



Mario Ridolfi, INA Casa Tiburtino District, Rome, Italy, 1950-1954. © Rinaldo Capomolla, 2020.

Reconstructing housing and communities: the INA-Casa Plan

BY ROSALIA VITTORINI

Among the Italian initiatives for social and material reorganization in the aftermath of WWII, the most interesting was undoubtedly the INA-Casa Plan. The plan was designed to counteract widespread unemployment in the construction sector and aimed to provide new and modern social housing to the poorer classes, thus simultaneously responding to the housing emergency. During the 14 years between 1949 and 1963, architects designed, and construction companies built a housing patrimony of remarkable quality, which now becomes an opportunity to develop strategies of urban revitalization.

Origins of the plan

In February 1949, having identified the construction sector as the driving force for economic recovery, Parliament approved a law for “A plan to increase worker employment, supporting the construction of social housing,” putting in gear a massive program designed “to provide a home for all Italians” and address the double emergencies of housing and employment.

The INA-Casa Plan originated from several preceding proposals on the theme of social housing, and took its name from the National Institute for Insurance (INA) that had been made responsible for certain administrative aspects. The plan was heavily influenced by principles of Catholic solidarity, and in keeping with this, funding was ensured by a mixture of state contributions and deductions from employers and employees, a principle maintained in the second phase of the plan, beginning in 1955.²

The plan was administered at the national level by an agile, two-part structure consisting of an Implementation Committee, for policy, regulation and oversight, and an executive board called INA-Casa Management. The former was chaired by Filiberto Guala (1907-2000), an engineer with ties to the Catholic left; the latter by Arnaldo Foschini (1884-1968), architect and dean of the School of Architecture in Rome. At the local level, the plan co-opted the administrative agencies involved in social housing since before the war, in particular the National Institute for Housing of State Employees (INCIS) and the Autonomous Institutes for Social Housing (IACP), but also called on the branches of state administration, and brought in specific consortia and cooperatives.

Filiberto Guala had proposed standardized designs as the mode of implementation, however this was rejected in favor of Arnaldo Foschini’s strategy of developing registers of architects,³ to be entrusted with the individual projects. In this way the plan would favor the relaunch of the professions, by calling on all Italian architects and engineers to participate in a great democratic and collective project.

The guiding committee directed that the plan should implement traditional construction types, entrusted to the

myriad of small and very small companies typical of the Italian sector, and avoid the experimentation in prefabrication, industrialization and concentration of companies then taking shape in other European contexts. The INA-Casa construction site thus featured very low levels of mechanization and massive use of unskilled labor, in keeping with the first aim of the 1949 law: a strategy also descending from awareness of the true state of the construction sector, which

... along with scarcity of adequate equipment was characterized by disorder in the production of materials, lack of modularization in brick sizes, lack of dimensional standards in timber, in windows and doors, and variability in construction practices from region to region, company to company, and master builder to master builder.⁴

With the launch of the first construction site on 1st April 1949, the vast machine of the INA-Casa Plan swung into action. By October of that year, 649 sites were operating in cities and towns throughout the nation. Pressing forward at an increasing pace, amplified by effective advertising, some 355,000 lodgings had been constructed by the expiration of the law. These represented 10% of the total housing stock, distributed through two-thirds of Italian municipalities. The homes were assigned to the less well-off classes, in rent or rent-to-buy programs, in developments varying in scale from single houses to entire blocks and neighborhoods, with associated shops and services.

Design instructions

Arnaldo Foschini entrusted the technical administration of INA-Casa Management to Adalberto Libera (1903-1963), who, after the wartime period of inactivity and consideration of eventual reconstruction, had participated with Gio Ponti (1891-1979) in a series of studies on the design of standardized housing.⁵ Adalberto Libera and Arnaldo Foschini also called other professionals, all based in Rome, including Giuseppe Vaccaro (1896-1970), Mario De Renzi (1897-1967) and Mario Ridolfi (1904-1984), who had already guided the publication of the *Architect’s Manual* (1946), on matters from

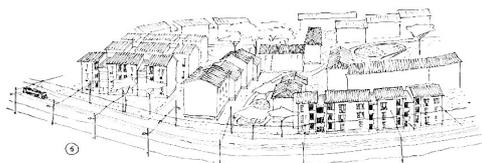


Fig. 56.

Fig. 56-57-58. — Vedute prospettiche dei complessi edilizi illustrati nelle planimetrie esemplificatrici della pagina precedente.



