the architecture of MODERN ITALY

volume 2

visions of utopia

1900–present

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terry kirk

The Architecture of Modern Italy


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The Architecture of Modern Italy

Volume II: Visions of Utopia, 1900–Present

Terry Kirk

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INTRODUCTION

"Modern Italy" may sound like an oxymoron. For Western civilization, Italian culture represents the classical past and the continuity of canonical tradition, while modernity is understood in contrary terms of rupture and rapid innovation. Charting the evolution of a culture renowned for its historical past into the modern era challenges our understanding of both the resilience of tradition and the elasticity of modernity.

We have a tendency when imagining Italy to look to a rather distant and definitely premodern setting. The ancient forum, medieval cloisters, baroque piazzas, and papal palaces constitute our ideal itinerary of Italian civilization. The Campo of Siena, Saint Peter's, all of Venice and San Gimignano satisfy us with their seemingly unbroken panoramas onto historical moments untouched by time; but elsewhere modern intrusions alter and obstruct the view to the landscapes of our expectations. As seasonal tourist or seasoned historian, we edit the encroachments time and change have wrought on our image of Italy. The learning of history is always a complex task, one that in the Italian environment is complicated by the changes wrought everywhere over the past 250 years. Culture on the peninsula continues to evolve with characteristic vibrancy.

Italy is not a museum. To think of it as such—as a disorganized yet phenomenally rich museum unchanging in its exhibits—is to misunderstand the nature of the Italian cultural condition and the writing of history itself. To edit Italy is to overlook the dynamic relationship of tradition and innovation that has always characterized its genius. It has never been easy for architects to operate in an atmosphere conditioned by the weight of history while responding to modern progress and change. Their best works describe a deft compromise between Italy's roles as Europe's oldest culture and one of its newer nation states. Architects of varying convictions in this context have striven for a balance, and a vibrant pluralistic architectural culture is the result. There is a surprisingly transparent top layer on the palimpsest of Italy's cultural history. This book explores the significance of the architecture and urbanism of Italy's latest, modern layer.

This book is a survey of architectural works that have shaped the Italian landscape according to the dictates of an emerging modern state. The idea of Italy had existed as a collective cultural notion for centuries, but it was not until the late nineteenth century that Italy as a political state became a reality. It was founded upon the strength of the cultural tradition that brought together diverse regional entities in a political whole for the first time since antiquity. The architecture and the traditions it drew upon provided images and rallying points, figures to concretize the collective ideal. Far from a degradation of tradition—as superficial treatments of the period after the baroque propose—Italy's architectural culture reached a zenith of expressive power in the service of this new nation by relying expressly on the wealth of its historical memory. Elsewhere in Europe, the tenets of a modern functionalism were being defined, tenets that are still used rather indiscriminately and unsuccessfully to evaluate the modern architecture of Italy. The classical tradition, now doubly enriched for modern times by the contributions of the intervening Renaissance, vied in Italy with forces of international modernism in a dynamic balance of political and aesthetic concerns. An understanding of the transformation of the Italian tradition in the modern age rests upon a clarification of contemporary attitudes toward tradition and modernity with respect to national consciousness.

Contemporary scholarship has demonstrated the benefits of breaking down the barriers between periods. Notions of revolution are being dismantled to reconstruct a more continuous picture of historical development in the arts. Yet our vision of modern Italian architecture is still characterized by discontinuities. Over the last fifty years, scholars have explored individual subjects from Piranesi to the present, and have contributed much to our knowledge of major figures and key monuments, but these remain isolated contributions in a largely fragmentary overview. Furthermore, many of these scholars were primarily professional architects who used their historical research to pursue timely political issues that may seem less interesting to us now than their ostensible content. My intention is to strive for a nonpolemical evaluation of cultural traditions within the context of the modern Italian political state, an evaluation that bears upon a reading of the evolution of its architecture.

The Architecture of Modern Italy surveys the period from the late baroque period in the mid-eighteenth century down to the Holy Year 2000. Its linear narrative structure aligns Italy's modern architectural culture for the first time in a chronological continuum. The timeline is articulated by the rhythms of major political events—such as the changes of governing regimes—that marshal official architecture of monuments, public buildings, and urban planning and set the pace for other building types as well. The starting point of this history will not be justified in terms of contrast against the immediately preceding period; indeed, we set ourselves down in the flow of time more or less arbitrarily. Names and ideas will also flow from one chapter to the next to dismantle the often artificial divisions by style or century.

This study is initiated with Piranesi's exploration of the fertile potential of the interpretation of the past. Later, neoclassical architects developed these ideas in a wide variety of buildings across a peninsula still politically divided and variously inflected in diverse local traditions. The experience of Napoleonic rule in Italy introduced enduring political and architectural models. With the growing political ideal of the *Risorgimento*, or resurgence of an Italian nation, architecture came to be used in a variety of guises as an agent of unification and helped reshape a series of Italian capital cities: Turin, then Florence, and finally Rome. Upon the former imperial and recent papal capital, the image of the new secular nation was superimposed; its institutional buildings and monuments and the urban evolution they helped to shape describe a culminating moment in Italy of modern progress and traditional values balanced in service of the nation. Alongside traditionalist trends, avant-garde experimentation in Art Nouveau and Futurism found many expressions, if not in permanent built form then in widely influential architectural images. Under the Fascist regime, perhaps the most prolific period of Italian architecture, historicist trends continued while interpretations of northern European modernist design were developed, and their interplay enriches our understanding of both. With the reconstruction of political systems after World War II, architecture also was revamped along essential lines of construction and social functions. Contemporary architecture in Italy is seen in

the context of its own rich historical endowment and against global trends in architecture.

Understanding the works of modern Italy requires meticulous attention to cultural context. Political and social changes, technological advance within the realities of the Italian economy, the development of new building types, the influence of related arts and sciences (particularly the rise of classical archeology), and theories of restoration are all relevant concerns. The correlated cultures of music production, scenography, and industrial design must be brought to bear. Each work is explored in terms of its specific historical moment, uncluttered by anachronistic polemical commentary. Primary source material, especially the architect's own word, is given prominence. Seminal latter-day scholarship, almost all written in Italian, is brought together here for the first time. Selected bibliographies for each chapter subheading credit the original thinkers and invite further research.

5.1 Raimondo D'Aronco, Esposizione Internazionale d'Arte Decorativa, Turin, 1902

Chapter 5

ARCHITECTS OF THE AVANT-GARDE, 1900S–1920S

THE INTERNATIONAL EXHIBITION OF DECORATIVE ARTS, TURIN, 1902

On 10 May 1902, a new art burst upon Italy. An international exhibition of decorative arts brought together the major protagonists of the Art Nouveau—Victor Horta, Peter Behrens, Hendrik Petrus Berlage, Joseph Maria Olbrich, Charles Rennie Mackintosh, Louis Comfort Tiffany, and many others—for the first time in a single place: Turin. To local critics, the arrival of the European avant-garde awakened Italy from the hypnosis of its architectural heritage to a bright new design aesthetic.

International exhibitions allowed a participating nation to distinguish its production from rivals, but Italy had in the past not fared well at such events. Its artistic progress seemed to lag behind that of France in particular. Exhibitions of contemporary art, like the bi- and triennials of Venice and Milan, were staged in the major Italian cities and were intended, as one member of the Turin 1902 guiding committee expressed it, "to socialize the consciousness of the arts." Primo Levi, keen on all aspects of the national well-being, extolled the Art Nouveau movement as a more fruitful union of art and industry that would create a truly modern aesthetic to enrich daily life at all social levels.

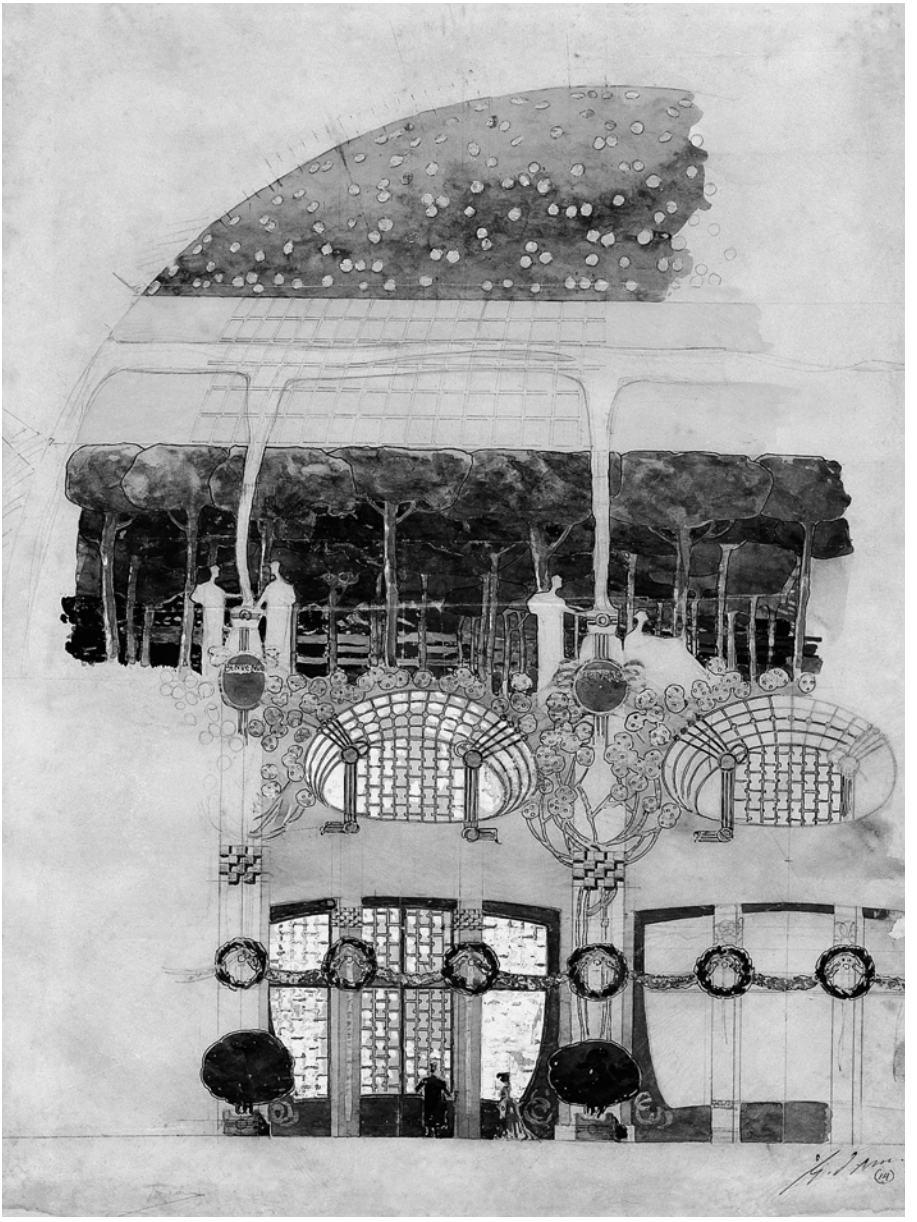
Freedom from historical styles and traditional canons was key to the Turin program. "Nothing will be accepted but original work showing a decided effort at the renovation of form," read the exhibition manifesto. "Reproduction of historical styles will be rigorously excluded." The exhibition aimed "to bring art and life back together and to eliminate

every trace of the passé." Prototypes were not to be displayed in glass cases but integrated in unified ensembles of real rooms.

The exhibition pavilions were designed by Raimondo D'Aronco to echo the aesthetic principles of the objects on display. In 1893 D'Aronco had gone to Constantinople to design the pavilions for an Ottoman national exhibition, but when an earthquake intervened he remained there to work for Sultan Abdül Hamit II rebuilding palaces and restoring Hagia Sophia. D'Aronco answered the Turin 1902 competition program from abroad and was chosen for his facility with exotic invention and his skills of improvisation. While preparing the final designs, D'Aronco toured Europe with a stop at the Darmstadt artists' colony, where Olbrich himself gave him a guided tour. D'Aronco seems to have been strongly influenced by the visit.

D'Aronco's designs for the Turin fair involved a half dozen pavilions lighted with colored lightbulbs. The entrance rotunda was a 30-meter bubble of vivid forms in wood, canvas, and plaster. Its balletic lines were punctuated with leaping statue figures. The circular space within served as a hub to the principal exhibition halls beyond. The interior canvas surfaces were hung from a structural cage that allowed a continuous translucent ring of light around the inside, creating a magical, weightless effect. "I was inspired by the dome of Hagia Sophia," D'Aronco wrote, "its dark-yellow center resting on a luminous base . . . flooded by a golden light. . . . I should like to attain the same effect." He succeeded in creating an environment free of any traditional imagery. Visitors were drawn into a votive temple to the new art. D'Aronco's aggressive novelty announced the arrival of avant-garde modernism into Italy.

The art on view at the Turin exhibition was characterized by the use of curved rather than straight lines, a focus on color over form, an aversion to symmetry, the integration of decoration inside and out, and the use of modern building materials such as iron, glass, and molded cement. Italians were at a loss for words to describe the new style. They called it *arte nuova*, *stile moderno*, and, in acknowledgment of its naturalistic elements, *floreale*. But, most memorably, they dubbed it "*stile Liberty*," after the whiplash motifs they recognized from the magazine advertisements for Arthur Liberty's London export store. The term aptly denoted the style's essential freedom, and it stuck.



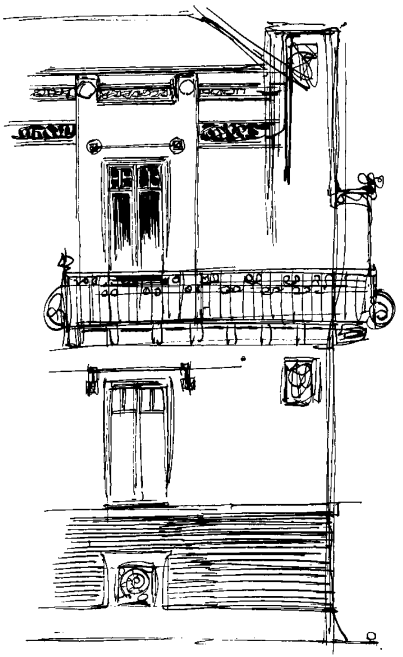
5.2 Raimondo D'Aronco, Esposizione Internazionale d'Arte Decorativa pavilion, Turin, 1902

When critics noted the obvious derivations from Olbrich's work, D'Aronco denied it. He feared identification of foreign models would jeopardize Italy's position in the development of a new culture of artistic modernism. For Italian critics, D'Aronco's internationalism was nothing to cheer about. Indeed, the inherent internationalism of Art Nouveau was perceived by conservative critics as a threat to Italy's cultural integrity and hard-won independence. Camillo Boito criticized the new movement for severing evolutionary ties to history. Antonio Frizzi warned, "the national architecture cannot expect a fruitful period of evolution if it wants to imitate such examples [as this], distancing itself so brusquely from all those traditions that for centuries were the heritage and pride of our Italy." Though the socialist dimensions of the modernist program paralleled the new governing philosophy (a progressive political faction of Giovanni Giolitti had recently taken control of parliament), the logic of the aesthetic debate remained elusive. The Turin exhibition, this "socialism of beauty" as headlines read, was inaugurated incongruously by the new king, Vittorio Emanuele III, and coordinated with the unveiling of an equestrian statue to Prince Amedeo, his ancestor, just outside. The speech delivered by the minister of public instruction extolled renewal and the cosmopolitan *stile nuovo*, but concluded *restiamo Italiano* ("let us remain Italian"). The clamorous debut of Art Nouveau in Italy triggered a seminal debate in which at least one thing was clear: innovative international modernism and classical national tradition were set in tense opposition. D'Aronco's pavilions, idiosyncratic, peculiar, and ephemeral as they were, would have no systematic influence on Italian architecture except to demonstrate the possibility of extreme liberty.

STILE LIBERTY: PIETRO FENOGLIO, GIUSEPPE SOMMARUGA, ERNESTO BASILE

Stile Liberty flourished in the buildings of the nouveaux riches: their private houses, their places of business, their shopfronts and art galleries, their cafés and restaurants and luxury hotels. The work of Pietro Fenoglio exemplifies the speed with which the entrepreneurial bourgeoisie and their architects joined the latest trend. Fenoglio was a member of the 1902 exhibition committee, and the experience realigned his design sensibility. His own house and studio in Turin of 1902, named "La Fleur," picks up naturalistic motifs from Horta and Guimard. Across the Po river Fenoglio designed a fully representative work of the Italian Art Nouveau: the Villino Scott, also of 1902. The interiors, however, are distinctly neo-rococo, but with the buds of the *stile Liberty* grafted on. In contrast to Horta or Guimard, Fenoglio operated on a superficial level, substituting one style for another without regard for the structure or program that made Art Nouveau elsewhere into a material revolution in architecture.

Many Italian architects and clients followed the fad. Italian Art Nouveau architecture is concentrated in urban centers such as Turin, Milan, and Genoa, where a mercantile class could afford expensive status symbols. Liberty style was almost entirely excluded from ecclesiastical buildings, which continued to rely on the evocative force of historical forms. Giuseppe Sommaruga built what was universally hailed in its day as the most important architectural work of Italian Art Nouveau: the Palazzo Castiglioni of Milan. The project was developed during the excitement over the Turin fair and inaugurated exactly one year later, in May 1903. It is a simple apartment house built up to a monumental scale. Despite its bulk, the Castiglioni facade plays nimble tricks with asymmetry, regrouping its nine bays at each level to avoid any formulaic composition. Greenish-gray granite breaks up the local palette of terracotta and plaster. Spandrels slip and bands wrap in novel ways, interlocking like cabinetry. Decorative figures that emerge from the wall's mass invest the design with energy. Overscaled allegories of Industry and Peace relax on Castiglioni's windowsill. Putti clamor about the upper windows, their uninhibited movement symbolic of this entire architectural



5.3 Pietro Fenoglio, Villino Scott, Turin, 1902–4
5.4 Giuseppe Sommaruga, Palazzo Castiglioni, Milan, 1901–3
5.5 Ernesto Basile, Villino Basile, Palermo, 1903–4, detail

work. Liberated fantasy carries through to the inside with inventive column capitals and the highest quality wrought iron.

The Palazzo Castiglioni shook up Milanese residential architecture. Sommaruga, the leader of the *arte nuova*, showed that Italy could pursue modernism by exercising creative fantasy. The architectural press stirred up a scandal over the scantily clad allegories, so Castiglioni had the figures removed within a month of their unveiling. Without the sculpture, the facade shows the essential difference between Sommaruga and the northern European Art Nouveau masters in whose designs no ornament is extraneous. Nonetheless, Sommaruga's work remained emblematic for the various bold architects of the early twentieth century who followed their fantasy.

Ernesto Basile, son of Giovanni Battista Filippo, was keenly aware of the peculiar cultural evolution of his native Sicily. In his first commission in Palermo, the pavilions of an 1891 regional exhibition, he amalgamated that heritage of Greek, Roman, Norman, and Arab colonializations in a stylistic hybrid that met with wide popular approval. Basile's search for a distinct regional expression is exactly contemporaneous with Antoni Gaudí's work in Catalonia and shared with it an accent on individual artistic liberty. Basile remained, critics claimed, "genuinely Latin, traditional and personal . . . the most original and decisive [genius] of a vital modern Italian artistic movement" because he understood, unlike his more strident modernist colleagues, that he did not need to destroy historical heritage in order to renew.

Basile's language of form consists of fluid planning, asymmetrical massing, and vertical planes dominating horizontal blocks. His white stucco surfaces are taut and slightly curled at their edges, which lends them a gentle energy. When Basile was twenty-five years old, he expressed the principles of this language as "the feeling *in* the line" guided by a study of nature. If published, Basile's manuscript could have been a manifesto of international Art Nouveau. Basile's own residence and studio of 1903 demonstrates his confidence. Decorative motifs were inspired by sea animals, insect anatomy, thistles. Similar forms are found on ancient pottery, and Basile conjoins the archaic and the naturalistic.

