plan. (Students: V. Boffo, L. Bongiolatti, A. Bugatti, A. Giamboni, C. Landoni, A. Sposetti; Prof. E. Bordogna, T. Brighenti; AY 2016-17 and 2017-18; Politecnico di Milano).







more substantial indoor and outdoor amenities (gym, swimming pool, basketball, volleyball, and tennis courts), with a stand, locker rooms, and other service areas for the public (Figs. 7 a-b-c-d). In this sense, in both of the solutions that confirm the campus system, by using the sloping orography of the land, the design approach, rather than deepening the internal typological structure of the different school buildings, aims to configure a part of the town specifically intended for functions of education, sports and leisure activities. A fusion therefore takes place, beyond the historical direction of access from the territory, with the proposal of an intervention intended for a Trade Fair quarter and an in-line block facing the street across from the elementary school, intended for shops and market facilities for the traditional agri-food production of the territory located along the industrial expansion line and characterized by a series of fixed stalls for permanent shops and an open covered space, with a more spontaneous and flexible conformation suitable for fairs, exhibitions, and civic festivals.

The exhibition centre with adjoining auditorium is arranged on a grid in which a series of small pavilions with a wooden structure and a fourgable roof are located, connected to one another by covered walkways which end near the auditorium consisting of two large orthogonal halls (one flat and the other terraced) which in part compensate for the difference in height of the area (Figs. 8 a-b-c).

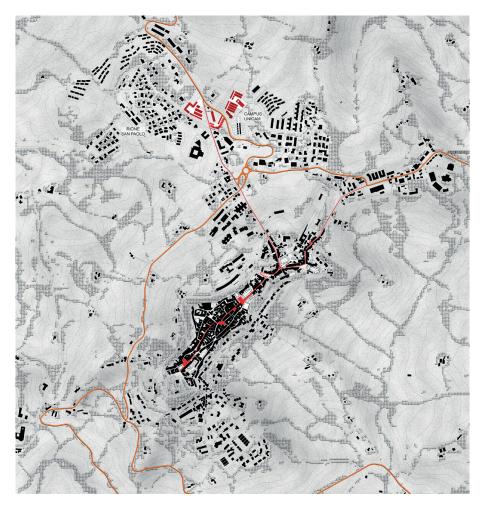
Camerino: recovery, safeguarding and restoration of works of art affected by the earthquake¹¹

In Camerino, the intervention strategy began from the issue of the uni-



Figg. 9
Camerino: center for the recovery, shelter and restoration of works of art affected by the earthquake. Planimetry. (Thesis by: S. Faravelli and M. Frisinghelli; Supervisors: E. Bordogna, T. Brighenti, AY 2017/18; Politec-

nico di Milano).



versity, a multi-centennial pole of urban and cultural transformation of the history and tradition of this municipality in the Marches, addressing a particular theme linked to the need to recover, safeguard and restore the works of art damaged by the earthquake, also in view of the presence of a course of study in Cultural Heritage with which to establish useful synergies of mutual exchange, involving students in workshop and internship activities aimed at the restoration of works of art or research into local art. This resulted in an original typology, conditioned on the one hand by the particular characteristics of the context, and on the other designed to meet educational and museum/workshop needs.

The choice was taken to intervene outside the Old Town, today only partially accessible, consolidating with the new addition, a complex consisting of buildings for a university residence and a departmental library created at the beginning of the 2000s by the architect Raffaele Mennella (Fig. 9).

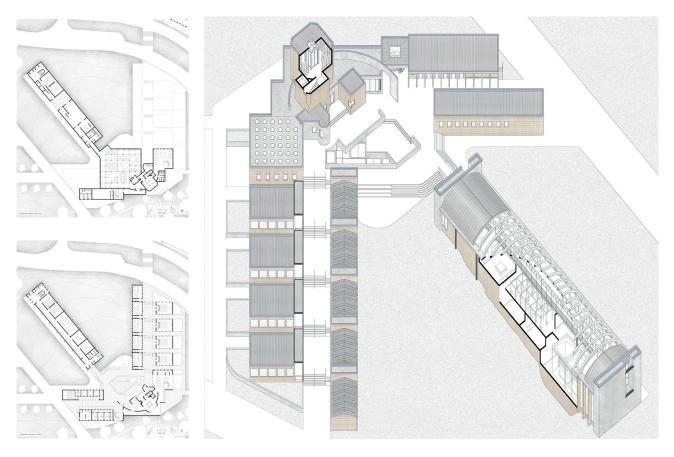
The project site is located at the end of Via Madonna delle Carceri, in the north of Camerino. This trajectory arises inside the Old Town from the main street that runs through Camerino and which, near the museum complex of San Domenico, splits into two to define the main axes of the town's suburbs. Past the university science centre, the Church of Madonna delle Carceri, and the new commercial area, the trapezoidal-shaped intervention area is strategically placed at the end of a sequence of artefacts located on this trajectory lying on a gently steep slope. Along this axis of expansion, characterized by a series of university buildings positioned outside the historical nucleus, the project envisages three inline blocks laid out as a trident, which ascend some curves following