Fig. 57.



Fig. 58.

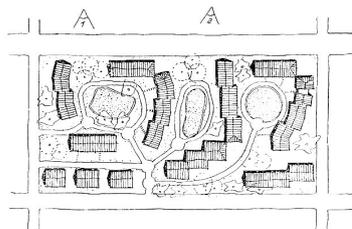


Fig. 54.

Date le possibilità di associazione, illustrate nella pagina precedente, il corpo di fabbrica può essere articolato con tutta libertà, e così creare dei complessi edilizi il cui interesse non sia limitato ai fabbricati, ma anche agli spazi liberi da essi definiti. (Fig. 54-55-55 bis).

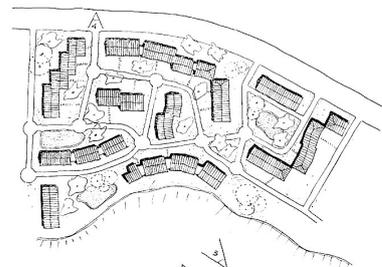


Fig. 55.



Fig. 55-bis.

construction techniques to worksite organization and safety.

The artisanal approach to construction also forced the designers to enter into artisanal detailing, since executive drawings were necessary not only for building elements, but also for construction operations, ensuring control over results and quality. To guide the architects, INA-Casa Management produced four instructional “dossiers”. The first (1949), dedicated to the housing unit, gathered floor plans for four types – multi-story single, continuous, and terrace housing – also showing aggregative and distributive solutions. The second (1950), dedicated to urban planning, offered Italian and international examples, in particular showing principles of “organic planning”. Designers were invited to avoid rigidly geometrical or closed and isolated rationalist schemes, and instead pursue plans adapted to the terrain and environment, so that the inhabitants “have the impression that there is something spontaneous, genuine, indissolubly fused with the place where the developments rise.” The 1950 dossier also established a maximum density of 500 inhabitants per hectare (ha), reduced to 300 in the second seven-year period. The last two dossiers were drawn up in 1956, considering the results of the first period. The first recommended exclusion of solutions proven dysfunctional or unsatisfactory to residents, such as buildings with more than three floors, ground-level apartments, two-story units in urban contexts, and staircases open to the exterior. Instead, designers were guided towards well-accepted

solutions: living rooms free of traffic routes, sheltered entrances, indoor common laundries, family balconies and clothes-drying areas. This dossier also saw the introduction of urban planning standards, such as on neighborhood sizes and provision of a “social center” fulcrum, signifying a multipurpose structure for services and collective activities. The fourth and last dossier gathered the main circulars and standards of INA-Casa Management.

An entire generation of young designers would advance their professional training as they pursued these directives, working in groups on the sole theme of social housing. The entire plan assumed the character of a national laboratory of design and construction, aimed at developing housing for the less well-off, at low-cost, built quickly, optimizing available resources and favoring durable materials. The new urban complexes were distributed throughout the country, and assumed more or less original character, sometimes even experimental, depending on the hand of the designer. All developments, however, shared a similarity of appearance, descending from the unitary strategy and INA-Casa Management, with its control over designs, contracts and construction sites.

INA-Casa Style

The designers were entrusted with shaping a new concept of the “neighborhood”, marking a political and social change, but, as Gio Ponti explained, without renouncing Italian tradition:

between the Anglo-Saxon and German approaches of gathering single-family houses in the garden city, and that of grouping homes in a huge machine as in Marseille, we have the Italian way of the 'rione', meaning the approach of bringing a number of homes together in single structures, gathering them very close, creating small and lively spaces, always varied and always commensurate with the person, their habits and their most essential pleasure: of chatting from window to window, of seeing the children play (...) of courtyards, not grand parade squares, but small courts, with the sensation of living spaces – a very Italian and pleasant invention.⁶

The idea was to develop the already complete housing as a community – an idea deriving in part from the areas designated for construction. These were peripheral, for economic reasons, but also for aims of urban decentralization, expressed as