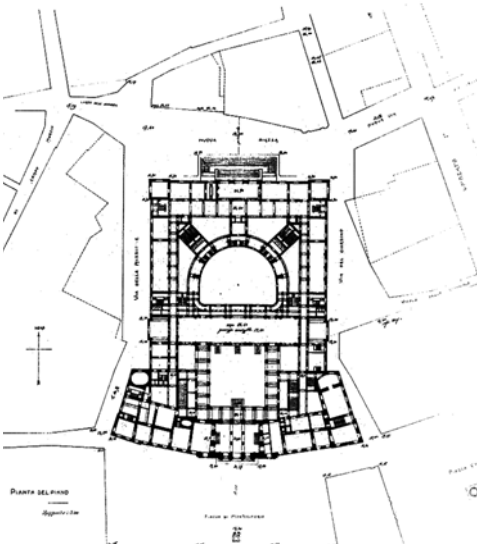
Basile invented a wholly original style without a hint of foreign inflection, and he was given an exceptional opportunity to apply it on

a national scale with a design for a new parliament building. The Palazzo di Montecitorio—Bernini's Ludovisi palace and once the seat of the papal courts—had been fitted in 1870 with a temporary auditorium for the chamber of deputies. The modest wooden construction was sufficient for previous ministers but intolerable for Prime Minister Francesco Crispi.

In 1881 Crispi held a competition for a new construction on Via Nazionale. Sommaruga submitted a neo-Gothic design like London's Parliament, but Basile designed a tall, boxy mass that avoided the domes favored in European parliament buildings that would in Rome carry an inevitable ecclesiastical association. The entries to Crispi's competition reflect an overreaching and wayward architectural culture, and no winner was selected. Each successive prime minister sponsored his own competition to adapt Montecitorio, but the program parameters and decision-making processes were often so ill defined that no results were ever achieved. It was never clear whether the task was to amplify Bernini's original with a seamless imitative addition or to adjoin an independent modern entity.

In 1899, after thirty years of use, the temporary auditorium had to be evacuated. Prime Minister Giuseppe Zanardelli ordered a definitive project without delay. Circumnavigating all established procedures for public commissions and disregarding the compilation of earlier projects, Basile was hired over objections from both the chamber and the architect himself. Basile's invitation to Rome, however, reflects a new cultural policy to address a conspicuous absence of southern talent in the capital. After coming close in two major state competitions, Basile finally stepped to the national front line. Basile's project for the new parliamentary hall was presented by Prime Minister Giovanni Giolliti in 1903 and its approval symbolized a vote of confidence in Giolliti's new government.

Basile began with interior distribution. The auditorium remained in its original position in the semicircular rear courtyard of Bernini's palace, retracing it in the fan of deputies' seats. A transverse lobby joins the chamber's flat end to the earlier baroque sections while offices around the perimeter isolate the center. No rising volume expresses the chamber on the exterior. A flight of stairs provides the new complex with its own entrance. Basile did not rely



5.6–5.8 Ernesto Basile, Palazzo del Parlamento, Rome, 1903–18

here on his usual relaxed asymmetrical planning and opted for a turreted four-square image. Basile's design, however, belies considerable difficulty. There is no subtlety in its insertion into the urban fabric. Its connections to the baroque original, complicated by a fall of street level, are more aggressive than conciliatory. The planning around the auditorium is largely stiff and uninteresting, with some tight passages. Basile had never built at such large a scale, never in so rich an urban context, and never for national representation. He sought, perhaps unsuccessfully, to reconcile a monumental rhetoric inherent in the project with the looser vivacity of his earlier experience.

For his facade Basile has transcribed the elements of Roman classicism in crisp calligraphic marks, taut bands, and clasps instead of columns and cornices. The florid capitals are tied into an overall weave and the carefully observed natural details blur the distinction between the natural and the artificial. To one contemporary critic seeking a national meaning in the floral elements, they recalled the Augustan motifs of the Ara Pacis, recently excavated only a few meters from Basile's building. Line remained Basile's font of creative energy. The interiors are unified by an Art Nouveau imagery of rich materials, saturated colors, naturalistic motifs, and energized lines. Camillo Boito and the official painter, Cesare Maccari, supervised the completion of the figural decorations: Domenico Trentacosta for the front door's allegories, Davide Calandra for the hall's relief on military valor, and Aristide Sartorio for the painted frieze on the theme of Italy's history and her cities. Only the last, which floats above Basile's architectural frame in the chamber, amplifies the fluidity synonymous with the architecture's essential qualities; the sculptors' works remain entrenched in the pomp of the capital's commemorative monuments.

Despite Italy's historical weight and contextual conditions, it was the only nation to build its seat of government in the Art Nouveau style. This was an auspicious moment for early modernism in architecture. Ugo Ojetti, an early champion of Basile, wrote in 1913 of the value of separating the new from the old. Reconstructing a historicist addition to Bernini's palace would have been, for Ojetti, an empty rhetorical exercise. "Think, as far as it is possible, with the ancients," he wrote, "but do not speak with their language. Speak with

our own." Basile, according to Ojetti, was one of the few architects with the conviction to speak a contemporary language even in the company of the greatest predecessors. The selection of Basile coincided with the peak of interest for the *stile Liberty* and the concomitant consideration of an Italian national style. Basile, once described as "genuinely Latin, traditional and personal," seemed to have struck the perfect balance of tradition and innovation. The sublimated classicism and trimmed naturalism of his Parliament expresses this equilibrium, a *floreale* grown in Italian soil. The classicizing Liberty style of Basile's Parliament can also be cogently read in its political context. Its gentle imagery, softer and smaller than other state monuments, describes the desired political image of Giolitti's leadership. Through Basile, the political moment found an ideal architectural imagery.

Ironic interpretations are also possible. The stylishness of Art Nouveau gave Parliament, in the eyes of less generous critics, the look of a luxury hotel, catering to the fulsome taste of its transitory guests, the deputies and their constantly shifting governments. The lobby was nicknamed "Il Transatlantico" for its resemblance to an ocean liner. To conservatives it was incongruously modern, to modernists too compromised by the classical. The building's prolonged construction over seventeen years meant it was inaugurated long after the taste for Art Nouveau had passed. Furthermore, Basile never succeeded in turning Palazzo di Montecitorio around. Bernini's facade remains the principal entrance and the recognized image of the institution. The two parts are joined uncomfortably, old and new unreconciled, a concrete symbol of the unresolved ambiguity of modernity in early-twentieth-century Italy.

Art Nouveau in Italy never became a galvanizing "socialism of beauty" as had been hoped. No pioneers of modern design made it their conviction. Late in life, D'Aronco returned to a Renaissance monumentalism. Basile retreated to his former historicist mixtures for the Sicilian pavilion at the 1911 Roman exhibition. Marcello Piacentini also faltered. Piacentini launched his career amid the modernist enthusiasms. His Cinema Corso in Rome of 1918, one block north of Basile's building (then nearing completion), received all the brunt of critics crackling around the Parliament. In Piacentini's cinema, the fluid freedoms of *stile Liberty* met the cool dryness of the latest Viennese trends in a reinforced concrete structure, and the

project was vehemently attacked in the press. In self-defense, the young Piacentini, who wanted to free modern design to express itself as equivalent to the older forms, decried the "servile continuation or reproduction" of an artistic historic environment. Piacentini was only the most flagrant perpetrator brought before the period's architectural court of inquisition, and he was forced to alter his design. Nonetheless, the modernist experiment did affect many architects of the younger generation; there was not an artist in Rome who did not respond to the catalytic experience of the *stile Liberty*. Although none remained tied to the revolutionary style, the Italian Art Nouveau inaugurated a period of transition and presented alternatives to prevalent modes of architectural historicism.

SOCIALIZED PUBLIC HOUSING

The social program inherent in European modernism was most fruitfully expressed in Italy in low-income housing. The speculative building market failed to confront the problem, and the demand for housing for the lower classes was at first met by workers' cooperatives or by philanthropic initiative. Pietro Fenoglio, for example, designed an apartment block in 1903 in Turin for the local public housing association and also a workers' village in Collegno for a cotton manufacturer. Both of these "sincere" constructions reflect, in the words of the architect, his "democratic aesthetic." Fenoglio's designs owe much to the last work of Camillo Boito, completed in 1899: a retirement home for professional musicians in Milan funded by and dedicated to Giuseppe Verdi. Its Gothic structural logic and ornamental clarity kept Boito's idea of a moral architecture alive for his numerous students at the Brera, who went on to assimilate it to modernism and apply it in the construction of public housing.

In Rome, the area called Testaccio was designated in the earliest city plans as an industrial zone, and its first residential blocks, built on speculation, showed no consideration for hygienic standards. Testaccio quickly acquired a dreadful reputation among the bourgeois ruling class until Giolitti's government drafted a social policy to address the

problem. In 1903, Luigi Luzzatti, Giolitti's minister of public instruction, enacted national legislation to assist building societies in their efforts to erect housing for the lower classes. The Istituto per le Case Popolari (Institute for Public Housing), or ICP, replaced the piecemeal, unprofitable, and often extortionist efforts of the private sector and cash-strapped municipalities with a bureaucracy to oversee low-income housing. The Luzzatti bill required that specific standards be maintained: a minimal floor area per room, a limited number of floors per building, double exposures for cross ventilation and light, and the rigorous separation of sanitary facilities from kitchens. Use of new materials and building technology was encouraged.

As public housing projects were often large-scale developments covering a number of city blocks, architects were urged to avoid the monotonous look of a barracks, "empty of all thought, of any life, denuded of all grace," as an ICP director said. The ordered Renaissance palazzo facade became an essential template that allowed easy integration with most streetscapes. Shared interior courtyards provided area for communal gardens, wash rooms, or nursery schools. Luzzatti conceived public housing as an integrating social agent, an instructive means toward a healthier, more cohesive society, befitting his official responsibility for education.

The results of the ICP's efforts varied among the major cities, but were generally successful. The Milanese were the first to install electric lighting, central heating, and linoleum flooring (developed by the Pirelli tire company). During Ernesto Nathan's term as mayor of Rome, beginning in 1907, the ICP flourished. By the end of the decade, in the capital's annual tally of newly built housing, subsidized units outnumbered speculative ones. The first ICP venture in Rome dates from 1906 and is located behind the medieval Church of San Saba, near Testaccio. The forty-four duplex units, detached and semidetached row houses, were designed by the ICP staff designer Quadrio Pirani, a member of the Italian socialist party. These modest brick constructions are unique in Rome for their rich textures and natural colors. Pirani let the craftsmen develop their own variety of decorative patterns. Through his architecture, Pirani became the ICP spokesman for a humanitarian spirit in early Italian socialism, and his San Saba is a dignified environment that evokes a genteel English

square. However, unforeseen complications in laying the foundations over ancient quarries drove the price of the units out of range of the target group. When he designed more ICP construction here in 1910, Pirani had to increase plot density and building height and reduce standards for the internal details in order to meet more realistic economic goals. In 1910 the ICP rescued Testaccio with ten sober blocks by Giulio Magni that reduced Pirani's interesting surfaces to an economical minimum. Pirani eventually designed two dozen more buildings in his characteristic brick for Testaccio along the riverbank from 1918 to 1921. Despite these successful and admirable works and the advance of the building type in other countries, public housing in Italy ranked below private commissions in prestige and did not attract the best minds during this period of experimentation.

NEO-ECLECTICISM: GIULIO ULISSE ARATA, ALDO ANDREANI, GINO COPPEDÈ

As the Art Nouveau waned, a younger generation of Italian architects returned to their historical heritage with renewed vigor. Giulio Ulisse Arata began building in the *floreale* style in Naples but he returned to Milan in 1911 to participate in its booming building industry. Heeding his former professor Camillo Boito's call for an architecture of national expression, Arata strove to distinguish his work from what he deemed "the enormous hives, the usual unaesthetic and shapeless cubes that they're calling modern constructions." Arata's finest work was the Palazzo Berri-Meregalli, which presents a turgid mass of patchwork rustication and colossal pilasters engulfed by balconies and bow windows. Mosaics glitter in colorful bands, putti hang on drainpipes, and vines spill from its built-in planters. Granite, brick, and molded cement overlap as the artificial merges with the natural. Nothing rests in this building, which tests the limits of compositional orthodoxy. Boito's historically based renewal was only a starting point for Arata's design.

Arata thoroughly distorted the academic canon with his restless hybridization and his negation of traditional stylistic hierarchies. Contemporaries attributed the vigorous plasticity and sumptuous

fantasy to medieval architecture. Arata had published on Byzantine art, the Italian Romanesque, even Sicilian Arabo-Norman architecture, and yet he evoked the past in an entirely ahistorical way. To many critics, Arata seemed obscure in his meaning, reaching an ungracious restlessness comparable to ugly American building. To others, he succeeded in breaking through the limits of historicism to a modern idiom. Like Piranesi before him, Arata was "a conqueror of academic frigidity," "among the most thoroughly imbibed of the modern spirit" with the capacity to reinvent tradition. In Italian minds, this freewheeling eclecticism was a way out of Art Nouveau's quandary of rootless internationalism. Arata was also very active in Milan's avant-garde artist community, coordinating exhibitions and publications dedicated to dismantling the arts establishment with clamorous proclamations. Arata led the pack of designers who trusted the intuitive power of fantasy in the reuse of the riches of Italian cultural tradition.

Aldo Andreani reinvigorated the backwater of his native Mantua. Mantua was in 1900 decidedly behind the times. The region had been divided by former Austrian rule and was only starting to catch up in the united national economic system. The city's fortifications were leveled and moats filled in; disused waterways and brackish swamps were reclaimed. A city hospital, communal cemetery, and public housing units were built, the historical municipal seat restored, and the ghetto cleared to make room for institutions of public economy, including the Banca d'Italia and the new offices for the Camera di Commercio (Chamber of Commerce). This last structure, founded by the Austrian Emperor Josef II when he reformed the medieval guilds, was considered a vibrant symbol of Mantua's modern progress.

In 1911 young Andreani was commissioned to design the Camera di Commercio, despite the fact he had not yet earned his diploma—a decision owing to his family's prominent local standing, his father's position as city engineer, and Aldo's distinction as Mantua's only aspiring professional architect. He began drafting the design while visiting the world's fair in Rome. The building's program included the grain market, post office, and a caffè . His ground plan follows a regular grid with modules either open or closed, depending on the functions required. The exterior was at first designed with

5.9 Giulio Ulisse Arata, Palazzo Berri-Meregalli, Milan, 1911–13
5.10 Aldo Andreani, Camera di Commercio, Mantua, 1911–14

classical rhythms based on a study of Michelangelo and of Boito's Palazzo delle Debite in Padua.

When he returned to Mantua, he reworked the facade with an overlay of heavy Romanesque motifs. He continued to enrich the design throughout the construction process until the placid quality of the original classical arcade was entirely consumed by borrowed elements from other styles. Half-round windows are bisected by slender columns with exotic capitals and outscaled impost blocks that seem like slipped pieces of the arch. The columns do not rest on the windowsills but connect to the ground floor's entablature, which seems pulled up out of line. Two entirely different stylistic references and conflicting structural modes are held together here in an elastic tension. Classical pilasters were at the last minute replaced with clusters of Gothic colonnettes that end abruptly at the third floor.

This historical medley was built in the modern material of reinforced concrete. Boito, had he lived to have seen it, would surely have disapproved of the indiscriminate mix and the lack of expression of the concrete construction. Like Arata, Andreani elaborated an intuitive artistic process, exploring historical styles to the limits of cohesion, and confronting the problems of a new art with heavy doses of personal expressionism. Andreani's great talent was the ability to handle diverse styles as if he were modeling sculpture. Eventually he moved to Milan and built for many of Arata's clients. His most acclaimed work there, the Palazzo Fidia of 1929, is a dozen meters from the Berri-Meregalli. Andreani kept alive a figurative, dense, narrative approach to architecture.

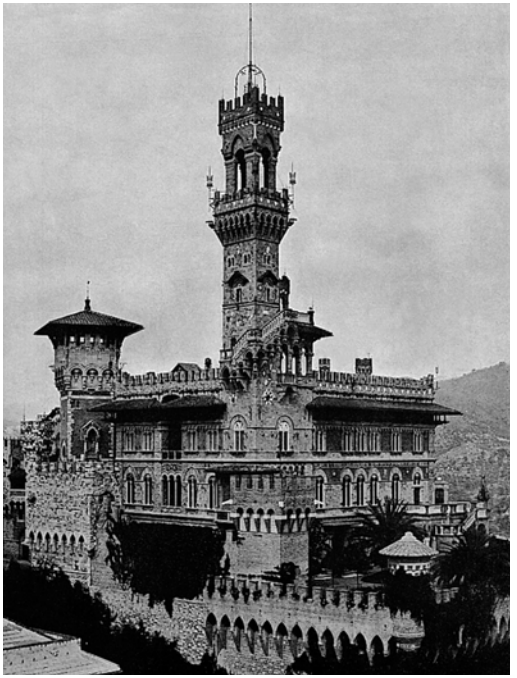
Gino Coppedè spoke in his Tuscan dialect with impetuousness and dash, and his architecture spoke the same language. The *stile Coppedè* is fantastical, hyperbolic, symbolic, acrobatic, hilarious, and clever. From a family of furniture impresarios, Gino first developed his art designing mantelpieces for aristocratic Florentine residences. He was the first in the family to be interested in architecture, and after earning a degree in decorative arts went on to obtain a second degree in architecture.

An impressionable and wealthy Scotsman, Evan MacKenzie, hired Coppedè in 1897 to restructure and furnish a simple villa outside Genoa. The hillside site offered a picturesque perch for a rambling

house of blocks, wings, loggias, towers, turrets, ramparts, crenellations, grottoes, and drawbridges all built over the next decade, the whole surrounded by a fortified wall. Coppedè vigorously combined fragments of every description, archeological and counterfeit, in this treasure chest. His Florentine sources lose their legibility in his transgressive combinations. Here there is no historical transcription, no medieval idiom, but a fantastical castle. The castle is at once ridiculously miniature and grotesquely gigantic. Its fifty or so rooms were furnished with the Coppedè firm's widest historical revisitations. The Castello MacKenzie is paradigmatic of bourgeois excess, comparable to Ludwig II's Neuschwanstein, Lord Bute's Cardiff Castle, William Randolph Hearst's San Simeon. It is an enchanted city, a Disneyland ready for costume pageants. The designer tapped Piranesi's potential; his rambling interiors writhe with tortuous plays of light, paradoxical structural illusions, and restless surfaces.

By the time the Castello MacKenzie was finished, in 1907, Coppedè had become famous for his inimitable style. So many commissions for more castles in Genoa poured in that he moved the whole family up from Florence. Florence's old-money clients did not offer the license that Genoa's new-money magnates demanded. Gino and his brother Adolfo worked indefatigably on a series of palaces and offices, hotels and apartment buildings, even the interiors of Genoa's famed luxury ocean liners. Adolfo, who eventually took over the firm, emulated his brother in everything. His own designs for a children's theme park, the Città Ragazzofolesca, were not built, but he realized an equally fantastical Moorish theater at the Piazza Beccaria in Florence. Fairground designs promised the Coppedès great publicity. Gino designed the Genoese pavilion at the 1906 exhibition in Milan celebrating the opening of the Sempione tunnel through the Alps. It dramatized the technology of Genoa's port with riveted metal and jutting crane spurs for decoration.