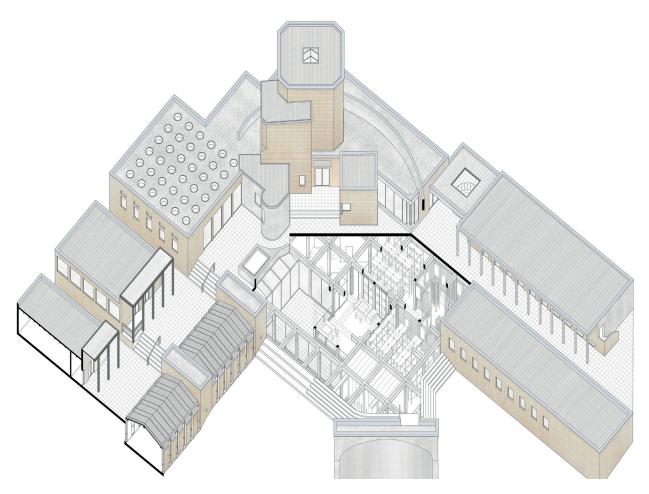
Figg. 10 a-b-c-d

Camerino: center for the recovery, shelter and restoration of works of art affected by the earthquake. Elevation; Basement floor plan; Ground floor plan; General axonometry. (Thesis by: S. Faravelli and M. Frisinghelli; Supervisors: E. Bordogna, T. Brighenti; AY 2017/18; Politecnico di Milano).









Figg. 11 a-b

Camerino: center for the recovery, shelter and restoration of works of art affected by the earthquake. Axonometric cross section; Model (Thesis by: S. Faravelli and M. Frisinghelli; Supervisors: E. Bordogna, T. Brighenti; AY 2017/18; Politecnico di Milano).



the hilly terrain in continuity with the pre-existing university residences. The enclosed green areas that link the various parts of the intervention in a system of public and collective spaces, designed to enhance the characteristics of the site, overlook the extraordinary landscape of the Esino Valley, towards the Primo and San Vicino mountains.

The three buildings have separate destinations. The first wing houses standard university functions: teaching, research, and students' workspaces; the central wing is given over specifically to a museum, with rooms for storage, restoration workshops, and exhibition spaces for works salvaged from the territory; the third wing, of smaller dimensions and facing towards the recently constructed shopping mall, houses the service structures, with spaces for local associations, offices, a projection room, and a hostel (Figs. 10 a-b-c-d).

The three in-line buildings converge in a sort of slab which is multifaceted in both plan and elevation, and whose basement is intended as a deposit for works of art awaiting restoration, while the roof is a public square at the service of the entire complex. At the top of the slab and the three wings, the formal junction of the entire project, a block which develops in height from the composite volume contains a small, specialized library and complementary service spaces, configuring an organically concluded intervention which is barycentric to the existing university structures (Figs. 11 a-b).