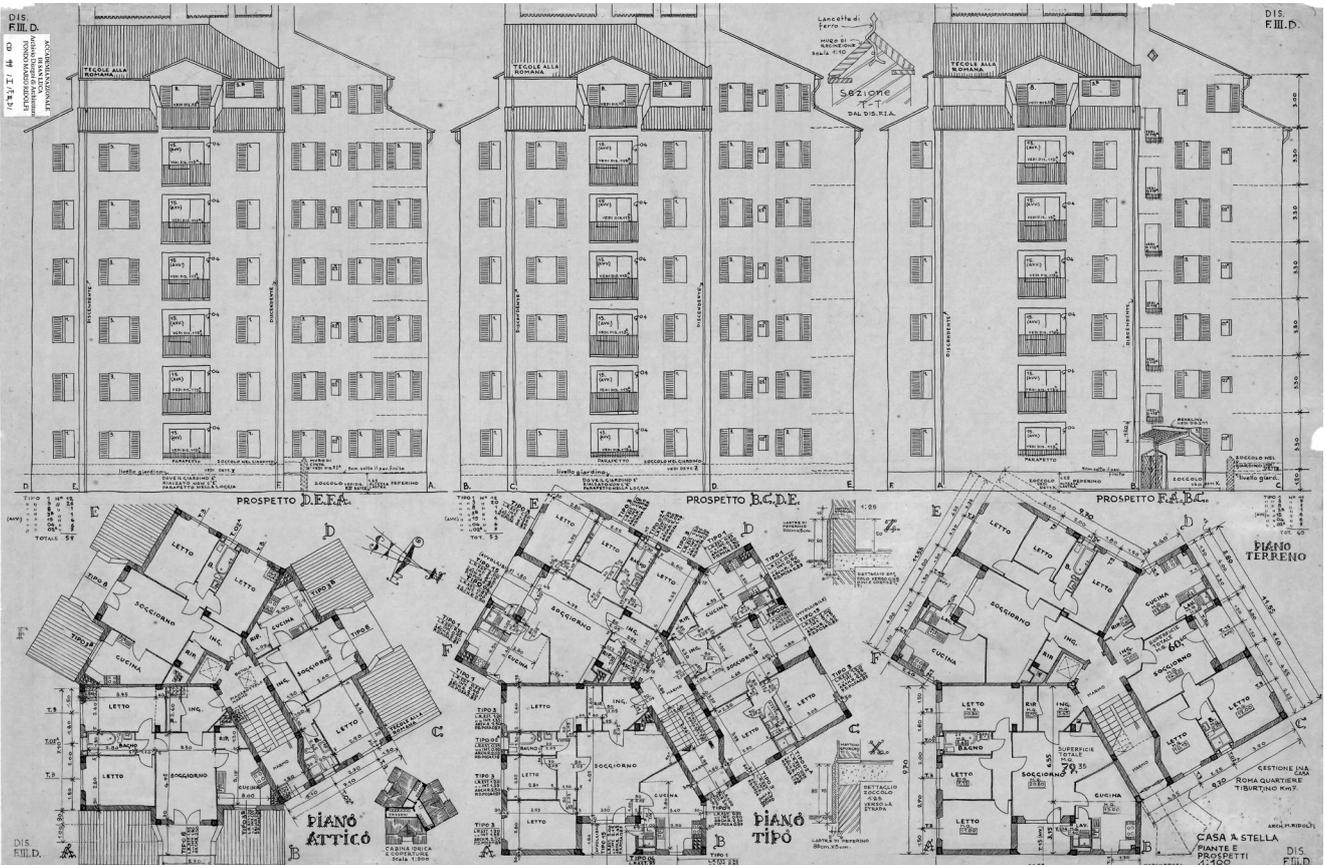
various urban compositions, articulated and activated so as to create welcoming and restful environments, with different views in every part, and endowed with beautiful vegetation, where every building has its distinct appearance, and every person easily finds their own home, with the feeling that it reflects their own personality.⁷

The planners sought compositional diversification in the design of collective spaces – pedestrian paths, courts, green spaces, flower and vegetable gardens – developing a

connective tissue mediating the relationship between the neighborhood and the houses and encouraging community relationships and rootedness.

Given the predetermined construction systems, of load-bearing masonry for lower structures and reinforced concrete framing for higher structures, the architect's work was focused on the materials and building elements. This resulted in experimental works in new languages, based on the exposition of all structural and finishing elements, reinterpreted in a figurative key, also extending to the outdoor spaces, in components from paths to fences.