Coppedè was the principal designer of Genoa's own maritime exhibition of 1914, the only fair design comparable to D'Aronco's of 1902. Looking a lot like Adolfo's Città Ragazzofolesca, it featured cannons, gigantic projectiles, and hallucinatory effects that flabbergasted the public. "What style is it?" exclaimed a journalist. "Certainly an ultra-futurist style, but who knows, everybody likes it and that's



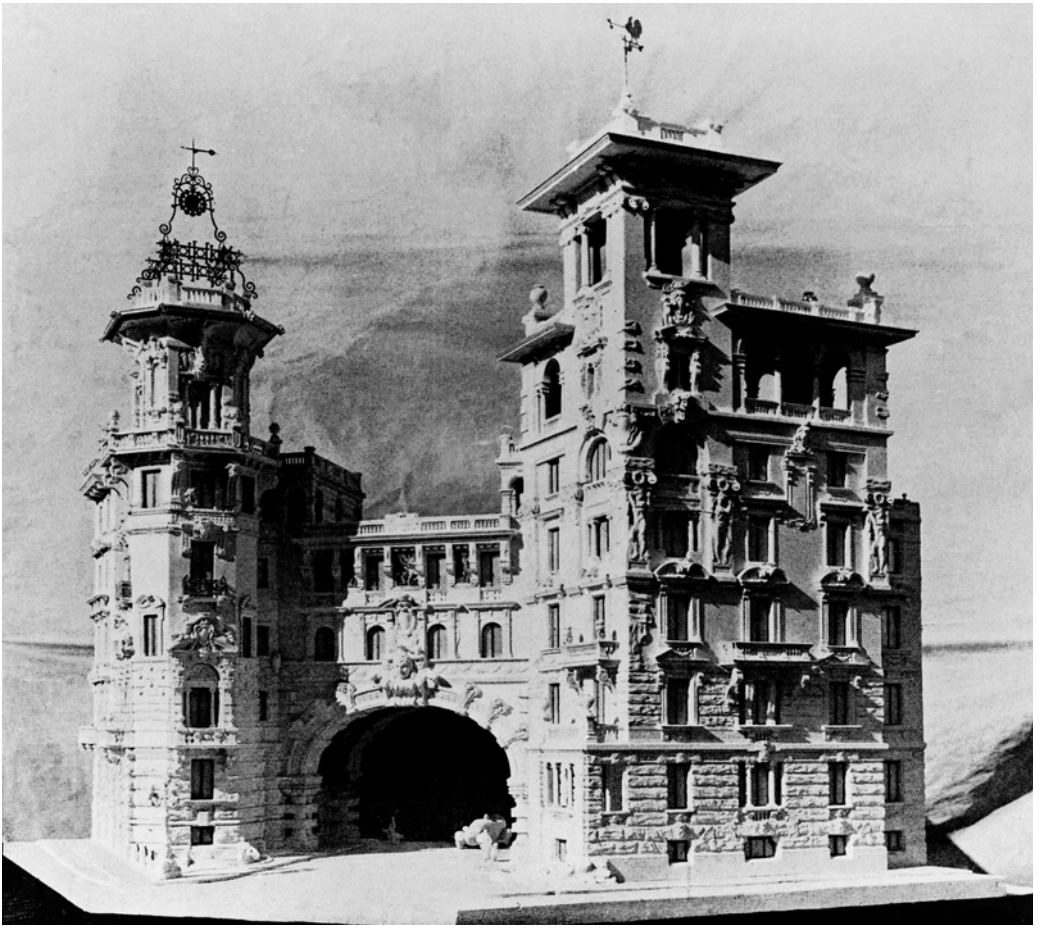
5.11 and 5.12 Gino Coppedè, Castello MacKenzie, Genoa, 1897–1907

enough." Real estate speculators seized on the value of a recognizable if undefinable Coppedè style. A group of Genoese financiers operating in Rome hired Coppedè in 1915 to develop the "Quartiere Coppedè," an area between the villas Albani and Torlonia. Eighteen luxury palazzi and twenty-seven smaller villas were planned, but only half were built. The Quartiere Coppedè is a Castello MacKenzie on a larger urban scale, combining everything that popped into Gino's exuberant mind: Renaissance, Gothic, mannerist, Moorish, baroque, Babylonian. He confessed of his manner of working, "I get a little carried away." Art Nouveau lines, symbolist motifs, machined cuts of a streamline styling, and fake archeological fragments all make appearances.

Coppedè died suddenly in 1927 but not before imprinting his bold, eclectic approach upon the face of contemporary architecture. *Artis praecepta recentis | maiorum exempla ostendo* [I am presenting the exemplars of our forefathers according to the precepts of today's method] reads an inscription on one of his apartment houses. The idea that Coppedè's work represented a most up-to-date reconciliation of tradition and modernity pervades the enthusiastic criticism it received in its day.

TITANIC VISIONS OF INDUSTRY: DARIO CARBONE, GAETANO MORETTI, ULISSE STACCHINI

Genoa, Italy's most modernized city, embodied all the surging energy of this crucial period of growth. With a boom in shipping, industry, and construction—and tycoons eager to show something for it—the city was shaped by a collection of mighty buildings. It was "a grand architectural poem," wrote the aesthetician Mario Morasso in 1908, "that the modern Genovesi are inscribing in stone alongside those left by their opulent forefathers." The city extended a new broad street named Via XX Settembre from the newly enlarged Piazza de Ferrari in 1887. The avenue was soon lined with apartment buildings in high-keyed bourgeois taste. The Via XX Settembre was entirely built up in the last eight years of the nineteenth century, two thirds by the energetic contracting firm of Dario Carbone. Carbone, like Coppedè, moved from



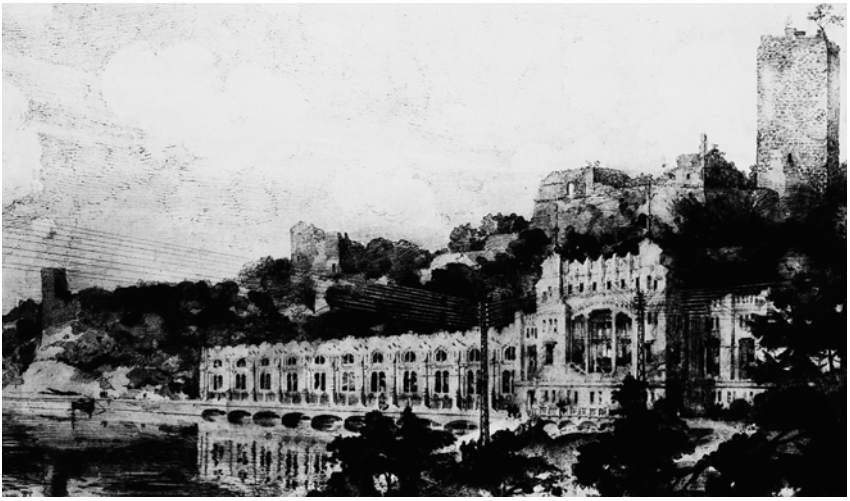
5.13 Gino Coppedè, Quartiere Coppedè, Rome, 1915–27

his native Tuscany to Genoa in 1882. He worked in the municipal planning office until 1892, when he ventured out on his own, buying lots along Via XX Settembre. His apartment buildings were the first large-scale use of reinforced concrete in Italy. Inside, they were equipped with all the latest technologies: elevators, central heating, electric lighting and intercom systems, full baths, and kitchens with labor-saving machines.

At the top of Via XX Settembre, Carbone built the anchor of modern industrial Genoa—the new Borsa, or stock exchange. As the port area was modernizing, a group of local businessmen decided to abandon the traditional trading locations down near the waterfront and create a new, dignified home for the merchants' exchange. They purchased the bull-nosed corner site on the Piazza de Ferrari in 1906 and commissioned Carbone as architect and contractor. The vast elliptical trading hall, 33 meters in diameter, fits behind an imposing curved facade. Carbone brought in Gino Coppedè's brother Adolfo to decorate the interiors. The rusticated ground floor portico, the double-height window arcade of the upper floors, and the large balustraded cornice reinforce the elevated sense of scale. The roofline bristles with cupolas, gables, and muscular sculpture all molded in a rosy artificial stone. The use of reinforced concrete allowed a relatively skeletal structure and thus greater sculptural play on the wall surfaces; the whole building seems modeled by a dynamic, swirling force.

Carbone and Coppedè's work was widely and intensely praised. "Their creativity springs from the ardent and fantastical impulse of the poet," Mario Morasso commended, "the unbridled dreams of the fantasy." Carbone fulfilled the tremendous aspirations of his clients. His building conveyed the energy and enormity of the modern age. Carbone, like his many successful contemporaries, did not relinquish history but indeed relied upon the local legacy of palatial architecture. Modern industrial society should not lose itself in mean utilitarianism, Morasso warned, as he pointed to Carbone's work as the exciting image of the future machine age.

In the burgeoning field of industrial construction, with new building types to define and new technologies to explore, architects pursued modernism freely. Factories around the country, especially in the industrial cities of the north, were constructed in frank manners consonant with Boito's material aesthetic. New technologies were



5.14 Dario Carbone, La Borsa, Genoa, 1906–8
5.15 Gaetano Moretti, Centrale idroelettrico, Trezzo sull'Adda, 1905–6

also available. The Società Edison of Milan established its first power plant in 1883 and illuminated La Scala and the Galleria and helped the cotton, iron, and automobile industries flourish. Camillo Olivetti, who taught electrical engineering at Stanford University, returned to Italy in 1908 to make typewriters. He built an electrically powered plant at Ivrea, hoping it would be a model for transforming the Piedmont region into his ideal of a progressive and humane industrial society. The Olivetti M-1 typewriter, presented at the 1911 exhibition, was developed exclusively on Italian-held patents. Giovanni Agnelli founded the Fabbrica Italiana Automobili Torino, the FIAT car company, in Turin and set up his first plant not along the canals but along the train line to the southern Ligurian ports. The portability of electricity freed industrial plants from their waterway locations to spread almost anywhere in the landscape. Electricity exerted a powerful physical and psychological influence on the lifestyles and imaginations of turn-of-the-century Italians, and the development of large hydroelectric generators, with their dams and locks and tension wires, brought industrial architecture directly into the landscape.

Cristoforo Benigno Crespi exported cotton to South America, the Balkans, and Asia from a mill in a small Lombard town along the Adda river. He masterminded an environment there with a paternalistic program for a workers' village, comprising semidetached duplex units with gardens, a school, a church, a theater, a cooperative market, houses for the managers, and a castle for himself. Crespi believed architecture to be beneficial to his enlightened program of productivity. Among Crespi's architects was a brilliant student of Boito, Gaetano Moretti. After a couple of highly regarded competition entries won him wide acclaim, Moretti founded with Luca Beltrami the architecture periodical *L'Edilizia moderna*, which published large glossy photographs of early examples of Italian modernist work. In 1896, Crespi hired Moretti to design the Crespi family mausoleum, a project that led to a ten-year association with the industrialist.

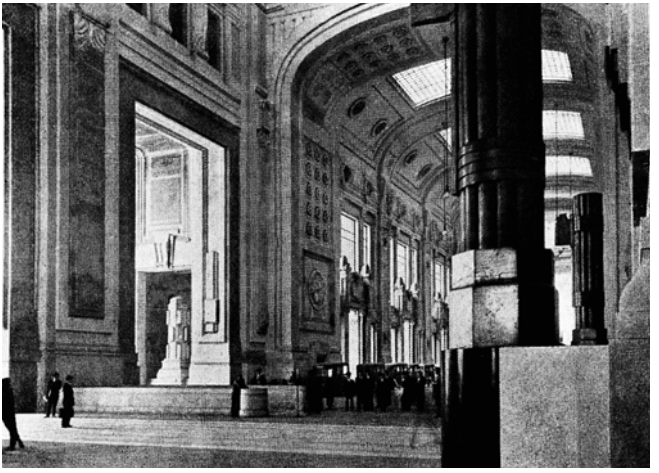
Moretti was also chosen to design the hydroelectric plant that would supply the Crespi factories. In 1905 Crespi's engineers had dammed the Adda at the nearby village of Trezzo, where the river winds around a promontory that is home to the ruins of a medieval castle. They created a 7-meter fall through a dozen turbines, and built

locks that assured safer navigation. The slews pass through the promontory, which Crespi was then obliged to purchase. Crespi considered the castle remains a nuisance until Moretti encouraged him to add preservation to his patronage program. In order to blend with the natural surroundings, Moretti had the dam, the locks, and the power plant clad in *ceppo*, the local limestone material of the castle. Moretti modeled three distinct masses: the turbine hall, the central command post, and an ancillary wing housing back-up steam generators. The volumes rise and fall with a jagged profile that evokes the ruins above, as the architect emphasized in his watercolor presentation rendering. Moretti's beginnings as a furniture maker are seen in the interlocking planes and intricate rhythms. Thick, out-scaled buttresses and heavy vault openings bisected by a single column resemble the plastic accretions of Andreani. Moretti fused essences of a variety of sources, from medieval to Mesopotamian, Otto Wagner to Angkor Wat. Boito had enthused Moretti with the study of architectural history, but his progeny seems to have gone farther. Not until after the master's death in 1914 did Moretti reveal that he thought Boito's excessive rationalization of the design process could never ignite spontaneous aesthetic intuition. Going beyond the study of medieval construction, Moretti challenged the notion of style itself. Gaetano Moretti would remain at the center of Milanese architecture for twenty-seven years as dean of its first independent, legally recognized architecture school, guiding the next generation to a new architecture.

The electricity generated at Crespi's plant powered the greater Milan area, now ringed by industrial development. Traffic was a major issue; for decades various commissions and officials had been contemplating the replacement of the city's 1864 train station. In 1906 during the Sempione tunnel exhibition, the cornerstone for the new Stazione Centrale Viaggiatori was laid—before a competition had been held, much less a design selected. Arrigo Cantoni won the competition that followed, but engineers soon discovered that his structure was not feasible. A second competition was announced in 1912, with a program that called for a transverse galleria for general circulation and a giant shed. This time the winner was an expert in Roman monumentality, Ulisse Stacchini.

Stacchini's career in Milan was varied but astute: apartment buildings in the *stile Liberty*, an industrial building in reinforced concrete, and a neo-Cinquecento bank. These were not wildly innovative works, but they demonstrated Stacchini's profound knowledge of historical models. Stacchini's winning station design was a deft fusion of Roman classicism, *floreale* ornament, Parisian Beaux-Arts volumes, and the abstraction of the Viennese school then in vogue all in one reinforced concrete structure. His planning for the vast program, however, was infallible. When world war interrupted the colossal undertaking for nine years, Stacchini used the time to refine his drawings. The changes he made are significant and they show how quickly tastes of the period shifted. Iron elements were covered up and curved forms eliminated for a more cubic quality. As built in 1925, the building includes more ornament, but it is also fully integrated into the architectural lines. Indeed, the ornament accentuates the overall molded plastic effect. Stacchini introduced to the station a fantastical Assyro-Babylonian quality well suited to this gargantuan construction. Limestone and tinted cement subsume the station in a richly conceived architectural language.

The shed behind is indeed one of Italy's finest. Its five slender iron vaults, 350 meters long, were developed independently by railroad engineers without Stacchini's input. They brought the tracks in several meters above street level to avoid interrupting the cross streets and commercial development underneath. The problem of getting passengers up to the tracks was resolved fluidly in Stacchini's unique plan. A galleria 210 meters long and wider than any city boulevard spans the entire facade at ground level, allowing people to come to the station under a giant *porte-cochère*. (The term *galleria* was used to deliberately recall Mengoni's great public space downtown.) A vast, vaulted ticketing hall within is comparable in dimensions to Grand Central Terminal in New York and is flanked by waiting halls and staircases that rise up through to a second parallel pedestrian galleria at the tracks' heads. Some American influence seems to have played a decisive role in shaping this project. Grand Central Terminal, published in *L'Illustrazione italiana* in February 1913 with vivid cutaway sections of all its subterranean connections, was certainly already known to the railroad engineers and subway planners who sat on the competition



5.16 and 5.17 Ulisse Stacchini, Stazione Centrale Viaggiatori, Milan, 1912–31

jury that selected Stacchini. Like Grand Central, "the monumental gateway to a great city," as the article read, Stacchini's project had a striking monumental effect. There are sculptures of winged horses of Progress led by Will and Intelligence, medallions and statues symbolizing Work and Commerce, Science and Industry, War and Peace, and enamel panels with panoramic views of Italian cities: Rome seen from the Vittoriano, Turin's Mole Antonelliana, Florence from the Piazzale Michelangelo. And everywhere there is a machine-pressed quality to the smooth monochrome surfaces.

The Stazione Centrale of Milan exudes the terrifying gigantism of modern industrial society. Stacchini gives us a churning force, the aestheticized product of the Sempione tunnel's boring machines rolling into town. The station brings to mind contemporary cinematographic visions, such as *Cabiria* of 1914, set in colossal cityscapes. The sublimely scaled rooms offer glimpses of impossibly vast space. When the station was conceived in 1912, a local critic exclaimed, "It is no longer possible to think of a simple shed for a building of substantial mass and importance that a train station needs to be for a great city, a symbolic monument *par excellence*, since it responds to the most characteristic phenomenon of modern life, intense movement. It presents a solemn invitation to a metropolis and should give the visitor a first impression of well being, wealth, beauty and refinement of taste." Although much in architecture had evolved before the station was finally completed, the grandiose image of antiquity merged with a vision of modern industrial society seemed its great virtue. The Stazione Centrale was inaugurated on 1 July 1931, and the city sang its factory sirens to welcome the latest monument to modernity.

Stacchini and the other fantastical architects are scarcely treated in histories of early-twentieth-century architecture. They have been dismissed by later critics as embarrassing retardants to modernism, the tired aftereffects of a washed-out and unrealized Art Nouveau experiment, a confusion of eclectic minds. Examining their work carefully in context, it is clear that these Italian architects built with a firm gaze on modern issues. They balanced antirational intuition with impeccable technical skill to create poetic expressions of the industrial world. There are many more of these architects to rediscover: Pietro Botta, Francesco Fichera, Achille Manfredini, Giuseppe Mancini, and

Aldo Avati, for example, produced electrifying, Piranesian visions for the industrial world. These remained mostly on paper in lavish portfolios published by the architects. They intended to defend the creative aspect of the architectural design process against encroachment of engineers in the building industry.

What made the architecture of the so-called neo-eclectics successful in its day was their expansive sense of scale, marked theatricality, unprecedented experimentation, and enigmatic interpretation. For a young industrial society inventing its own imagery, their powerful yet ambiguous scenographies were seductive. Their incessant dialog with history oscillated between nostalgic mythologizing and calculated negation, but either way historical monuments remained touchstones for Italian architects. In his 1916 review of the culture of architectural competitions, Luigi Angelini wrote, "There exists a reawakening and a renewal in the artistic vision of these new works and it promises a vigorous rebirth for the future, a vigorous rebirth of an Italian architecture, free from ties to foreign imitations and less enchanted by bonds to a past despite its being refulgently glorious." At this crucial moment for modernism, these fantastical architects revealed an approach that proved an articulated compromise between innovation and the cultural condition of Italian tradition.

ANTONIO SANT'ELÌA: ARCHITECTURAL VISIONARY

Antonio Sant'Elìa lived in the northern lakeside city of Como and studied construction at the local trade school before he left in 1907 for Milan. "I want to paint the new, the fruit of our industrial times," reads a typical diary entry from the period. His technical training secured him a job with a canal company and then the municipal engineering office, but Sant'Elia felt the calling of architecture. He enrolled at the Brera, where he took courses in scenography, perspective drawing, and, eventually, architecture with Gaetano Moretti. He was taught to divine the essences of architectural composition from historical examples, but Sant'Elia rejected the discipline of the academy. He dropped out in

his third year, still plagued by a deficiency in drawing floor plans.

The system of architectural education in Milan had remained essentially unchanged since Napoleon's time. The Brera, like academies of fine arts across Italy, offered an introductory curriculum in descriptive geometry, perspective, and chiaroscuro, architectural elements for *ornato*, literature, and history of art, followed by a two- or three-year specialization in historical styles, theory, and composition. The advent of industrial materials and mechanical processes in the 1830s had been at first perceived, understandably, as outside the purview of an academy of arts, so a separate school of civil engineering, called the Politecnico, was established in Milan. The institutional distinction between the Brera and the Politecnico reinforced a dichotomy in Italy between architectural design and engineering construction. Train stations and most apartment houses manifest this dichotomy in the clear division of interior structure versus exterior decoration.

Camillo Boito, whose theory addressed exactly this separation, attempted to reconcile the artist of the academy and the engineer of the polytechnic. He encouraged cross-enrollment and a coordinated curriculum by which engineers got some exposure to artistic issues and architects kept abreast of advances in technology. Boito was unable in his lifetime to confront the legal deficiency of the academy degree, *Professore di disegno architettonico*, which did not authorize its recipient to build. After earning the design diploma, an architect would then pick up the necessary builder's qualification in applied engineering, for example, at Rome's Scuola d'Applicazione per Ingegneri, where Guglielmo Calderini taught. Sant'Elia relied on his trade school diploma for his low-level but lucrative jobs in engineering firms, yet never earned his design degree at the Brera. In 1912, however, he passed the exams at the academy in Bologna, after being tipped off that they were easier there.

Sant'Elia had an extraordinary talent for assimilating visual material, but it was not matched by a verbal confidence. Evidently, he pored over illustrated periodicals of the moment, taking in Sommaruga's and Moretti's latest works. He discovered Viennese design also firsthand at the world's fair in Rome, where he sketched Otto Wagner's models and Gustav Klimt's paintings in the Austrian

pavilion. Josef Hoffmann's austere architecture may have suggested the classic essences that Moretti's teaching advocated. Sant'Elia was everywhere cribbing from everyone.

Back in Milan he tried competitions and assisted Arrigo Cantoni on his entry for the train station, but nothing was moving for Sant'Elia, so he pursued his own personal research in hundreds of small drawings. He ruminated on current themes like reinforced concrete construction or power plants, transposing motifs and exploring, for example, ideas of his own for the Milan train station. His free, intuitive sketches surge with energy as they negotiate the program's many challenges: the problematic change of level, its dynamic traffic flow, the need for monumentality. His research developed rapidly, working through issues new and old in no particular order. Towering compositions recall Romantic notions of architecture and landscape. Forced perspective views from very low angles and tight crops are the tricks of pictorial representation Sant'Elia learned in the Brera scenography classes. Soon, the naturalism of the mountain drawings gave way to fully artificial landscapes of smooth uninflected surfaces, interpenetrating stereometric volumes, like the factories and silos in German and American periodicals. These drawings communicate an abstract dynamism that lies just below the surface of Gaetano Moretti's work.