Notes

- ¹ For more information on this topic, see the essay and the rest of the issue: G. Canella, *Assumere l'emergenza che non finisce*, in "Hinterland", Year 1, nos. 5-6 / *Calamità naturali e strategie di ricostruzione* (special monographic issue), Milan, September-December 1978, pp. 2-3.
- ² Among the extensive bibliography on Amatrice, see as a minimum: A. G. Giavarina, E. Guidoni, *L'espansione urbanistica di Rieti nel XIII secolo e le città nuove di fondazione Angioina*, in M. Righetti Tosti-Croce (ed.), *La Sabina Medievale*, A. Pizzi Editore, Cassa di Risparmio di Rieti, Rieti 1985, pp. 166-187; E. Guidoni, *Storia dell'Urbanistica. Il Duecento*, Laterza, Bari 1989; A. Viscogliosi (ed.), *Amatrice, storia arte e cultura*, Silvana Editoriale, Cinisello Balsamo, Milan, 2016; E. Moriconi (ed.), *La storia di Amatrice. Dalla preistoria ai giorni nostri*, Typimedia editore, Rome, 2020.
- ³ Among the extensive bibliography on Norcia, see as a minimum: A. Fabbi, *Breve storia di Norcia. Arte, storia, turismo*, Editrice San Benedetto, Norcia, 1975; U. Bistoni, F. Bozzi, *Norcia. Storia e storiografia di una città*, Volumnia, Perugia, 1983; M. T. Gigliozzi, *Norcia città sismica. La basilica di San Benedetto paradigma di rinascite*, Campisano Editore, Rome, 2019.
- ⁴ Among the extensive bibliography on Camerino, see as a minimum: Vv.Aa., *Camerino. Ambiente, Storia, Arte*, G. Misici-Falzi Editore, Camerino, 1976; P. Verdarelli (ed.), *Camerino suo stato e ducato*, University of Camerino, Camerino, 1994; Lorenzo Ciccarelli, *Guida all'architettura nelle Marche: 1900-2015*, Quodlibet, Macerata, 2016.
- ⁵ The project presented is taken from a thesis by A. Valvason and L. Bonardi of the Master's Degree Course in Architecture and Urban Design of the Polytechnic University of Milan discussed in the 2018-19 academic year. Supervisors: Profs. E. Bordogna, T. Brighenti.
- ⁶ E. Bordogna, *Progetto di ricostruzione del centro di Amatrice*, in P. Zermani (ed.), *Identità dell'architettura italiana n. 17*, Diabasis, Parma, 2019, pp. 38-39. See also the volume: E. Detti, G. F. Di Pietro, G. Fanelli, *Città murate e sviluppo contemporaneo*, Edizioni CISCU, Lucca 1968.
- ⁷ The projects presented were developed within a Master's Degree Course of the School of Architecture Urban Planning Construction Engineering at the Polytechnic University of Milan, in an Architectural Design Workshop held during the AY 2016-17 and 2017-18. Profs. E. Bordogna, T. Brighenti, V.M. Finzi (Plants and systems), M. Madeddu (Structures); Students: V. Boffo, L. Bongiolatti, A. Bugatti, S. Faravelli, M. Frisinghelli, A. Giamboni, C. Landoni, A. Sposetti.
- ⁸ In the early Twenties, Arnaldo Foschini created one of his first works for Amatrice, the Institute for War Orphans, built between 1921 and 1923 for the Opera Nazionale per il Mezzogiorno d'Italia, a building for 150 children along with five other minor buildings for schools of art and crafts. At the same time, he was developing his project for the church, revised in 1938, interrupted because of the war and then gradually brought to fulfilment in various phases until it was finally finished in 1961, enriched by numerous works of art, such as the large bas-relief in travertine of the façade. In these same years, also the large building of the hospice was completed, whose U-shaped plan and three storeys concluded the entire ground plan. See Nullo Pirazzoli (ed.), *Atti del Convegno. Arnaldo Foschini. Didattica e gestione dell'architettura in Italia nella prima metà del Novecento*, Faenza Editrice, Faenza, 1979, pp.86-89; D. Tassotti, *Ricordo di Arnaldo Foschini*, in "Evangelizzare", Bollettino mensile dell'Opera di Padre G. Semeria e Padre G. Minozzi, Rome, May 1968.
- ⁹ The projects presented were developed within a Master's Degree Course of the School of Architecture Urban Planning Construction Engineering at the Polytechnic University of Milan, in an Architectural Design Workshop held during the AY 2016-17 and 2017-18. Profs. E. Bordogna, T. Brighenti, V. M. Finzi (Utility systems), M. Madeddu (Structures); Students: V. Boffo, L. Bongiolatti, A. Bugatti, S. Faravelli, M. Frisinghelli, A. Giamboni, C. Landoni, A. Sposetti (Trade Fair quarter, agricultural and food market); S. Angeli, S. Angrilli, M. Colombo, P. Escoriza Torralbo, M. Iotti (school complex).
- ¹⁰ Both complexes, while in the current post-earthquake state of compromise, are characterized by a "campus-style" ground plan, with the individual school buildings for different levels and subjects interrelated and connected to the sports facilities and