The building elements are all placed in plane, revealing their functions: load-bearing masonry, framing in reinforced concrete with infill, roof and balcony parapets, window and door sets (comprising architrave, sash and sill). The facades attain a strong formal character through the balconies, and in particular through two new elements: the *loggia*, introduced to facilitate outdoor life, and small drying spaces for laundry, ventilated but shielded from view. The roofing also assumed new importance: most often in semi-traditional pitched form, accentuating the domestic character of the buildings, more rarely flat roofs. In both cases, all the fittings were on display: overhangs, eaves, downspouts and chimneys. The rich assortment of solutions descended not only from the skill of the designers, but also the reference to local traditions and materials: tuff, stone and colored plasters, with exposed reinforced concrete for perimeters and framing, and solid and



02 Mario Ridolfi, INA Casa Tiburtino District, Rome, Italy, 1950-1954. Design for tower blocks. © Accademia Nazionale di San Luca, Roma, Fondo Mario Ridolfi.

03 Luigi Carlo Daneri, INA Casa Forte Guezzi District, Genoa, Italy, 1956-1968.
© Roberto Saba, 2008.



04 Adalberto Libera, INA Casa Tuscolano III District, Rome, Italy, 1950-1954.
© Luigi Beretta Anguissola, 1963.



05 Luigi Figini and Gino Pollini, INA Casa Harar District, Milan, Italy, 1951-1955.
© Marco Introini, 2005.



06 Ceramic tiles that distinguish one of the INA Casa District. © Rosalia Vittorini.

perforated brick in an infinity of systems. Added to this were innovative solutions for balconies, *loggias* and drying areas: iron railings, concrete and brick grilles, wooden and sheet-metal louvers, panels in glass brick.

The neighborhoods share a language of spontaneous, studied realism, in an almost infinite range of variants, precisely characterized by one of Pier Paolo Pasolini's (1922-1975) fictional characters:

One day, on the via Tiburtina just past the Fort, they began to spread apartment buildings all around: it was an INA-Casa project, and buildings began to sprout on the meadows, on the knolls, with strange shapes, pointed roofs, little terraces, dormers, round and oval windows. People called them Alice in Wonderland houses, the Fairy Village, New Jerusalem, and everyone started laughing.⁸

The best-known examples, together with a multitude of smaller and untraced interventions, offer a rich and varied, but still unitary, panorama. Only in rare cases does the construction deviate from INA-Casa directives, through reference to local vernaculars, or at the opposite extreme, by exploiting the expressive potential of concrete framing.

The Tiburtino project (1950-1954)⁹ is pivotal to the debate,

given its status as a pilot intervention. Here, Ridolfi designed both in-line terraced houses, adapting them to the rigid structural scheme of load-bearing masonry, and tower blocks, where, instead of capitalizing on the freedom offered by the concrete framework, he forced the framing into the role of a sort of reinforcement of the walls, adapting the position and section of the concrete pillars to the masonry planes. Mario De Renzi was among the first to propose the tower block, in an original star-shaped version achieving greater facade surfaces and multiplying the views, in the Valco San Paolo district of Rome (1949-1952)¹⁰. Adalberto Libera's design for the Tuscolano III project (1950-1954) remains unique: a horizontal dwelling unit, closely descended from Mediterranean tradition, counterpointed by high buildings with external access galleries. Derogating from the INA-Casa instructions on density, Adalberto Libera designed an urban quadrangle incised by narrow pedestrian lanes and perforated by terraces, overlooked by single-story homes gathered in groups of four. Above these rise higher buildings, with minimal housing units inserted in a field of portals in reinforced concrete, endowing the facades with rhythm.

The projects by the Milanese architects echo those of the Romans: in Milan Cesate (1951-1957)¹¹, Ignazio Gardella (1905-1999) and Franco Albini (1905-1977) proposed the terraced

type, with two-story homes in load-bearing masonry. Gardella designed long narrow modules, with elements typical of the masonry tradition. Franco Albini worked with a quadrangular unit, rotated and embedded in an L-shaped module, assembled in multiples to create the overall project.

Given the traditionalist orientation of the Plan, there are only rare cases of prefabrication, such as grilles, sills, shutters, balcony parapets, and generally in small series. In the Harar district of Milan (1951-1955),¹² Luigi Figini (1903-1984) and Gino Pollini (1903-1991) designed parapets of concrete grating elements, cast in factory for the south-facing terraces of an apartment block with an external corridor. In the Bernabò Brea district of Genoa (1950-1957),¹³ Luigi Carlo Daneri (1900-1972) specified panels for parapets and architraves, of thin slabs of reinforced concrete with the external face showing rounded river or sea pebbles, about four centimeters (cm) diameter, immersed in concrete.