By 1914 Sant'Elia was fantasizing on hydroelectric power plants and the dams and slews associated with them. Massive diagonal buttresses of a turbine hall lean against a mountainous concrete dam. Functionally gratuitous but aesthetically powerful smokestacks are drawn with energetic lines that shoot beyond the boundary of their forms. This saturated, intuitive response to electricity obliterates historicism and dismantles the traditional notion of style altogether. This constitutes Sant'Elia's most daring proposal. Sant'Elia did not think in plan; he never learned to. He conceived these perspective views perhaps in hopes of publishing them.

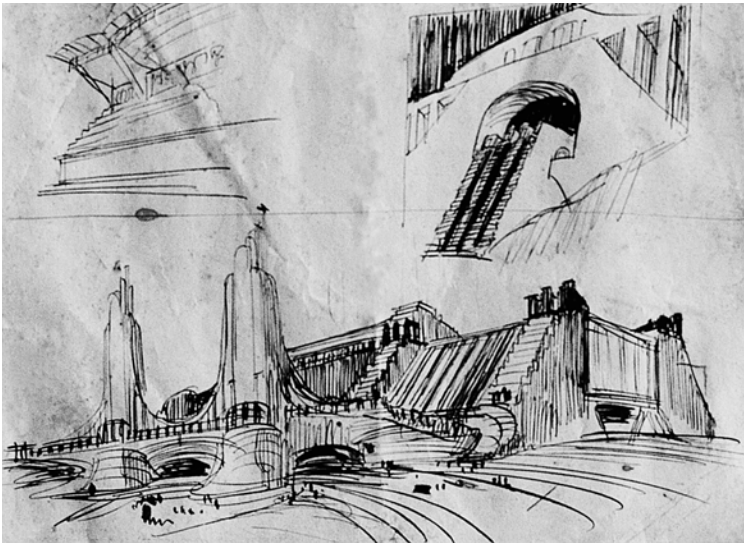
Sant'Elia's rather bleak prospects brightened when Giulio Ulisse Arata got him involved in a group exhibition in February 1914. D'Aronco, Sommaruga, Stacchini, and Marcello Piacentini participated in the show. Edoardo Baroncini, a young architect recently returned from India, exhibited a design for a cantilevered stadium in reinforced concrete, which Sant'Elia then copied on the corner of a

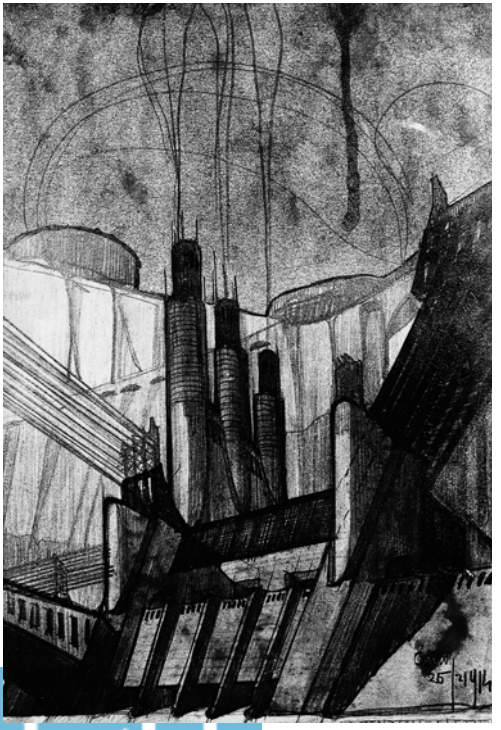
stray sheet. Sant'Elia exhibited eleven drawings, the first public showing of his expressionist train stations and power plants. Naturally, Arata himself publicized the show in his magazine. "The most ingenious of all the young designers, the most impetuous and the most logically fantastical, the only one who knows how to see architecture through his sketches a bit beyond the usual forms is Antonio Sant'Elia. . . . He demonstrates with a few strokes how a building to house turbines, a viaduct, a church, an electrical plant should be constructed; and although industrialized, they are always composed of firm pictorial masses never interrupted by vulgar decorations."

Sant'Elia's images suddenly made everything else seem very old. It was obvious to Arata that Sant'Elia had been studying Otto Wagner, but he had so thoroughly digested the Viennese influence that he had obtained "the true fusion of architecture, its structural goals with its practical utility." But, Arata warned, Sant'Elia remained in the realm of abstract thinking, and if he were to find the way from the fantastical to the concrete, it would signal then "a great stride on the not easy path of new architecture."

Sant'Elia had never received such attention and praise. Arata signed Sant'Elia up for another exhibition in two months' time with his new group, Nuove Tendenze, and Sant'Elia quickly developed futuristic visions of whole cities. In May 1914 at the Famiglia Artistica, the Milanese art gallery notorious for provocative exhibitions, a show opened with "a lively and insolent flash of color that seems aimed to unsettle the public," one of the organizers, Ugo Nebbia, proclaimed. Paintings of the dock cranes in Genoa's port, the strange forms of Coppedè's maritime exhibition there, and an interior of the Pirelli factory made up a rambunctious display from artists, Nebbia wrote, eager to thrust their enthusiastic visions of the industrial world upon the public. In contrast to the more virulent artistic groups of the moment, like the Futurists, the Nuove Tendenze was indeed rather moderately toned. The catalog of the show included a short introduction to Sant'Elia's drawings, dubbed the "Messaggio" by later scholars, that was signed by Sant'Elia.

Starting from the standard Romantic-era position that architecture needed to be conceived according to the latest science





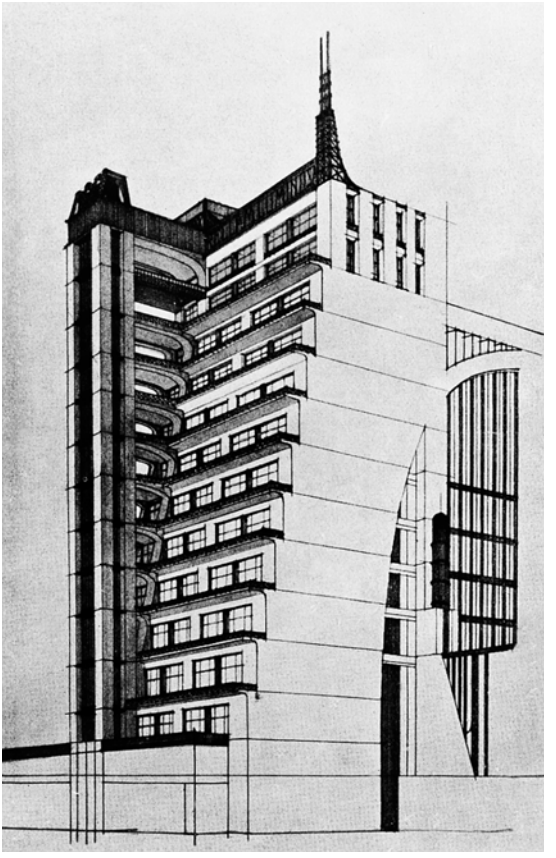
5.18 Antonio Sant'Elia, sketches, including a Stazione Centrale for Milan, a stadium in concrete, a power station, 1912/1914
5.19 Antonio Sant'Elia, "La Centrale elettrica," February 1914

and building technology and adapted to the special conditions of modern life, the Messaggio railed against idiotic and vacuous academic exercises out of sync with contemporary sensibilities. "This architecture cannot naturally be subject to any law of historic continuity. It must be new, as our state of mind and the contingencies of our historical moment are new. . . . In modern life the process of coherent stylistic development in architecture has been arrested. Architecture breaks from tradition and by necessity begins all over again." The statement sets the new architecture against the very notion of style as defined by historical example and toward "the discovery of natural laws" for architecture. Reinforced concrete construction could not be ruled by classical tradition. Modern society was now associated with the Galleria, not the Duomo. "We feel we are no longer the men of cathedrals and guild halls but of grand hotels, railway stations, vast highways, colossal harbors, covered markets, luminous arcades, straight lines, and salutary demolitions," read the text. "We must invent and rebuild *ex novo* the modern city like an immense, tumultuous building yard, agile, mobile, dynamic in all its parts, and the modern house like a gigantic machine. . . . The days of monumental funereal and celebratory architecture are over. Architecture must be something better and more vital, and in order to obtain this extra something we must begin by doing away with monuments, sidewalks, porticoes, steps, by sinking streets and piazzas, raising the level of the city, and rearranging the crust of the earth in order to render it at last a servant to our every need, our every whim."†

In the past, scholars have placed a great deal of importance on the single signature—Sant'Elia's—at the foot of this text. Nebbia, however, may have provided the strident language. The architects of Sant'Elia's circle did not commonly make verbal declarations. Their promotional monographs usually have a single page of introduction, penned by others, that often does not correspond closely to the images. The Messagio is full of provocation and paradox typical of the rhetorical style of rival groups like the Futurists. The text is tailored to Sant'Elia's very latest series of drawings, produced especially for the Nuove Tendenze show, his *Città nuova* collection.

Sant'Elia had developed in two months an entirely new manner of drawing. His favorite themes recur: power plants, train stations,

† Translation by Esther DaCosta Meyer, *The Work of Antonio Sant'Elia* (Yale University Press, 1995), appendix 1, 211–12.



5.20 Antonio Sant'Elia, "Casa a grandinata," "La Città nuova" series, May 1914
5.21 Mario Chiattone, "Casa ad apartamenti," 1914

bridges, and skyscrapers, plus much elaboration of the apartment high-rise. His "modern house like a gigantic machine" is a stepped-back construction, a *casa a gradinata*, of load-bearing concrete masses and tensile metal trusses. Elevators are set outside against the receding diagonals of the terraces and connected on each floor by ever longer bridges. The roof is loaded with machinery, radio transmission towers, and illuminated billboards. Set back to back, the two towers are connected by a passage vaulted by a parabolic arch and glazed like a galleria. Many architects, from Arata to Pirani, were experimenting with new exterior articulations of apartment blocks, but Sant'Elia's primary stimulus here seems to have been French: Sauvage and Sarazin's "maison à gradins," published in the March 1914 issue of *L'Illustrazione italiana*. Sant'Elia, who never drew interiors, copied Sauvage's distinctive section from the article but he did not proceed as Pirani would in an investigation of interior apartment dispositions; he was merely interested in the exterior effects.

The *Città nuova* series had explosive implications for the traditional city. The street wall was dissolved and the ground level churned up. The street itself became a tumultuous abyss, a scaleless space with funiculars, elevators, and trams speeding by. Intersecting circulation systems, pedestrian viaducts, highways, subways, and high-speed rail lines dig down into the ground, throwing up, as Sant'Elia described, catwalks and conveyor belts. The *casa a gradinata* and all the drawings of the *Città nuova* series constituted a new vision of the city of megastructures in an all-connected mechanical utopia. The machine age spirit of speed was already prevalent in Milan, as seen in its subway plan, Moretti's turbine hall, and Carbone and Stacchini's excited industrial inspirations. But Sant'Elia threw off the veil of historicist styling that cloaked these other works, interpreting the dynamic energy of the city with its ideal structures and spaces.

Sant'Elia was not alone. He shared a studio with Mario Chiattone. At the Brera, Chiattone was more dogged but no more successful than Sant'Elia and after seven years gave up and also took his qualifying exams in Bologna. Through Chiattone's father, an advertising designer and art collector, the young architects came to know Umberto Boccioni, one of the notorious Futurists. Chiattone kept their studio well stocked with trendy publications like those of

Otto Wagner. "We wanted to create a new architecture with respect to that coming from Vienna," wrote Chiattone, "because we thought that it should take into account the new rapidly developing technology that has inspired new and free visions, but we thought of a positive, realizable architecture." Chiattone shied away from the incendiary political activities of the Futurists and joined Sant'Elia for the Nuove Tendenze exhibition. His brief period of intense research parallels Sant'Elia's, and his skyscrapers and bridges would be easily confused for Sant'Elia's if not for an earthbound volumetric quality that makes Chaittone's factories look like cathedrals. A design for an apartment house reveals his distinct talents. There is a sober simplicity of symmetrical volumes appropriate to the public housing projects that interested him. They are enlivened by colored accents, inventive window bay treatments, and metal cantilevered balconies. Like Sant'Elia, Chiattone displayed no concern for interior dispositions, treating his blocks as pure urban scenography.

FUTURISM

Filippo Tommaso Marinetti's literary movement, *Futurismo*, was the most conspicuous of the early modern Italian avant-garde movements. He published its first psalmic manifesto on 20 February 1909.

> We shall sing the great crowds excited by work, by pleasure, and by unrest. We shall sing the multicolored polyphonic tides of revolution in the modern capitals. We shall sing the vibrant nightly fervor of arsenals and shipyards blazing with violent electric moons, voracious railway stations devouring smoke-plumed serpents, factories hung on clouds by the crooked lines of their smoke, bridges that stride the rivers like great gymnasts, flashing in the sun with a glitter of knives, adventurous steamers that sniff the horizon, deep-chested locomotives whose wheels paw the tracks like the hooves of enormous steel horses bridled by tubing, and the sleek flight of planes whose propellers chatter in the wind like banners and seem to cheer like an enthusiastic crowd. It is from

> Italy that we launch through the world this violently upsetting, incendiary manifesto of ours. With it, today, we establish Futurism.

Through deliberately polemical leaflets, public exhibitions, and provocative performances, Marinetti attracted a variety of visual artists to his cause. On painted canvases, Umberto Boccioni captured the speed, energy, and emotion of train travel, Carlo Carrà the vibrant social tumult in the Galleria, Luigi Russolo the dynamism of an automobile, Giacomo Balla velocity of anything that moved through space. Their collective research on the aesthetic of modern motion smashed all remnants of traditional Euclidean space. The first exhibition of Futurist painting opened in Milan in April 1911 to "all those who want to assert something new." Boccioni's painting *La città che sale* (The city that rises) is a symbolist vortex of fragmented colors and oblique strokes that projects the state of mind of the modern city, a pervasive Futurist theme.

Marinetti struck out polemically against venerated "museum cities," first and foremost Venice. He called Venice, Florence, and Rome "the three festering blemishes." But, "Milan! Genova! There . . . the new Italy is reborn! These are the cities we love! . . . great centers that blaze day and night, spreading their vast breath of fire across the open countryside." It was natural that architecture should play a key role in the Futurist development, but no architect joined the movement. So in February 1914, Boccioni, with recent recruit Enrico Prampolini, drafted some preliminary positions on architecture. Boccioni elaborated from his sculpture manifesto ideas of an abstract plastic form free of imitation, a "spiral" architecture of centrifugal energies and aerial structures.

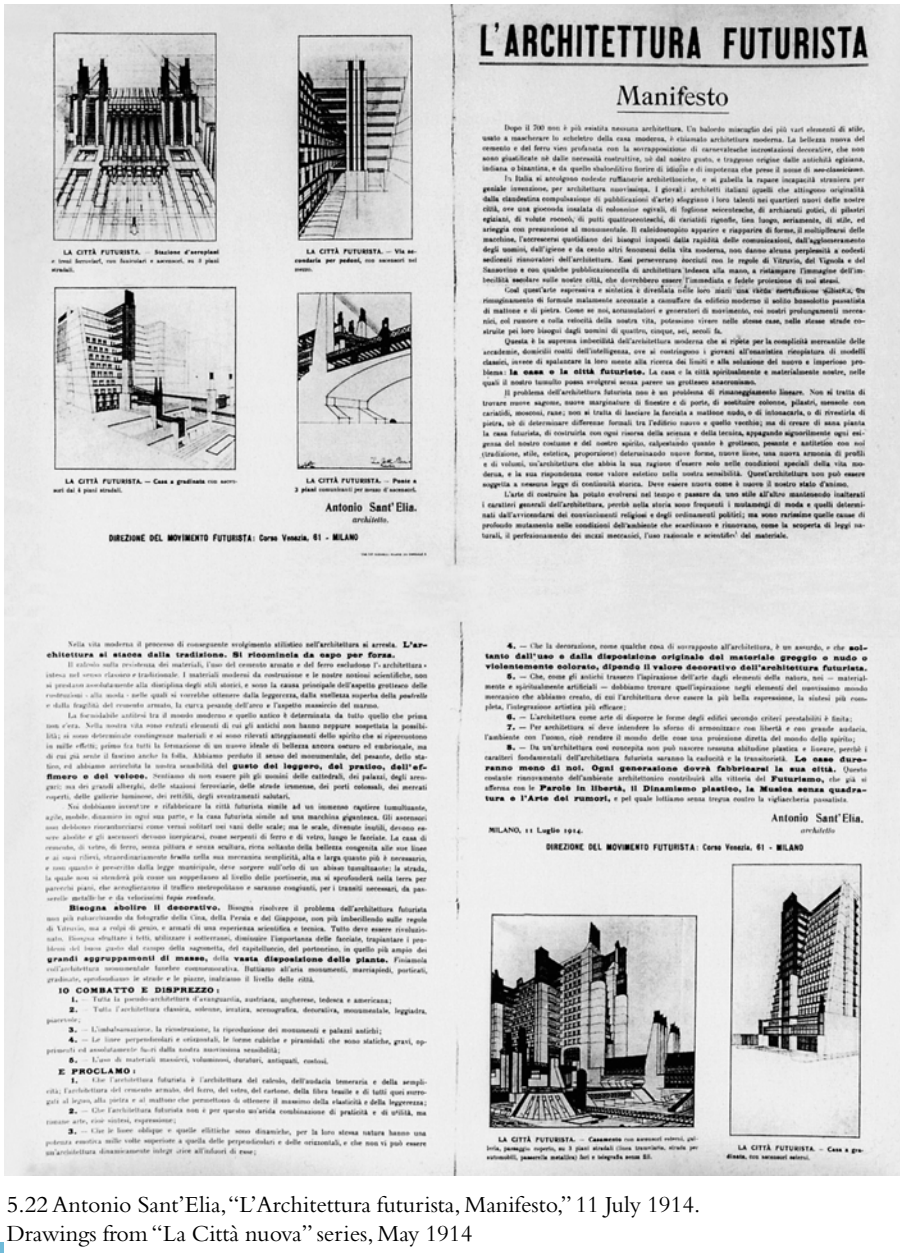
Boccioni had to explain to Marinetti why no architects came aboard: the "architects aren't budging and evidently Futurism could not offer them anything attractive"—jobs. It was not that architecture was incompatible with the tenets of Futurist design; far from it, as Prampolini observed in some of the works he saw at the Nuove Tendenze exhibition. Rather, the Futurists' virulent political rhetoric, punctuated by acts of civil disobedience, was not viable for professional architects collaborating with patrons and building committees. So Marinetti had to seduce an architect, and Prampolini suggested Sant'Elia. Chiattone later recalled that a skeptical Sant'Elia

was coerced by Marinetti, who filled the young architect with hopes of actually building something. Chiattone himself was never a Futurist—on this he was always quite clear—and did not build until after World War I in Switzerland, where he relocated. The Nuove Tendenze group collapsed at Sant'Elia's departure and Arata complained that Sant'Elia was prostituting his art to politics.

On 11 July 1914, less than three weeks after the Nuove Tendenze exhibition, Sant'Elia's name appeared on the first Futurist manifesto of architecture. Six of his *Città nuova* drawings were reproduced and relabeled *La Città futurista*. The text of his earlier Messaggio was also reprinted but with significant changes. Carrà related that Sant'Elia was roundly amused by some of Marinetti's edits, especially the sections on a "deciduous," elliptical, and oblique architecture, and the battery of rhetorical gimmicks common to current radical political speech. Arata, not the most impartial observer, was piqued by Sant'Elia's disloyal slight of his group and dismissed the manifesto as a ridiculous and overly abstract proposal.

The summer of 1914 was momentous. A socialist uprising in the Romagna region was sparked by a Futurist-style agitator named Benito Mussolini. Emperor Franz Ferdinand of Austria was assassinated in Sarajevo, which plunged Europe into world war. Action in the Balkans prompted Italy to enter the Great War with the idea of expanding national boundaries in the northwest. Marinetti preached the regenerative virtues of war and all the Futurists enlisted. On 10 October 1916, Antonio Sant'Elia was killed on the front, 25 kilometers northwest of Trieste. Boccioni, Edoardo Baroncini, and 600,000 other Italian soldiers also died. Sant'Elia had built virtually nothing that expressed his vision in concrete terms, but like Piranesi he left behind influential suggestions for the course of Italian modernism.