the surrounding green areas, to form structures which are morphologically unitary and integrated. In particular, the lower school complex, close to the main gate in the city walls, are characterized by an elementary school building, a typical C-shaped structure with two storeys from the late 1950s, aligned with the main thoroughfare to access the city from the surrounding territory, with classrooms arranged in series along corridors overlooking an inner courtyard. Continuing upwards from one wing of the C-shaped building is another structure with three storeys above ground, and typical forms of the 1960s in unclad reinforced concrete, with dividing walls in brick and a gable roof, which houses the junior secondary school. In the open space delimited by these two buildings, anonymous rectangular prefabricated structures with only one storey above ground, house a gym and other service spaces, while all around, in a wooded environment characterized by repeated variations in height, are a large range of sports facilities open to the public in addition to school use, comprising a football pitch, tennis courts, and outdoor swimming pools with associated locker rooms.

¹¹ The project presented has been taken from a thesis by S. Faravelli and M. Frisinghelli of the Master's Degree Course in Architecture and Urban Design at the Polytechnic University of Milan discussed in the 2017-18 academic year. Supervisors: Profs. E. Bordogna, T. Brighenti.

References

Vv.Aa. (1976) – Camerino. Ambiente, Storia, Arte. G. Misici-Falzi Editore, Camerino.

Vv.Aa. (2018) – *Ricostruzioni. Architettura, città, paesaggio nell'epoca delle distruzioni.* Silvana Editoriale, Milan.

BISTONI U. and BOZZI F. (1983) – *Norcia. Storia e storiografia di una città*, Volumnia. Perugia, 1983.

BORDOGNA E. (2019) – "Progetto di ricostruzione del centro di Amatrice". In Zermani P. (ed.), *Identità dell'architettura italiana no. 17*. Diabasis, Parma, pp. 38-39.

BORDOGNA E. and BRIGHENTI T. (2019) – "Education as Reconstruction. School Typology in Post-earthquake Reconstruction in Central Italy". In Della Torre S., Bocciarelli M., Daglio L. and Neri R. (eds.), *Buildings for Education. A Multidisciplinary Overview of The Design of School Buildings*. Diabasis, Parma, pp. 127-137.

CANELLA G. (1978) – "Assumere l'emergenza che non finisce". *Calamità naturali e strategie di ricostruzione* (special monographic issue) Hinterland, 5-6 (September-December), 2-3.

CICCARELLI L. (2016) – *Guida all'architettura nelle Marche: 1900-2015*. Quodlibet, Macerata.

DETTI E., DI PIETRO G. F. and FANELLI G. (1968) – *Città murate e sviluppo contemporaneo*. Edizioni CISCU, Lucca.

FABBI A. (1975) – *Breve storia di Norcia. Arte, storia, turismo*. Editrice San Benedetto, Norcia.

GIGLIOZZI M. T. (2019) – Norcia città sismica. La basilica di San Benedetto paradigma di rinascite. Campisano Editore, Rome.

GUIDONI E. (1985) – "L'espansione urbanistica di Rieti nel XIII secolo e le città nuove di fondazione Angioina". In: RIGHETTI TOSTI-CROCE M. (ed.), *La Sabina Medievale*., Amilcare Pizzi Editore, Cassa di Risparmio di Rieti, Rieti, pp. 166-187.

GUIDONI E. (1989) – Storia dell'Urbanistica. Il Duecento. Laterza, Bari.

MORICONI E. (ed.) (2020) – *La storia di Amatrice*. *Dalla preistoria ai giorni nostri*. Typimedia editore, Rome.

PIRAZZOLI N. (ed.) (1979) – Atti del Convegno. Arnaldo Foschini. Didattica e gestione dell'architettura in Italia nella prima metà del Novecento. Faenza Editrice, Faenza.



TASSOTTI D. (1968) – "Ricordo di Arnaldo Foschini". In: "Evangelizzare", *Bolletti*no mensile dell'Opera di Padre G. Semeria e Padre G. Minozzi. Rome.

VERDARELLI P. (ed.) (1994) – *Camerino suo stato e ducato*. University of Camerino, Camerino.

VISCOGLIOSI A. (ed.) (2016) – *Amatrice, storia arte e cultura*. Silvana Editoriale, Cinisello Balsamo.

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