By the time of the second seven-year period, experience had led to the revision of rules on design, and experiments were advanced for rationalizing the worksite, contributing to what would become a mature INA-Casa style. The still limited use of reinforced concrete in framing permitted new aggregations, such as the free-plan housing of *Forte Quezzi* in Genoa (1956-1968).¹⁴ Here, faithfully following the site contours, Luigi Carlo Daneri organized typologically complex units with loggias and pedestrian paths. In the La Palma district in Cagliari (1957-1963),¹⁵ Enrico Mandolesi (1939-2015) experimented with the theme of unification through a project using modular components. Starting with a reinforced concrete frame, he designed five variants of a wall panel in exposed UNI brick, with openings up to full height. In the Soccavo-Canzanella district of Naples (1957-1962)¹⁶, Mario Fiorentino (1918-1982) introduced a prefabricated metal staircase with steps of vibrated concrete, and eight types of sheet-metal sashes and doors, each in four variants, complete with rolling shutter and batten, painted and ready for installation.

Perspectives

The INA-Casa experience produced an architectural heritage and an immense historical and cultural heritage of quality urban nuclei. Although criticized, this patrimony represents a unique instance in the history of Italian building policies, for the efficiency of public management and the central role played by architects. At the time of construction, the INA-Casa neighborhoods represented an anomaly. Until then, urban centers had grown gradually, in small increments, through almost spontaneous planning. Following this interlude, growth would often proceed by disorderly summation of indistinct parts.

Today, the INA-Casa neighborhoods maintain their distinct image, each with its identity, despite the inevitable tampering with common spaces and changes to the properties, in many cases accelerated by fragmentation of ownership. The projects are highly resilient, and capable of responding to current sustainability criteria, given their design for optimization of environmental resources.

The surviving common spaces, often green, intertwine domestic areas and collective uses, and can be reinvigorated without loss of identity. Nowadays, these neighborhoods

offer a decisive added value, residing precisely in these “unbuilt” connective spaces: in light of the crisis of later models of public housing and the current restrictions on resources, revising the shape and roles of this material heritage can open new perspectives on contemporary living.

Notes

- 1 Salvatore Aldisio (1890-1964), Minister of Public Works, speaking at the opening of the National Congress on Construction and Housing, 20th-25th October 1950, in Rome.
- 2 At the close of the first seven years, Parliament passed Law 1148 for the “continuation and expansion” of the plan.
- 3 The first call (October 1949) brought 340 applications, mostly from young architects.
- 4 Francesco Tentori, “Opere recenti di Mario Ridolfi”, *Casabella Continuità*, No. 249, Milano, Studio Editoriale Milanese, March 1961, 4-23.
- 5 From his larger work on “The technical function of the housing unit”, Libera published *La stanza da letto*, Garzanti, Milano, 1945, and “Il ciclo dei cibi. Tecnica funzionale e distributiva dell'alloggio”, *Strutture*, No.3-4, Roma, Edizioni della Bussola, December-January 1947-1948, 22-48.
- 6 Gio Ponti “Quartiere all'italiana”, *Domus*, No. 293, Milano, Editoriale Domus, 1954.
- 7 From the second dossier.
- 8 Pier Paolo Pasolini, *Una vita violenta*, Milano, Garzanti, 1959, 184-185.
- 9 Ludovico Quaroni (1911-1987) and Mario Ridolfi, with others.
- 10 Mario De Renzi, Saverio Muratori (1910-1973), Mario Paniconi (1904-1973), Giulio Pediconi (1906-1999), Fernando Puccioni (1907-1990).
- 11 Franco Albini, Ignazio Gardella, Gianni Albricci (1916-2001), Enrico Castiglioni (1914-2000), Ludovico Barbiano di Belgiojoso (1909-2004), Enrico Peressutti (1908-1976), Ernesto Nathan Rogers (1909-1969).
- 12 Luigi Figini, Gino Pollini, Gio Ponti, Piero Bottoni (1903-1973), Paolo Chessa (1922-1981), with others.
- 13 Luigi Carlo Daneri, Luciano Grossi Bianchi (1922-2013), Giulio Zappa (1895-1989).
- 14 Luigi Carlo Daneri, Eugenio Fuselli (1903-2003), Claudio Andreani (1914-2005), Robaldo Morozzo della Rocca (1904-1993), with others.
- 15 Enrico Mandolesi with others.
- 16 Mario Fiorentino, Giulio De Luca (1912-2004), Giulio Sterbini (1912-1987), with others.

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