After Sant'Elia's death the Futurists needed another architect. The role was filled temporarily and partially by the painter, scenographer, and publicist Fortunato Depero. He fled the Austrian territory of his birth and was in Rome during the war, unable to serve because of poor health. He collaborated with Giacomo Balla on reconstructing a Futurist universe in a manifesto of 1915. Their ideas saw the light at least of the stage in nightclub interiors and in Diaghilev's production of Stravinsky's *Feu d'artifice* in 1917. The Roman audience was



L'ARCHITETTURA FUTURISTA

Manifesto

Dopo il 200 non è più esistita nessuna architettura. Un balordo miscuglio dei più vari elementi di stile, usato a mascherare lo scheletro della casa moderna, è chiamato architettura moderna. La bellezza nuova del cemento e del ferro vien profanata con la sovrapposizione di carnevalesche incrostazioni decorative, che non sono giustificate né dalle necessità costruttive, né dal nostro gusto, e traggono origine dalle antichità egiziana, indiana o bizantina, e da quello sbalordito fiorire di idiozie e di impotenza che prese il nome di neo-classicismo.

In Italia si arrologano sedotte ruffianerie architettoniche, e si galvella la rapace incapacità straniera per geniale invenzione, per architettura nuovissima. I giovani architetti italiani quelli che attingono originalità dalla clandestina compulsazione di pubblicazioni d'arte) sfuggono i loro talenti nei quartieri nuovi delle nostre città, ove una giocosità insalata di colonnine ogivali, di fogliame seicentesche, di archiacuti gotici, di pilastri eguizzi, di volute rococò, di putti quattrocenteschi, di cariatidi rigonfie, tien luogo, seriamente, di stile, ed arriggia con presunzione al monumentale. Il calcolcomposto apparire e rapparire di forme, il multiplicarsi delle macchine, l'arrecarsi quotidiano dei bisogni imposti dalla rapidità delle comunicazioni, dall'agglomeramento degli uomini, dall'igiene e da cento altri fenomeni della vita moderna, non danno alcuna perplessità a codesti sedicenti rinnovatori dell'architettura. Essi perseverano ineciti con le regole di Vitruvio, del Vignola e del Sansovino e con qualche pubblicazionella di architettura tedesca alla mano, a ristampare l'immagine dell'imbecillità secolare sulle nostre città, che dovrebbero essere l'immediata e fedele proiezione di noi stessi.

Così quest'arte espressiva e sintetica è divenuta nelle loro mani una vieta mistificazione ellenica. Un rinsignorimento di formule malamente arcaicizzate a camuffare da edificio moderno il solito banalotto pasticcio di mattone e di pietra. Come se noi, accumulatori e generatori di movimento, coi nostri profondamenti incrementici, col rumore e colla velocità della nostra vita, potessimo vivere nelle stesse case, nelle stesse strade costruite pei loro bisogni dagli uomini di quattro, cinque, sei, secoli fa.

Questa mostruosa imbecillità dell'architettura moderna che si ripete per la complicità ereditarie delle accademie, domicili coatti dell'intelligenza, ove si costringono i giovani all'ossivitire ricopiatura di modelli classici, invece di spalancare la loro mente alla ricerca dei limiti e alla soluzione del nuovo e imperioso problema: **la casa e la città futuriste.** La casa e la città spiritualmente e materialmente nostre, nelle quali il nostro tumulto possa svolgersi senza parere un grottesco anacronismo.

Il problema dell'architettura futurista non è un problema di rinnovamento lineare. Non si tratta di trovare nuove sagome, nuove marginature di finestre e di porte, di sostituire colonne, pilastri, mensole con cariatidi, mostri, rane; non si tratta di lasciare la facciata a mattone nudo, o di intonacarla, o di rivestirla di pietra, ma di determinare differenze formali tra l'edificio nuovo e quello vecchio; ma di creare di sana pianta la casa futurista, di costruirla con ogni risorsa della scienza e della tecnica, appagando signorilmente ogni esigenza del nostro costume e del nostro spirito, calpestando quanto è grottesco, pesante e antistetico con noi (tradizione, stile, estetica, proporzioni) determinando nuove forme, nuove linee, una nuova armonia di profili e di volumi, un'architettura che abbia la sua ragione d'essere solo nelle condizioni speciali della vita moderna, e la sua rispondenza come valore estetico nella nostra sensibilità. Quest'architettura non può essere soggetta a nessuna legge di continuità storica. Deve essere nuova come è nuovo il nostro stato d'animo.

L'arte di costruire ha potuto evolversi nel tempo e passare da uno stile all'altro mantenendo inalterati i caratteri generali dell'architettura, perchè nella storia sono frequenti i mutamenti di moda e quelli determinati dall'avvicendarsi dei convincimenti religiosi e degli ordinamenti politici; ma sono rarissime quelle cause di profondo mutamento nelle condizioni dell'ambiente che scardinano e rinnovano, come la scoperta di leggi naturali, il perfezionamento dei mezzi meccanici, l'uso razionale e scientifico del materiale.

Nella vita moderna il processo di conseguente svolgimento stilistico nell'architettura si arresta. **L'architettura si stacca dalla tradizione. Si ricomincia da capo per forza.**

Il valore nella resistenza dei materiali, l'uso del cemento armato e del ferro escludono l'architettura intesa nel senso classico e tradizionale. I materiali moderni da costruzione e le nostre nozioni scientifiche, non si prestano assolutamente alla disciplina degli stili storici, e sono la causa principale dell'aspetto grottesco delle costruzioni alla moda - nelle quali si vorrebbe ottenere dalla leggerezza, dalla snellezza superba della *penultelle* e dalla fragilità del cemento armato, la curva pesante dell'arco e l'aspetto massiccio del marmo.

La formidabile antitesi tra il mondo moderno e quello antico è determinata da tutto quello che prima non c'era. Nella nostra vita sono entrati elementi di cui gli antichi non hanno neppure sospettata la possibilità; si sono determinate conseguenze materiali e si sono rilevati atteggiamenti dello spirito che si ripercuotono in sulle effetti, primo fra tutti la formazione di un nuovo ideale di bellezza ancora oscuro ed embrionale, ma di cui già sentiamo anche la folla. Abbiamo perduto il senso del monumentale, del pesante, dello statico, ed abbiamo arricchita la nostra sensibilità del **gusto del leggero, del pratico, dell'effimero e del veloce.** Sentiamo di non essere più gli uomini delle cattedrali, dei palazzi, degli arengari; ma dei grandi alberghi, delle stazioni ferroviarie, delle strade immense, dei porti colossali, dei mercati coperti, delle gallerie luminose, dei rettifili, degli sventramenti salutari.

Noi dobbiamo inventare e rifabbricare la città futurista simile ad un immenso cantiere tumultuante, agile, mobile, dinamico in ogni sua parte, e la casa futurista simile ad una macchina gigantesca. Gli ascensori non debbono rinserrarsi come vermi solitari nei vani delle scale; ma le scale, divenute inutili, devono essere abolite e gli ascensori devono inerpicarsi, come serpenti di ferro e di vetro, lungo le facciate. La casa di cemento, di vetro, di ferro, senza pittura e senza scultura, ricca soltanto della bellezza congenita alle sue linee e ai suoi rilievi, straordinariamente fredda nella sua meravigliosa semplicità, alta e larga quanto più è necessario, e non quanto è prescritto dalla legge municipale, deve sorgere sull'orlo di un abisso tumultuante: la strada, la quale non si sprofonda più come un suppedaneo al livello delle portinerie, ma si sprofonderà nella terra per parecchi piani, che accoglieranno il traffico metropolitano e saranno congiunti, per i transiti necessari, da passerelle metalliche e da velocissimi *tapis roulants*.

Bisogna abolire il decorativo. Bisogna risolvere il problema dell'architettura futurista non più rabarcicando da falegname della Cina, della Persia e del Giappone, non più imbecillendo sulle regole di Vitruvio, ma a colpi di genio, e armati di una esperienza scientifica e tecnica. Tutto deve essere rivoluzionato. Bisogna sfruttare i tetti, utilizzare i sotterranei, diminuire l'importanza delle facciate, trapiantare i problemi del buon gusto dal campo della sagomatta, del capitelluccio, del portonzino, in quello più ampio dei **grandi aggruppamenti di masse,** della **varia disposizione delle piante.** Finiamola coll'architettura monumentale funebre commemorativa. Buttiamo all'aria monumenti, marciapiedi, portici, gradinate, sprofondiamo le strade e le piazze, inalziamo il livello delle città.

IO COMBATTO E DISPREZZO:

1. — Tutta la pseudo-architettura d'avanguardia, austriaca, ungherese, tedesca e americana;
2. — Tutta l'architettura classica, solenne, ieratica, scenografica, decorativa, monumentale, leggiadra, piacevole;
3. — L'imbalsamazione, la ricostruzione, la riproduzione dei monumenti e palazzi antichi;
4. — Le linee perpendicolari e orizzontali, le forme cubiche e piramidali che sono statiche, gravi, opprimenti ed assolutamente fuori dalla nostra nuovissima sensibilità;
5. — L'uso di materiali massicci, voluminosi, duraturi, antiquati, costosi.

E PROCLAMO:

1. — Che l'architettura futurista è l'architettura del calcolo, dell'audacia temeraria e della semplicità, l'architettura del cemento armato, del ferro, del vetro, del cartone, della fibra tessile e di tutti quei surrogati al legno, alla pietra e al mattone che permettono di ottenere il massimo della elasticità e della leggerezza;
2. — Che l'architettura futurista non è per questo un'arida combinazione di praticità e di utilità, ma rimane arte, cioè sintesi, espressione;
3. — Che le linee oblique e quelle ellittiche sono dinamiche, per la loro stessa natura hanno una potenza emotiva mille volte superiore a quella delle perpendicolari e delle orizzontali, e che non vi può essere un'architettura dinamicamente integrale all'infuori di esse;
4. — Che la decorazione, come qualche cosa di sovrapposto all'architettura, è un assurdo, e che **soltanto dall'uso o dalla disposizione originale dei materiale greggio o nudo o violentemente colorato, dipenda il valore decorativo dell'architettura futurista.**
5. — Che, come gli antichi trassero l'ispirazione dell'arte dagli elementi della natura, noi — materialmente e spiritualmente artificiali — dobbiamo trovare quell'ispirazione negli elementi del nuovissimo mondo meccanico che abbiamo creato, di cui l'architettura deve essere la più bella espressione, la sintesi più completa, l'integrazione artistica più efficace;
6. — L'architettura come arte di disporre le forme degli edifici secondo criteri prestabiliti è finita;
7. — Per architettura si deve intendere lo sforzo di armonizzare con libertà e con grande audacia, l'ambiente con l'uomo, cioè rendere il mondo delle cose una proiezione diretta del mondo dello spirito;
8. — Da un'architettura così concepita non può nascere nessuna abitudine plastica di vivere, perchè i caratteri fondamentali dell'architettura futurista saranno la caducità e la transitorietà. **Le case dureranno meno di noi. Ogni generazione dovrà fabbricarsi la sua città.** Questo costante rinnovamento dell'ambiente architettonico contribuirà alla vittoria del **Futurismo,** che già si afferma con le **Parole in libertà, Il Dinamismo plastico, la Musica senza quadratura e l'Arte dei rumori,** e pel quale lottiamo senza tregua contro la vigliaccheria passatista.

Antonio Sant'Elia,
architetto

MILANO, 11 Luglio 1914.

DIREZIONE DEL MOVIMENTO FUTURISTA: Corso Venezia, 61 - MILANO

LA CITTÀ FUTURISTA. — Stazione d'aeroplani e treni ferroviari, con funicolari e ascensori, su 3 piani stradali.

LA CITTÀ FUTURISTA. — Via sopraelevata per pedoni, con ascensori nei cavalli.

LA CITTÀ FUTURISTA. — Case a gradinata con ascensori dai 4 piani stradali.

LA CITTÀ FUTURISTA. — Ponte a 3 piani comunicanti per mezzo d'ascensori.

Antonio Sant'Elia.
architetto.

DIREZIONE DEL MOVIMENTO FUTURISTA: Corso Venezia, 61 - MILANO

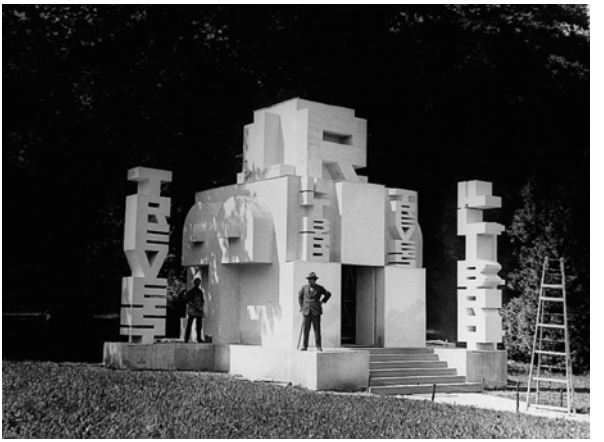
LA CITTÀ FUTURISTA. — Casamento con ascensori esterni, gallerie, passaggio coperto, su 3 piani stradali (linea transitarie, strade per automobili, passerelle metalliche) fari e telegrafia senza fili.

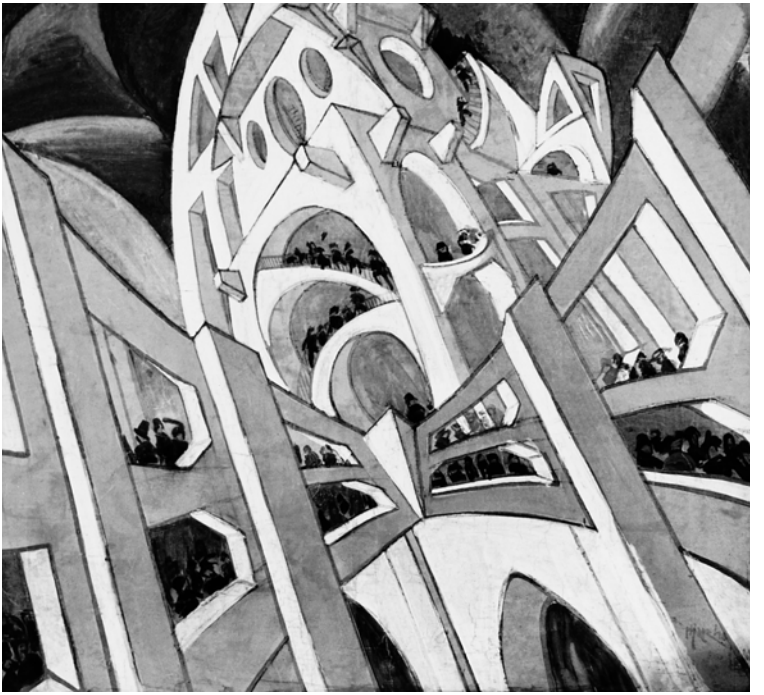
LA CITTÀ FUTURISTA. — Case a gradinata, con ascensori esterni.

5.22 Antonio Sant'Elia, "L'Architettura futurista, Manifesto," 11 July 1914. Drawings from "La Città nuova" series, May 1914

thoroughly put off by their completely abstract kinetic light show. Depero went on to design the corporate fair stands for various book publishers erected at the third Biennale at Monza in 1927. He designed the Bestetti & Tumminelli pavilion with the forms of giant letters, *architetture tipografiche*, Marinetti called it. Depero pitched the idea of architecture-as-advertising to the industrialists of Pirelli and FIAT, and then gravitated to advertising proper. He worked for a time in New York designing covers for *Vanity Fair*.

The Futurists soon found a full-time architect in Virgilio Marchi. As a student in isolated Siena, Marchi quipped that Marinetti's Futurist incantation had thrown open the gates of the insane asylum but not the heavy doors of the arts academy. Marchi served in the war, stationed for a while in Rome, training as a bombardier, yet still had free time to mount an exhibition of his works in 1918, which Marinetti attended. Marchi had been in the audience of the *Feu d'artifice* performance and was intoxicated enough by the Futurists to draft his own "Manifesto dell'architettura futurista," published in expanded book form in 1924. In his manifesto, Marchi developed all the issues Boccioni and Prampolini had drafted that Sant'Elia did not espouse: the deciduous, elliptical, and oblique. "Dynamic, state-of-mind, dramatic" was the breathless subtitle of Marchi's manifesto. He imagined a mechanical universe where every impulse, every movement, would be the shaping agent of a "radiating," "funneling," "spiraling" architecture. He advocated painting Calderini's Palazzo di Giustizia blood red just to see what the effect would be. "Let us reclaim the art of architecture," he pleaded, echoing the common cry of Arata's crowd. Marchi, who never attended a technical university, explored structural notions through purely artistic intuition, "the primordial dynamics of the material," he claimed, "with a passionate state of mind that confronts and bursts out into space." He expressed the results of his liberating research in lyrical paintings. Marchi described his visions as if he were riding a roller coaster: "Architecture gives bizarre vistas that we will glimpse cinematographically emerging from sparkling tunnels to stop in sunlit piazzas only to pick up the race toward fabulous distances." Futurist painters later in the 1930s would develop an entire genre of work inspired by the sensation of flight, called *aeropittura*. While still in the first days of aviation, Marchi entitled





5.23 Fortunato Depero, Bestetti & Tumminelli pavilion at Third Biennale, Monza, 1927
5.24 Virgilio Marchi, "Edificio visto da un aeroplano virante," 1919–20

his painting *A Building Seen from a Veering Airplane*, flying through a world in which the comforts of space, perspective, and gravity are all rearranged. In 1927 Theo van Doesburg, the Dutch architect, equated Marchi's work to Bruno Taut's Alpine Expressionism. Marchi embraced all the hedonistic vitality that modern capitalist technology could offer.

After enjoying the first one-man show of Futurist architecture in 1922, Marchi then mounted a retrospective of Sant'Elia's *Città nuova* drawings in Rome. Marchi drew up his own *Città fantastica* in emulation of Sant'Elia's. Marchi did realize one of the very few built works inspired by Futurism: a Roman cabaret interior. The gallery owner, cultural impresario, and exploratory photographer Anton Giulia Bragaglia hired Marchi to transform the basement of Palazzo Titoni into the Teatro degli Indipendenti. The fact that the subterranean passages were the vaults of an ancient bath complex made Marchi think of Piranesi. He wound fantastical baroque balconies through the labyrinthine spaces, decorating every surface with wild patterns. Marchi's greatest contributions, however, were in the field of scenography. He designed expressionist sets for the plays of Luigi Pirandello and film sets for Roberto Rossellini through the 1950s. Futurist architecture therefore remained almost entirely virtual. Like Piranesi, the enthusiastic adherents to Futurism communicated their messages largely through two-dimensional imagery yet were widely influential on the course of modern architecture in Italy.

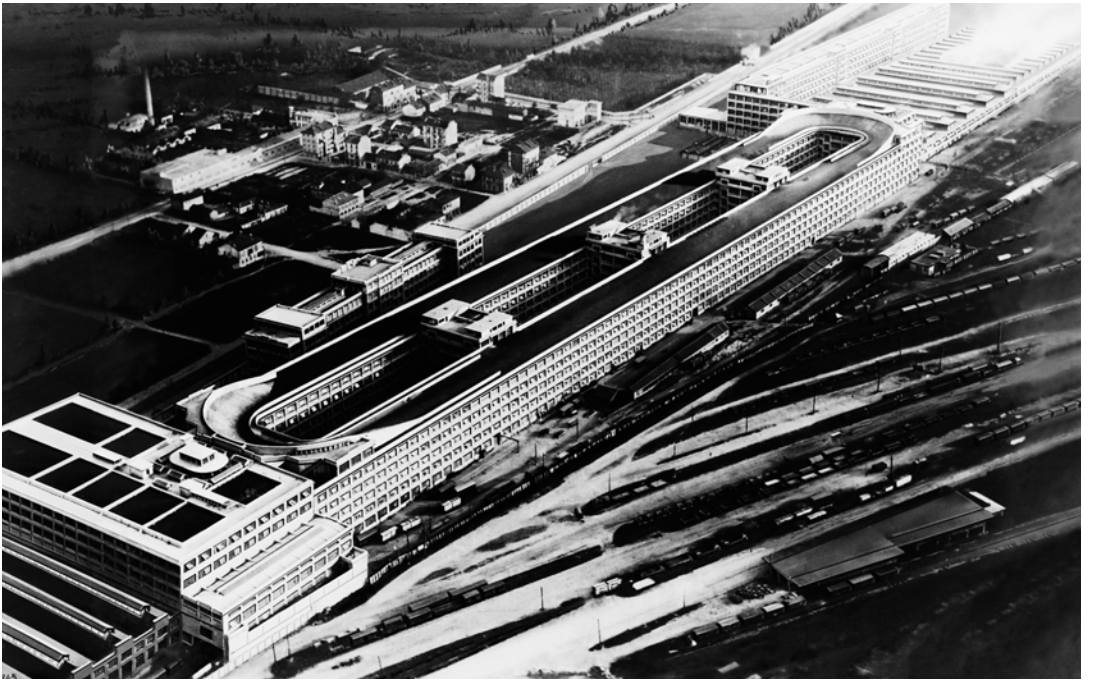
FIAT

The Futurists found an unwitting partner in FIAT. Giovanni Agnelli, the company's founder, was a pioneer of technological and organizational management and the visionary of a new economic and social order. Agnelli bought out his competitors and reused their factories, which had been designed by Fenoglio. By 1906, he began to reexamine the nature of the physical plant and sites of production and assigned one of his production engineers, Giacomo Mattè-Trucco, to the task. Born to a building contractor, Mattè-Trucco earned his degree in mechanical engineering in Turin in 1893 and came to FIAT in one of Agnelli's takeovers. He also did freelance work erecting

factories and power stations across the region. His work, often in unadorned concrete, denies any hint of concern for architecture in the sense of a design aesthetic.

Agnelli had his in-house team study the organization of American industry by touring a variety of automobile plants across the U.S. Mattè-Trucco read their reports on the efficiency principles of Frederick Winslow Taylor and the line assembly put into practice by Henry Ford. Ford's cycle of production was rationalized by carefully organizing the factory layout: distributing parts of the construction process according to the type of machine required, with specialized workers at those machines reducing the movement of men and material to a minimum. Agnelli wanted this logic translated directly into spatial terms for his factory. Mattè-Trucco's FIAT plant at Lingotto is the result. The Lingotto district was 4 kilometers down the train line from Turin's Porta Nuova station. Planning for the new plant began in 1914. It is a 500-meter-long, five-story block made of a modular space frame in the Hennebique system of reinforced concrete. The actual attribution of the design is not clear; many of the surviving drawings name collaborating engineers, and Mattè-Trucco had no recognizable style. The design was pared down to the barest structural essentials. Even details like vestigial capitals on the concrete piers found in early drawings were eliminated in the built work. An office block was added to the site in 1919, and even its potentially representational role as the FIAT administrative headquarters did not convince Mattè-Trucco to apply a recognizable architectural language to the concrete. In the end, Lingotto must be understood not as the product of an arduous search for a new architectural language; nor is it a self-consciously styleless poetic. Rather, it is the translation in spatial and structural terms of a mechanical process.

Metal materials arrive in the train yard, and the heaviest parts are pressed on the ground level in top-lit factories to the north and south. Within the main block, parts are produced—some in line assembly, many by workers around tables—then shuttled upward to the final assembly line on the fifth floor. Lingotto is unique in the upward motion of the assembly process, a logical consequence of the raw materials' arrival at ground level. Therefore, the freshly assembled autos were test-run on a track on the roof. The more plastic forms of the



5.25 Giacomo Mattè-Trucco, FIAT Lingotto plant, Turin, 1914–23

5.26 Giacomo Mattè-Trucco, FIAT Lingotto test track on roof, Turin, 1919–23
5.27 Giacomo Mattè-Trucco, FIAT Lingotto access ramps, Turin, 1924

track derive exclusively from the engineer's calculated task of force and resistence for 85-kilometer-an-hour banked turns.

The FIAT Lingotto plant was inaugurated in 1923 with royalty in attendance, although the factory had been in partial operation since 1917 making airplane motors for the war effort. Production rates soon topped two hundred cars per day, a pace that taxed the building's internal traffic, so two spiral ramps were added in 1924. Their lines of construction depart significantly from the Hennebique repertoire of the original construction. With dramatically radiating ribs, they push the limits of the strictly necessary toward a new aesthetic.

Here Mattè-Trucco seems to have elaborated not something glimpsed while thumbing through a Viennese magazine, discussed in some radical café, or derived from Marchi's contemporaneous manifesto, but something from a latent artistic talent just below the surface of this engineer's archetypal thinking. Mattè-Trucco's vocabulary was always without metaphor. He would not have called this architecture at all, yet the sincerity with which he went about solving problems created a work of undeniable power, reverberating for all who came into contact with it. The great dimensions of Lingotto made it seem to its first visitors as a vast city unto itself, a megastructure, had they used the term. The language of Lingotto's reception was couched in the humanist culture of its observers: "a new palace for the new power of industry, the assembly line like church naves with automobiles in steady processions . . . something solemn and mysterious in that cathedral-like vastness," the journalist Luigi Barzani wrote. What struck many visitors was a paradoxical stillness of the disciplined workers in colored uniforms, coded to the painted concrete piers between them. They plugged away, heads bent, elbows working, in a competition of speed and precision that the FIAT management encouraged.

Visitors flocked to Lingotto, from American industrialists to a French delegation to the Manchurian royal family. But its was Le Corbusier's visits, his first in 1925, and the photographs of the rooftop track that concluded the second edition of his book *Vers une architecture* that made Lingotto enormously famous. "Certainly one of the most impressive spectacles of industry. . . a Florentine work, punctual, limpid, clear," Le Corbusier wrote. Lingotto was Europe's

most advanced factory building, the first example of a factory conceived and realized solely on the basis of rational laws of production, an "American" factory, a talisman of European modernism. Even the transatlantic visitors were regaled with bold statements like "America will no longer give us the example of these colossal establishments of industry, but Lingotto will give the example to American industry of Italian grandeur of conception and audacity of construction."

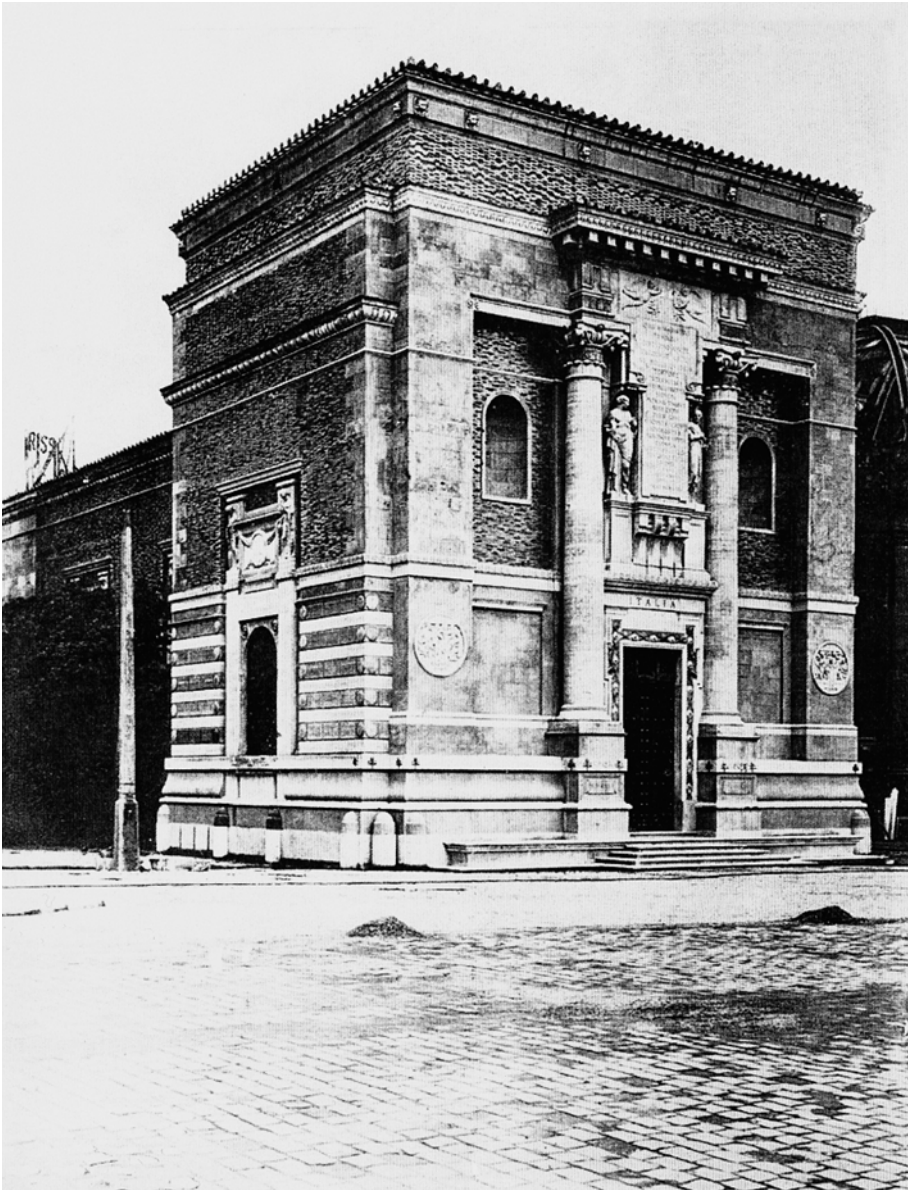
An interpretation both more modest and more profound was recorded by Edoardo Persico, a young journalist and budding art critic who got a job on the Lingotto assembly line in 1927. "In its structure, the track is a concrete image of velocity," he wrote. "It expresses the sense of the motor in a clear concept; nothing that comes into contact with it can stay still." For Persico, Lingotto demonstrated the same logic and perfection of material technology as Gothic cathedrals, "an incomparable construction of clear forms that in their simplicity express the very principles of order." This is a new order, Persico argued, of the irrefutable laws of deduction that disciplines its users in the vision of a just and ordered society. "As with the style of the cathedrals, this factory has concluded the search in a moment in history for the divine." Lingotto remained active until 1982 but already in the 1930s Agnelli was evaluating new production possibilities. Born of the industrial process of constant innovation, the fact that Lingotto became obsolete so quickly only confirms the truly functional nature of its origins.

PARIS 1925

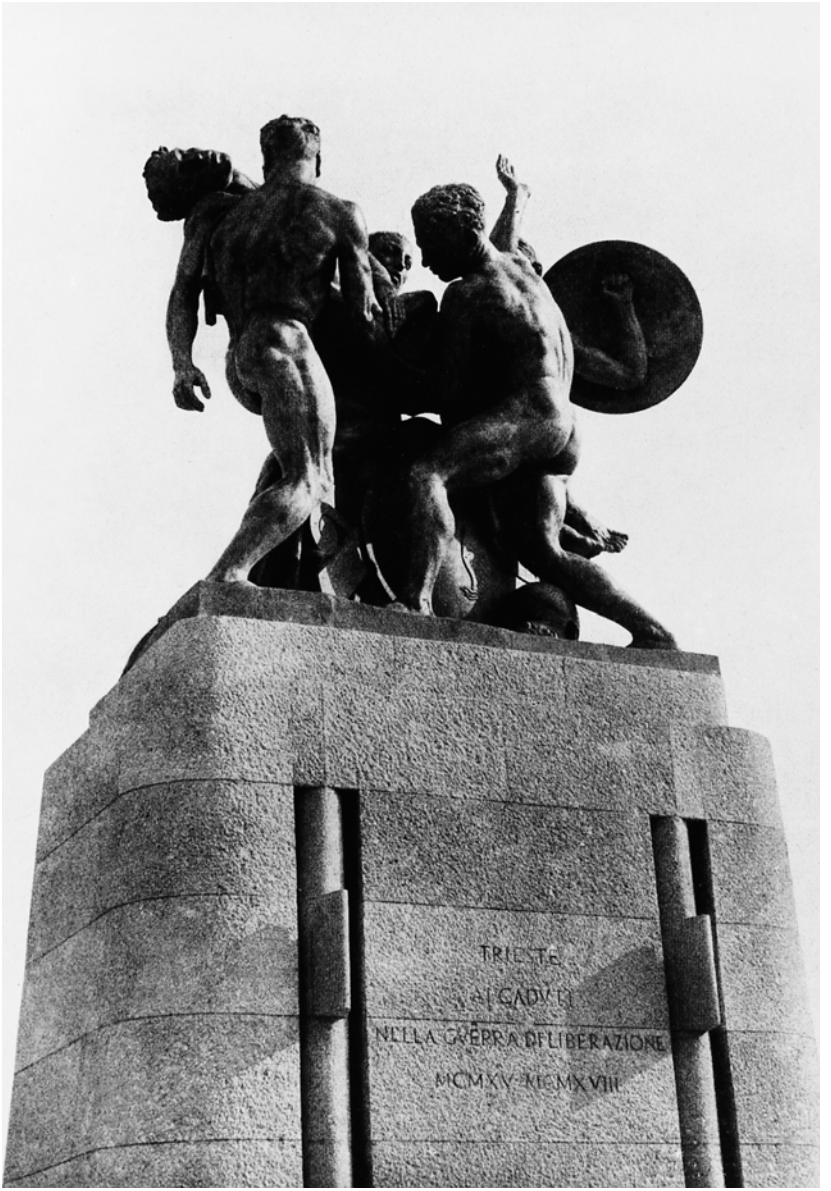
European modernism had been introduced to Italy at the Turin exhibition of 1902, and roughly a quarter century later Europe received Italy's response at the Exposition Internationale des Arts Décoratifs et Industriels Modernes in Paris. The programs of the two fairs were similar: only modern, innovative ideas, no copies or imitations allowed. But the Italian critic Roberto Papini reviewed the progress of European modernism and deemed it "simplistic." Its pared-down rationality was, he claimed, an excuse for a poverty of artistic ideas. The designer for the Italian pavilion at the Paris fair of 1925 was chosen by a committee that included Papini and Margherita Sarfatti, an art activist and government insider. They chose Armando Brasini "whose fame as a mighty interpreter of our most magnificent traditions understood in a modern way was in itself an incontestable guarantee of success and victory." Brasini graduated from the Roman academy of fine arts and worked primarily as a decorator in upscale hotels and on film sets. In 1924 he became the head architect of the Monument to Vittorio Emanuele and designed the crypt that was added there to the unknown soldier of the Great War. This exposure gained him the commission for Paris. The Italian pavilion rose in a prominent position on the fairgrounds and although it was small in dimensions, like the other national pavilions, Brasini gave it enormous proportions and built it out of sturdy materials used elsewhere for permanent structures. Golden Roman brick, travertine, marble, and mosaic revetments made up a robust block that stood in contrast to Melnikov's Russian Constructivist pavilion right behind it. Heavy columns and classical elements were assembled in an unorthodox fashion by Brasini, who reread the historical heritage with great liberty. It was also a direct attack on the *esprit nouveau* rationalists, Le Corbusier above all. In such a venue, and with its deliberate historicizing imagery, the pavilion was an official declaration of aesthetic war against European modernism. Brasini testified that "modern art" in Italy is nowhere confirmed, nowhere has it revealed the ubiquity and fullness of the classical language of architecture, which he understood to be still in vibrant evolution.

Former Futurist Ugo Nebbia, who seems to have been deeply rattled by the Great War, now weighed in with reactionary Brasini. "As if to prevent our being swept away by the turbines of modernity that churn all around, officially we preferred to latch onto the solid trunk of antiquity." In an exhibition pavilion, a form that so often was the quintessence of ephemeral notions, Brasini "expresses something more than just an aesthetic affirmation. . . . [It is] a witness to power, precision, virility, the consciousness of a nobility of the dominant and inflexible race against certain incursions of the modernist camp, the logical continuity of the national genius." Sarfatti pushed the nationalist political edge further, vindicating Italy's free interpretations of its own history. "We have placed ourselves *hors concours* of the modernity of turbines with an official testimony of heritage." The pavilion stood in exact opposition to the ideals D'Aronco advanced in 1902 in its unambiguous position vis-à-vis European modernism.

Van Doesburg commented that he was not surprised that Futurism, perhaps the most virulent avant-garde movement European architecture would ever know, was born in Italy; tradition is so deeply ingrained there that violence is required to break from it even a little bit. Compromise, however, was the preferred order, and the most prolific architects of the first two decades of the twentieth century—Basile, Coppedè, Carbone, Moretti—compromised with expert flair. Although Sant'Elia and Chiattone did not want to abolish the past, they did not master the art of compromise. Italian modernism in any of its initial permutations distinguishes itself from other European manifestations for its evident continuities with history. It is the experience of the modernist avant-garde and the series of real adjustments and compromises that architects made in the context of Italian culture that continued to characterize the succeeding period under the rule of the Fascist regime.



5.28 Armando Brasini, Italian Pavilion, Exposition Internationale des Arts Décoratifs, Paris, 1925



6.1 Attilio Selva, Monumento ai caduti (WWI memorial), Trieste, 1935

Chapter 6

ARCHITECTURE DURING THE FASCISM REGIME, 1922–1944

The rise to power of Benito Mussolini and his Partito Nazionale Fascista, or PNF, gave an impression that chronic problems in Italian society—and related architectural matters—would be resolved. Through the Great War, the nation seemed no closer to the *Risorgimento* ideal of a unified and strong Italy than before, and afterward, the liberal policies of Prime Minister Giovanni Giolitti came under fire as veterans returned to economic uncertainties. Unrest among workers signaled a spiritual crisis in the nation. Anarchists and socialists agitated for real revolution, believing the war itself, with its glorified collective sacrifice, could provide national regeneration and the opportunity, finally, to make Italians.

One notable element of postwar Italy was the sacralization of political acts; Napoleon, with his institutional rituals, had orchestrated public sentiment in just this manner. Commemorations of the war dead used the new mass media of radio and film to propagate nationalistic messages. Monuments to the fallen were erected in every Italian municipality in an attempt to transform the horrors of war into national pride. As in the Napoleonic era, political acts were symbolized in a fetishistic use of flags, uniforms, insignias, and emblems drawn from ancient tradition, especially the fasces. When the body of the unknown soldier was placed in the crypt designed by Armando Brasini at the Altare della Patria, the Monument to Vittorio Emanuele, on 4 November 1921, the overwhelming public response was the first truly felt collective political event in the nation's history. Members of the PNF, identifiable by their black shirts, were conspicuous at these events and were recognized by many as the nurturers of a vigorous Italian patriotism.

Fascism flourished as a political movement of aggressive nationalism. The original Fascist fighters' squads, called *fasci di*

combattimento, struck out against bourgeois values in favor of the totalitarian supremacy of a corporate state. The PNF was at first far from consistent on political issues, but with its focus on national unity it conveyed the impression of ideological coherence. Mussolini avoided defining Fascism in any explicit terms, thus keeping it open to maneuver. With its disciplined militaristic appearance, Fascism provoked a kind of hysterical devotion among the masses. Religious and military metaphors abounded in the most banal of slogans. *Credere Obedire Combattere* (Believe, Obey, Fight) was shouted on the radio and emblazoned on buildings everywhere.

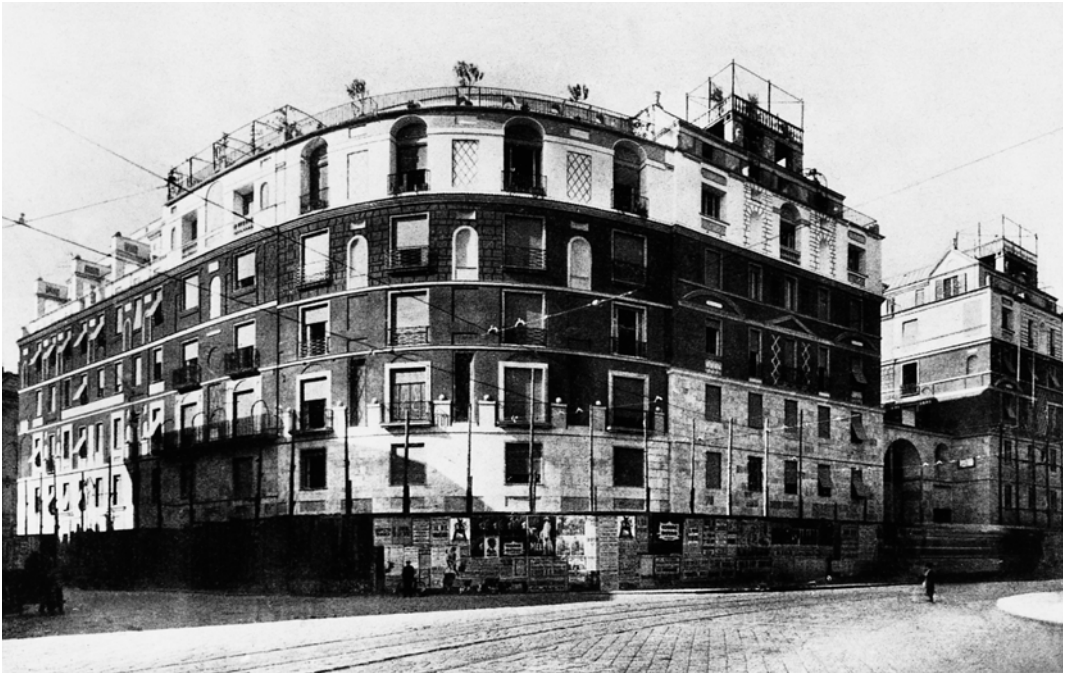
Mussolini clinched his hold on political power when he mobilized his followers in a symbolic march on Rome on 28 October 1922, the anniversary of Emperor Constantine's coup. In 1926, when Mussolini seized full dictatorial rule over the parliament, he moved his office to the Palazzo Venezia at the very center of the city. The violent revolutionary imagery of the early squads then gave way to stabilizing but often stifling corporate order in society, equally manipulative and unreasonable in its character as its violent predecessor.

The role of the arts in Fascism's hold on power was considerable, although Mussolini could not have explained it. He had no eye for art and made only the most fatuous comments on the subject. Mussolini was a dictator who never dictated the arts; it was up to the artist to explain to the Duce the potential use of his art for the national cause. The result in architecture was a defined sense of purpose, with the tentativeness of the early modern period replaced by more decisive contributions. Without dictated limits—indeed, with broadening encouragement—the architects of Italy in the 1920s and 1930s presented a great range of artistic achievement that cannot be easily classified by style or theory. The term *Fascist architecture*, it will be seen, has little meaning at all.

THE RETURN OF NEOCLASSICISM

At the war's end, a young architect named Giovanni Muzio returned to his native Milan after having been stationed in the Veneto, where he studied Palladio's villas. Before his discharge, Muzio stood guard at the Paris peace talks and afterward toured France, England, and Germany, coming away convinced that their artistic values had been "derived from *our* Italian origins, values that must not be lost." Back in Milan, Muzio recognized the need to break from the "exasperated and arbitrary individualism" that characterized the speculative building of the day, and called for a return to order. Several young designers whose careers or education were also interrupted by the war answered Muzio's call. Gio Ponti, Emilio Lancia, and Giuseppe de Finetti, among others, joined Muzio in his studio on Via Sant'Orsola for thoughtful group discussions. They produced no manifesto, but many of their ideas were expressed in Muzio's articles on, significantly, eighteenth-century Milanese neoclassicism. Muzio stated, "An absolute *Italianità* was desired and zealously sought . . . to have always remained faithful to our own great tradition, alive and continuous through the centuries, seems to me a great virtue." Classicism was Muzio's guide to steer between arbitrary artistry and structural exhibitionism.

Muzio had his chance to put his ideas into play in 1918, when two Milanese speculators began work on a thousand-unit development at the corner of Via della Moscova. The developers got their building permit based on drawings by a little-noted local architect, but with foundations laid, a reinforced concrete structure going up, and prefabricated window units on their way, they brought in Muzio to give the building some flair. To avoid a barracks-like monotony, Muzio developed a decorative system of classical motifs applied to the exterior in inventive patterns. He grouped the seven floors into three horizontal zones, and enlivened the spaces between the dreadfully uniform window openings with arches and shallow niches, mock balconies and recessed panels, pediments and pedestals. The dignity of the classical forms achieved a bright tone with none of the usual historicist rhetoric. When the scaffolding came down in



6.2 Giovanni Muzio, "Ca' Brutta," Milan, 1919–22

1922, the initial public response was decidedly flat. The decorative scheme departed so much from the filed drawings that the developers were slapped with a citation. Far from sensing a bucolic sweetness, the scandalized public dubbed the building *ca' brutta*—the ugly house.

Giuseppe de Finetti dropped out of the Milan Politecnico in 1912 to go to Berlin and then Vienna, where he met Adolf Loos. De Finetti, who was Loos's only Italian student, understood instinctively the master's abstract relationship to tradition. When hostilities between their nations broke out and de Finetti had to return to Italy, he found a congenial atmosphere for his traditional interests in Muzio's Sant'Orsola group. With Emilio Lancia, he wrote a manual in 1923 on hotel design that mixed classical form with contemporary needs. The fuss over the Ca' Brutta had dissipated so quickly that when de Finetti's Casa della Meridiana was finished in 1925 its severe and unusual harmonies passed without comment. This apartment house of luxury duplexes built on the grounds of a former botanical garden rises in asymmetrical setbacks with terraces that responded to the green shelves of a great cedar tree. Sharply cut window openings are defined by restrained classical moldings. Extreme refinement of luxurious materials inside counterbalances the rigorous functional clarity outside. Muzio called this a "limpid harmony, a vivid desire for simplicity, for nudity."

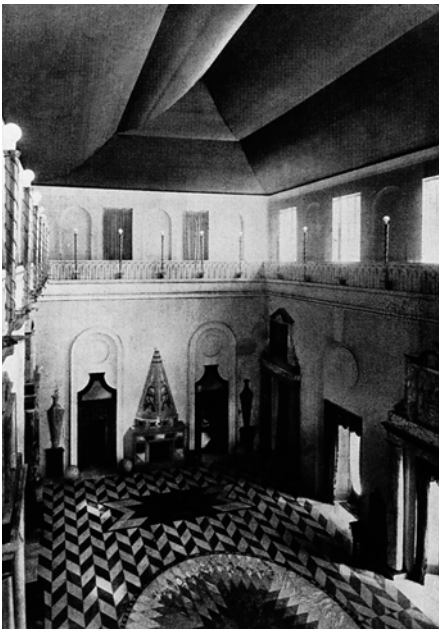
While de Finetti defined the austere extreme of Muzio's group, the decorative richness of the classical heritage was explored by Gio Ponti. Finishing his degree at the Politecnico after the war, Ponti soon became the artistic director of Richard Ginori's ceramics production line, which brought classical order into many Italian homes. In a clear polemic against strict functionalism, Ponti opined that houses were not machines for living, as Le Corbusier called them, but sanctuaries of stylish beauty and refined comfort that provided "the setting for Italian life." "La casa all'italiana" was the title of Ponti's editorial in the inaugural issue of his design magazine, *Domus*, in 1928. Its Latinate name reflects the classical basis of Ponti's brand of modernism. In the pages of this influential and long-lived design journal, Ponti and his neoclassicist colleagues explored building types in relation to the special cultural and climatic conditions of Italian identity.

Collaborating with Emilio Lancia, Ponti built many fine apartment buildings in Milan, such as the Casa Borletti on Via San Vittore of 1927, in which he further developed the decorative vocabulary reintroduced by Muzio.

The Sant'Orsola group also included Piero Portaluppi, whose mammoth Corso Venezia building bridging Via Salvini exudes an electrifying energy in its decorative elements. Aldo Andreani also reappears in this context, withdrawing from his former eclecticism for his Palazzo Fidia in Milan of 1930. Although never codified as a design school, Muzio's group operated with a disciplined intuition; they referred to themselves, modestly, as "neoclassicists," and their work as simply "in the modern style."

The incipient movement garnered a certain level of success and recognition when Ponti built the main pavilion for the Venice Biennale in 1928, and Portaluppi represented Italy at the Barcelona world's fair of 1929. But the 4th International Exhibition of Decorative Arts, in 1930, was their apogee. Held at Monza in the Villa Reale, Giuseppe Piermarini's masterpiece, Muzio and crew opened a dialog with their eighteenth-century forefather by completely redesigning the villa's interiors with "clearly Italian subjects," as Ponti wrote in *Domus*. "Arches, vaults and columns, bases, cornices, trabeation, and capitals of the most vigorous modeling. Not the abstract, but the epic, not the elementary but with elements rich in prestige of Latin culture and human expression."

Today, Muzio and the Sant'Orsola group are often linked by historians to the painters of the so-called Novecento movement, who, like such "metaphysical" painters as Giorgio de Chirico, sought a renewal of their art through the use of historical imagery. Often, traditional architectural forms predominate in their enigmatic, poetic paintings. In fact, this link is a tenuous one. Although Muzio was familiar with their work, he explicitly denounced architecture's potential reliance upon what he considered the simpler art of painting. Unlike the Futurists, Muzio did not strive for a synthesis of the arts. If anything, the most that can be said is that the artists of the Novecento and the members of Muzio's Sant'Orsola studio all contributed to a postwar call to classical order.



6.3 Giuseppe de Finetti, "Casa della Meridiana," Milan, 1924–25
6.4 Giovanni Muzio and others, Hall of Italian Marbles, 4th Esposizione Internazionale d'Arte Decorativa, Villa Reale, Monza, 1930

ITALIAN RATIONALISM: GRUPPO 7 & GIUSEPPE TERRAGNI, MIAR & ADALBERTO LIBERA

Muzio and his friends were not the only ones dissatisfied with the education at the Politecnico. A group of seven discontented recent graduates yearned for the synthesis of artistic and scientific curricula that Camillo Boito had planned, and in 1926 they addressed the problems of their profession. They renounced the ambitious individualism that characterized the neo-eclectics and Futurists in favor of the discipline of group research. With significant anonymity, they called themselves Gruppo 7. They reasoned that a group effort was required to tap into the "new spirit" of the age, and felt themselves on the threshold of a great period. "We are going to witness the birth of a new order of ideas," they enthusiastically declared in a four-part series of articles. Their position was distinct from the Futurists' destructive fury, the pretense of the Art Nouveau, and the decorative expedience of Muzio's neoclassicism. Gruppo 7 defined its position as "Rationalism."

"The new architecture, the true architecture," they wrote, "must result from a rigid adherence to logic, to rationality. . . . We do not pretend at all to create a style (similar attempts of creation from nothing led to results such as the *Liberty* style); but rather from the constant use of rationality, from the perfect correspondence between the structure of the building and the purpose it serves, to allow a style to be born through a process of selection." If one were attentive to functional requirements and the nature of new construction methods and materials, an aesthetic value would emerge. The rationalists consciously connected themselves to the contemporary functionalist modernism of Le Corbusier; in fact, they had read the influential master's tract *Vers une architecture.* They based their new architecture on the qualities that Papini criticized in the work at the 1925 Paris exposition: articulation of structure, emancipation from conventions, and minimal ornament. According to their statements, Gruppo 7 embraced material technology and the distillation of typological programs in the belief that new fundamental forms would arise, absolute forms of international value, just as Palladio, for

example, had in his villas created enduring forms that were influential for centuries around the world.

Roberto Papini had warned that "pure rationalism," being pursued throughout Europe, was ill adapted for Italy, and Italy's relationship to international trends grew even more tense in the postwar climate of nationalism. Gruppo 7 anticipated this cultural conflict by acknowledging the national differences even among the practitioners of Rationalism according to their respective local heritages. They deduced therefore that absolute forms in the hands of Italian designers would naturally produce unmistakably indigenous results, hence an *Italian* Rationalism. "Here, in particular, there exists a classical substratum, the spirit (not the forms, which is quite different) of tradition, that is so profound in Italy that evidently, and almost mechanically, the new architecture cannot but preserve a stamp that is typically ours." Gruppo 7 confidently prophesied that Italy would not only play a vital role in the development of modern architecture, but would once again regain predominance and dictate style to other nations, as in the great periods of the past, with Palladio, Brunelleschi, and the ancients. The source of this confidence lay in the Rationalists' unbroken ties to history. "There is no incompatibility between our past and our present. We do not want to break with tradition; it is tradition that transforms itself and assumes new aspects by which few may recognize it." This sense of tradition was broadly defined in the Italian context as essentially Mediterranean: white sunny surfaces, regular masses with an accent on walls rather than windows, a regional vernacular that, they claimed, had been even Le Corbusier's own initial source of inspiration. "The architect," the Rationalists explained, "should give the fundamental tone to this new geometry that partakes as much of the mechanistic spirit as of the Greek (perhaps the two are one and the same and are called the 'new spirit')."

What the Gruppo 7 first expressed in words was demonstrated in drawings in their debut public exhibition at the 1927 Monza Triennale, not far from Depero's Futurist typography pavilion. The models and drawings, each presented in an anonymous manner true to the group's principle of collective effort, described projects based

on industrial programs: a pipe factory, a parking garage, an office building. Each exercise presented an austere, paradigmatic, and often impractical solution. Because none of the projects were tied to real programs or real commissions, the Rationalist movement was for the moment nebulously suspended.

Their first chance to build came when Giuseppe Terragni, a Gruppo 7 member with an architectural practice in his hometown of Como, was commissioned to design an apartment building near the lake. Building permits were granted based on drawings prepared in 1928 in a vaguely neoclassical style. The built work, called the "Novocomum" and completed the following year, however, did not correspond to the permit drawings—a fairly standard gambit at the time. Its sleek planes, strip windows, and metal railings earned it the popular nickname "il Transatlantico," an ocean liner docked lakeside. In fact, it seemed so radically different from the immediate architectural environment that the city licensing board threatened to have it torn down. A special inquest of experts from Milan, chaired by a former professor of Terragni, favored the new design, and the fact that Terragni's brother Attilio had just been elected mayor could not have hurt its cause.

The Novocomum has a five-story reinforced concrete frame construction similar to Mattè-Trucco's FIAT plant at Lingotto. Its smooth, unadorned wall planes are clear interlocking volumes and its simply cut window openings are grouped in horizontal strips with rhythmic alternations. Every vestige of historical ornament has disappeared, but the massing derives from the neighboring building and the local tradition of curved building corners. Terragni has responded to these precedents in novel and, as the Rationalists predicted, at first unrecognizable ways. The Italian-ness of Terragni's Novocomum is evident in the classical symmetry of the lakefront facade, following the "spirit, not the form" of Italian tradition. Dramatic glazing of the corners and the full window wall of the cylindrical rooms turn the building out to the views of lake and mountains. The apartment interiors, however, rely on old-fashioned corridor-type arrangements that reflect none of the revolutionary thinking of living space one might expect of a reader of Le Corbusier. Some units have no street frontage at all. Finally, the Novocomum was

6.5 Giuseppe Terragni, Novocomum, Como, 1927–29
6.6 Giuseppe Pagano and Gino Levi-Montalcino, Palazzo Gualino, Turin, 1928. Photomontage by Pier Maria Bardi, with Milan Stazione Centrale

painted in earthy shades of hazelnut, yellow, and bright orange that invested the flat mural forms with a greater sense of volume.

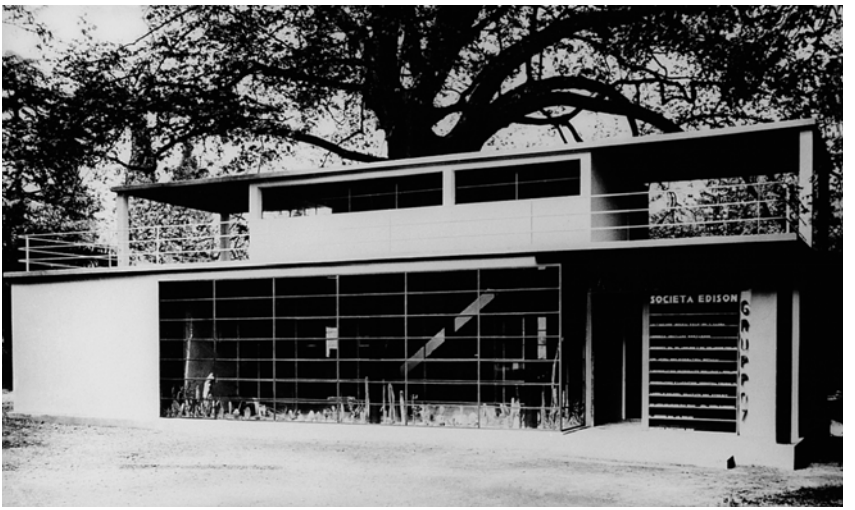
The Novocomum was announced by the Italian Rationalists as the first concrete realization of the new spirit. It attracted much attention in the pages of radical architectural journals. Giuseppe Pagano wrote in *Casabella* that the Novocomum was a modern masterpiece although it is clear that he evaluated it from the outside only: "A new aesthetic is born, a new way of living, a new way of imaging the habitation, the house. This anti-romantic, anti-decadent, anti-evanescent house not born of caprice, fashion or wild ideas of the moment but risen from the new aesthetic spiritual needs, from the necessities imposed by logic, this architect, this house that stirs today such scandal and protest, such alarm and such wonder, in a short time will not be the exception, the anomaly, it will be for everyone 'the house,' the 'house of tomorrow.' " The Novocomum was propelled to iconic status largely through published images in bold black and white.

In Turin, Giuseppe Pagano, a keen advocate of Rationalism and supporter of Terragni, grasped the importance of enlisting economic forces in the cause, so he attracted the patronage of Riccardo Gualino, a Torinese industrialist and art collector who was building a fantastical neo-eclectic castle for himself until he saw Pagano's work featured in a 1928 exhibition. Gualino commissioned Pagano for his company's headquarters on Corso Vittorio Emanuele. Its seven identical low-stacked floors with unorthodox but functionally rationalized horizontal windows lent an entirely new look to economic power, one of efficiency rather than the pomp of Carbone's Borsa. When Pagano published his building in *Casabella* as a photomontage, he emphasized the nobility of its classical weightiness in contrast to the "shameful" parade of historicist styles still lingering in works like the Milan train station. The stucco surfaces imitate nothing and do not obscure the concrete construction.

Rationalism arose in Rome too out of dissatisfaction with academic training. Adalberto Libera, after joining the Gruppo 7 in 1927, set up his practice in Rome and attracted like-minded recent graduates to his studio. Gaetano Minnucci wrote authoritatively on

European modern architecture, articulating all of the issues that fueled the Gruppo 7. Libera and Minnucci assembled the various Rationalists scattered around Rome, Turin, and Milan for an exhibition in 1928 at the Palazzo delle Esposizioni. The exhibition was sponsored by the recently incorporated architects' syndicate. Libera and Minucci wrote in the catalog of their "exacting synthesis of the past and the future," linking contemporary architecture to the enduring values of ancient construction. The Novocomum and FIAT Lingotto were featured in photographs, although Mattè-Trucco, twice the age of the students, kept his distance. The work of the industrial engineer was exalted once again, as both Marinetti and Le Corbusier had done, as a clairvoyant realization of yet another theoretical ideal. Sant'Elia was also claimed as a precursor to the Rationalist movement who "intuited an innovative architecture . . . indicating to Italians the first sign of a new way toward the healthy and decisive architectural renewal." The exhibition in Rome provided national exposure for the Rationalist movement and for "problems that architecture of the nineteenth century dared not pose," as one reviewer wrote.

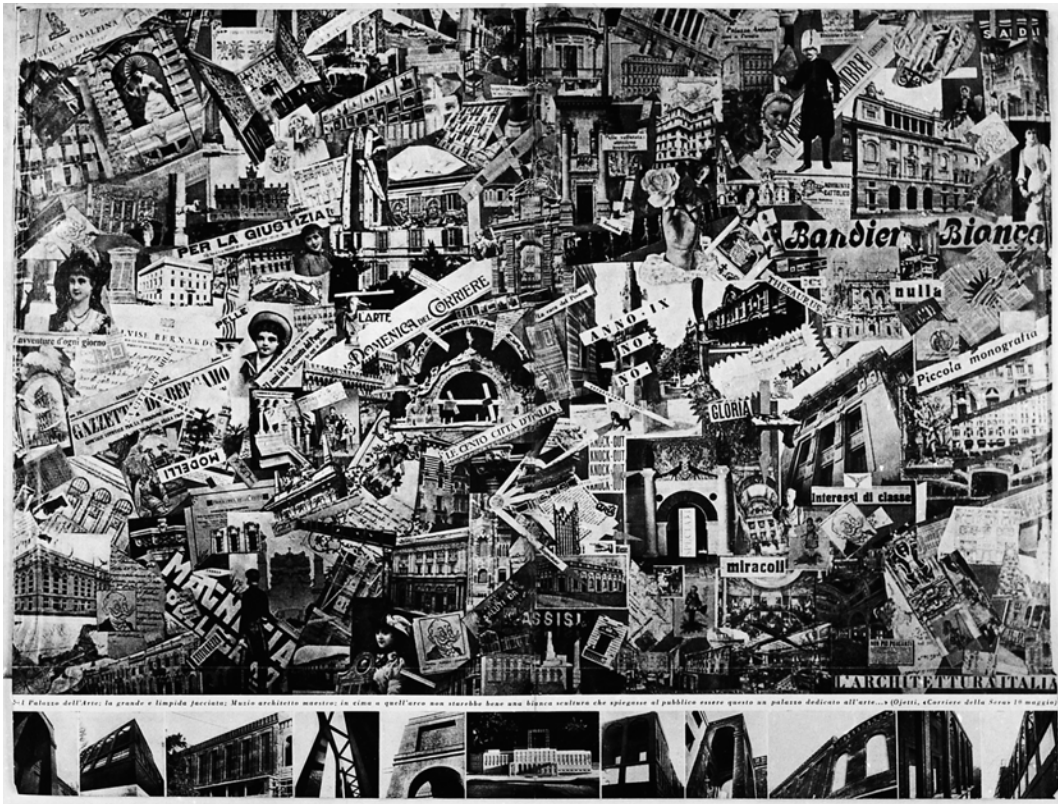
At the Monza Triennale of 1930, where Muzio and his neoclassicists redid the Villa Reale, the Rationalists presented a pavilion in the gardens. The "Casa elettrica," designed by a team from the Gruppo 7, was a showcase for the Edison company's modern household appliances and the spirit of machine-age living. At the same time, the first Rationalist constructions in Rome were reaching completion: two apartment buildings on the Lungotevere near Piazza del Popolo, one by Giuseppe Capponi, the other by Pietro Aschieri. Capponi's luxurious block for the Nervi & Nebbiosi engineering firm is a concrete structure clad in travertine. In a building across the river Aschieri too began with sound construction elements unadulterated by any ornamentation. The architects aspired "to liberate ourselves through the exclusion of every stylistic element from bogus traditionalism and to return the creative process to its essence—that is, invention arising out of the reality of the situation, the program and the environment." Contemporaries approved enthusiastically of the high quality of the works, the materials, and



6.7 Luigi Figini, Gino Pollini, Adalberto Libera, and others, "Casa elettrica," 4th Esposizione Internazionale d'Arte Decorativa, Villa Reale, Monza, 1930
6.8 Giuseppe Capponi with Pier Luigi Nervi, Palazzina Nervi-Nebbiosi, Rome, 1926–29

the strong mural quality of inflected concave planes developed by both architects. They reminded critics of a baroque handling of mass and constituted, like Terragni's apartment building in Como, a spontaneous lyric renewal of the spirit of local traditions.

With growing energies, Libera set out to coordinate the loose alliance of Rationalists into an organized professional entity. In 1930, he established the Movimento Italiano per l'Architettura Razionale, or MIAR, to promote rational design in Italy through exhibitions, publications, and conferences. With chapters and regional secretaries across Italy, MIAR deliberately bureaucratized the avant-garde in order to project a sober, responsible professional coalition that mimicked Fascist corporate organization. A second exhibition of Rationalist architecture was planned for 1931, again, with funds from the syndicate, in Pier Maria Bardi's art gallery. Bardi, an energetic publicist, secured a promise of Mussolini's attendance at the show's opening. A greater number of executed works were on display in the second exhibition, so discussion could dwell on some practical issues, but Bardi gambled on an exclusive state endorsement of the Rationalist movement. He made a direct plea to Mussolini to intervene in the *Rapporto sull'architettura (per Mussolini)* [Report on architecture (for Mussolini)], the show's catalog. "We say that the State has an interest in controlling the delicate question of architecture according to unifying dictated criteria and in establishing the general character of all building programs." Key ideas that had also appeared in Libera and Minnucci's earlier essay took on a proud, even bellicose, nationalism in Bardi's mind: "Every polemic for Art is today an event of innate political significance by virtue of Mussolini's statement that a people is great only to the extent that it knows how to make Art and to make War." Bardi drew the battle lines clearly in a photomontage of tacky fashion illustrations juxtaposed against cutouts of works of recent architecture. Eclectics who had participated in the 1925 exposition, the "shame of Paris," were outwardly lampooned, their images set next to pictures of cheap bourgeois consumer goods. Although Bardi acted independently of Libera and the others, his single-handed provocation implicated all of the Rationalist architects in a direct standoff with the older



6.9 Pier Maria Bardi, "Tavolo degli Orrori," 2nd Esposizione di Architettura razionale, Rome, 1931

generation. None had ever dared such confrontational tactics before.

Mussolini's will remained inscrutable, as it usually did in artistic matters. Architect Marcello Piacentini, although not directly attacked in the collage, was furious, and defended the establishment with editorials in the national newspapers. He debunked the pretense of a thoroughbred Mediterraneanism purported by the Rationalists and accused many of their works of "bolshevik" plagiarism. More seriously, Piacentini suggested that the show's participants could be expelled from the professional licensing syndicate. When Minnucci lost his teaching post at the university, many MIAR members broke rank. Libera deliberated judiciously and decided to disband MIAR in September 1931 for the sake of the members' careers and the cause of Rationalist architecture.

At this point, Marinetti leapt into the fray from the sidelines, where his Futurist movement seemed stuck, by renewing his assertion that Futurism and Fascism were born of the same virulent, revolutionary force. He described Sant'Elia and the FIAT Lingotto factory, among other architects and buildings, as monuments of a world-renowned Futurist movement worthy of exclusive Fascist commendation. Architects of all stripes waited, in vain, for Mussolini's response. Perhaps the Duce had other things on his mind, or liked the vibrant debate, or had little idea about the proper direction of a Fascist architecture. Whatever the case, no pronouncement was made. As Ernesto Nathan Rogers, the youngest of the Rationalists, put it, "We based ourselves on a syllogism which went roughly like this: Fascism is a revolution, modern architecture is revolutionary, therefore it must be the architecture of Fascism." Libera admitted that their experiment and exploration was still in progress. If MIAR was short-lived, Italian Rationalism survived as its practitioners learned to compromise with requirements of the regime.

MARCELLO PIACENTINI, THE *MOSTRA DELLA RIVOLUZIONE FASCISTA,* AND THE UNIVERSITY OF ROME

The reform of architectural education planned by Boito and urged by Gruppo 7 finally became a reality in the 1920s. The establishment of professional degree programs for architects, as distinct from civil engineers, was led by the University of Rome in 1919 under the direction of Manfredo Manfredi, and other cities followed: Venice, Turin, Florence, Naples, and finally Milan in 1930. The course subjects, which ranged from construction to "city buildings and gardens" to restoration, taught the skills needed by Boito's ideal architect: artistic confidence, engineering competence, urban scope. With education reform came greater discipline within the profession through the establishment of the national syndicate of architects, similar to that for all trades in the Fascist economy under party control. The union assured a standard of quality for numerous public building initiatives. No stylistic dictates were laid down, although Alberto Calza-Bini, the syndicate secretary, worked in a conservative mode. Indeed, many administrative positions within the syndicate were filled by former MIAR members in a politic move to defuse the tension over the Rationalists' recent exhibition. Pietro Aschieri sat on the national directorate, and Libera, Minnucci, and Pagano were all given staff posts on *Architettura e arti decorative*, the syndicate's official magazine, which was edited by Piacentini. The magazine's broad coverage of Rationalist issues after 1931 attests to the syndicate's real openness to new trends. Piacentini masterminded a détente between the conservative academics and the modern Rationalists that benefited the moderate wing of the avant-garde as much as it did the syndicate itself, which needed to demonstrate productive harmony to its party supervisors. But syndicate and party membership became a professional requisite, part of the coerced consensus characteristic of Mussolini's totalitarian regime. Refusal to join the Fascist party and the syndicate effectively ended an architect's career.

The Fascist government set up many institutions designed to forge a consensus both within professional culture and in the larger public. All cultural and intellectual pursuits were subordinated to the

will of the state. The Ministry of Public Instruction was renamed the Ministry of National Education, and new ministries of popular culture, propaganda, and the press were created. Marcello Piacentini, the most resilient figure in the history of modern Italian architecture, marshaled his power through these institutions. As a member of the newly established Accademia d'Italia, professor of architecture at the University of Rome, and editor of the syndicate's publication, he had maneuvered into a position of influence on all matters of architecture and urbanism. He sat on most juries for the nation's important works, was called as consultant on the regime's largest projects, and often ended up designing them himself. Piacentini was the Fascist regime's de facto official architect, although Mussolini did not designate such a role.

Marcello Piacentini was very much the son of his father Pio, architect of the Roman Palazzo delle Esposizioni. He wrote his thesis on neoclassicism in the history of architecture even before he attended the Accademia di Belle Arti in Rome. He debuted in a competition for the Biblioteca Nazionale Centrale in Florence of 1903, matching the statist grandeur of Sacconi, Calderini, and Basile senior. Marcello was never sympathetic to the younger Basile, however, who abandoned their fathers' classicism. Indeed, Piacentini showed his colors in the staunch neo-Cinquecento facade of the Banca d'Italia building that faces Basile's Parliament like a stern reproach.

Piacentini could rely upon his Roman tradition, but he was not closed within his culture like so many Roman chauvinists. He thought highly of Muzio's Ca' Brutta, for example. Piacentini also traveled more extensively than any of his colleagues. After finishing designs for the 1911 world's fair, he toured Germany, like D'Aronco before him, studying its contemporary architecture. He was especially impressed, as Muzio had been, in the way German architects, even the minor ones, followed a classical guide, each contributing to a remarkably consistent civic sense. In 1915 Piacentini was in San Francisco overseeing his pavilion at the Panama-Pacific Exhibition. On the way back across the United States he saw Chicago, Buffalo, New York City, and Washington, D.C. He acknowledged, as Gruppo 7 would, the marked national inflections of the modern movement and

6.10 Marcello Piacentini, Banca d'Italia at Piazza del Parlamento, Rome, 1916–18
6.11 Marcello Piacentini, apartment house with architectural studio on Lungotevere Tor di Nona, Rome, 1930–32

already in 1921 recognized what he perceived as a pervasive return to classical order: "smooth wall surfaces are coming back, an elementary quality of composition. . . . Everywhere a rationality of structure is coming back, that aristocratic research toward a refinement in proportion, in color, in a truth to material, in details and above all in the perfection of execution."

This was not just lip service to the rise of modernism: his design for an apartment house on the Lungotevere Tor di Nona attests to his recognition of modernism's meaning. Piacentini lived and worked in this building. Not all the features developed in the name of the modern movement abroad, however, might be suited to Italy's climate and customs, he sensed. Piacentini's concerns anticipated issues that five years later would be the Italian Rationalists' battle cry. What surprised and angered Piacentini, then, was the Rationalists' presumption of exclusivity. He doubted the usefulness of a structural puritanism that would deny creative intuition in the design process for facile typological formulas. He thought their 1928 exhibition lacked the richness of contextual dialog. In a characteristically constructive manner, Piacentini reviewed that show and suggested that the young Rationalists take up programs conditioned by realistic circumstances at precise locations.

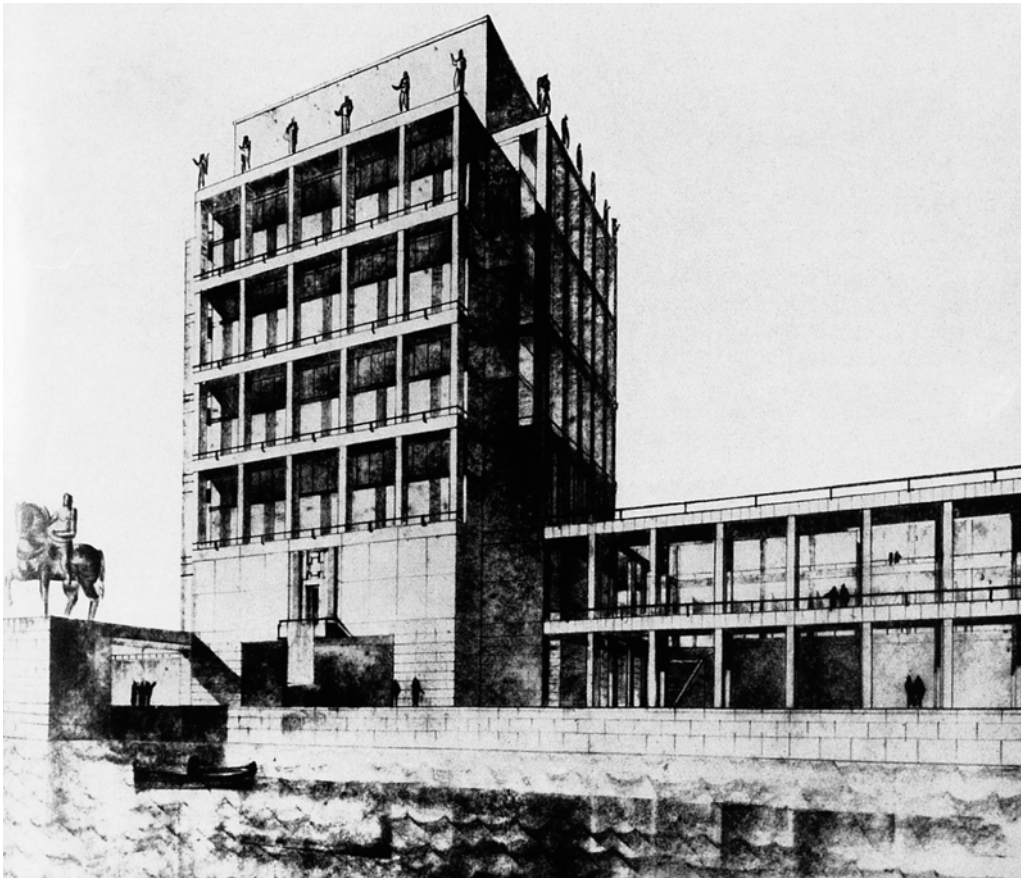
Given his long and broad experience, what Piacentini wanted most for Italian architecture was to foster a productive professional climate that might unite the scattered energies of its many contributors. Piacentini had both the position and the disposition to realize this long-sought goal. Personally, he built a great deal, but he was best known for his work in guiding enormous collaborative projects. Piacentini was the great mediator between dangerously divisive polemical tendencies. The extremists, be they die-hard traditionalists or utopian modernists, were excluded by Piacentini because they denied the very idea of compromise. In a January 1932 editorial in *Architettura e arti decorative*, Piacentini declared, "We all want a most modern architecture consonant to the political, social and civil aspirations of today's Italy, consonant to its sentiments, tastes, the patterns of contemporary lifestyle, consonant to the altered means of production and new materials. The artistic expressions of

this will are diverse. There are those more courageous and intolerant who feel compelled toward more abstract and universal forms, others more reflective and nostalgic who nurture a new bloom from the old branches. It would be a disaster if everyone were to conceive in the same manner!" The pages of his magazine over the following ten years are proof of his pluralist, moderate policy.

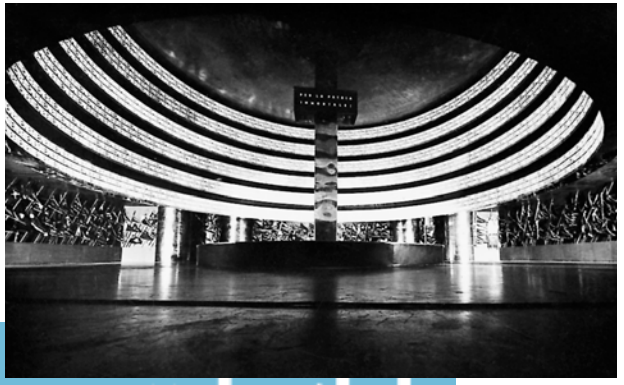
Piacentini won the affiliation of Pagano when the latter took over *Casabella* and proposed in his inaugural editorial the same call to a stabilizing campaign. Pagano recognized Piacentini, in the context of some of the nation's most arduous competitions, as the only moderator "who has the authority through the testimony of his built work and through his defined and courageous artistic responsibility" to lead contemporary architecture to its goals. Pagano and Piacentini collaborated on the design for the Italian pavilion at the universal exposition in Paris of 1937, just upstream from the famously aggressive German and Russian pavilions. The Italian pavilion was, in contrast, a placid compromise between modernism and classicism. Piacentini, the benevolent dictator of Italian architecture for over two decades, assured its success with his rare combination of political acumen and artistic sensitivity.

Through Piacentini's agency, the avant-garde movement was given its first big break: the invitation to design the face of Fascism at the Mostra della Rivoluzione Fascista (Exhibition of the Fascist Revolution). Dino Alfieri, an energetic cultural promoter from Milan, had conceived with Luigi Freddi the idea of a documentary show on the Fascist movement. This was to be an exhibition, Alfieri explained, "not in the usual sense but a reckoning of the activities and of the strengths of the first ten years of the Regime out of which implicitly the program for the future will grow." Party officials picked up the proposal and scheduled it for the Palazzo delle Esposizioni. Even Mussolini encouraged that they make it "something of today, very modern and bold—*modernissima*—without gloomy reminders of decorative styles of the past." Memorabilia were gathered from the early Fascist squads, letters, photographs, clippings, posters, banners, and trophies, all arranged in cases.

Designers were called in to render the exhibition installation in palpitating theatrical terms, framing Fascism as a collective myth.



6.12 Marcello Piacentini with Giuseppe Pagano and Cesare Valle, Italian Pavilion, Universal Exposition, Paris, 1937



6.13 Adalberto Libera and Mario de Renzi, Mostra della Rivoluzione Fascista, Palazzo delle Esposizioni, Rome, 1932
6.14 Giuseppe Terragni, Mostra della Rivoluzione Fascista, Room "O," Rome, 1932
6.15 Adalberto Libera and Mario de Renzi, Mostra della Rivoluzione Fascista, sacrarium, Rome, 1932

Piacentini invited radical artists, including several now in the professional margins, to participate in the collaborative undertaking: the Futurists Depero, Prampolini, and Marchi; Achille Funi and Mario Sironi from the Nuove Tendenze group; and the Rationalists Marcello Nizzoli and Giuseppe Terragni. Piacentini, who remained conspicuously absent as a contributing designer, appointed Adalberto Libera, the former MIAR ringleader, to the key position of architect of the central elements. Libera, along with Mario de Renzi, designed the exterior. The entire Palazzo delle Esposizioni—Piacentini's father's masterpiece—was obscured, if only temporarily, behind a 30-meter-high square box painted blood red, the same color Marchi had suggested the year before for the painting of the Palazzo di Giustizia. Four metal-sheathed pylons with enormous hatchet heads stood in front, effectively reiterating in abstract forms the triumphal arch hidden behind. These fasces, along with the marquee letters and (Roman) numerals, were a particularly clever fusion of ancient symbols and industrial forms. Steamship smokestacks and airplane wings merged modernity and the myth of *Romanità*. Inside, artists transformed each room with the widest range of techniques. Three-dimensional constructions built out from the walls and ceilings with murals, sculptures, collages, and photomontages created an unpredictable progression of vibrant spaces that expressed, according to a party mouthpiece, "our epoch yearning and dynamic, cut loose and feverish."

A room designed by Giuseppe Terragni extolled the Fascist March on Rome by sweeping the visitor up in a great saluting tide—a masterpiece of agitation propaganda. The enervating violence culminated in serene solemnity in the last room, the *sacrario* (sanctuary), designed by Libera. This was a shrine to the martyrs in the cause of Fascism. Pennants of Fascist squads were set in a cylindrical space and bathed in subdued blue light. From a blood-red dais, a shining metal cross rose up into a mystic space ringed by luminous letters, a thousand points of light reading *Presente Presente Presente*—the youthful roll call to the anthem *Giovinezza*, which emanated from hidden speakers all around. Self-sacrifice was the theme in this altar to the religion of the Fascist state.

The Mostra della Rivoluzione Fascista opened with ritualistic resonance on 28 October 1932. Reactions were on all counts enthusiastic. Visitors flocked like pilgrims from all parts of the country, some on their first trip to the capital, to be photographed in rooms of their choice or to participate in the revolving honor guard under the gigantic fasces. The exhibition was extended for two years and coincided with a holy year in 1934, reinforcing the Mostra's parallel sacred nature. The show was no less a success among critics. Persico lauded "a precise indication of the proud will of the national government for renewal: an example that could not be more convincing and important of the possibilities open for the new generations . . . an ensemble of work adapted to the new spirit." Papini praised "a decisive modernity in spirit and in form." The Mostra was a triumph for the avant-garde, especially the Rationalists, who accepted the conditions of the political program.

Throughout the 1930s there was always room for the modern design. The Triennale, transferred in 1933 from Monza to a permanent pavilion in Milan built by Muzio, remained an influential domain for the development of a viable language of Rationalist architecture. The dynamic relationship between ancient symbolism and modern form was pursued in numerous installations at successive triennials, such as the 1936 *sala d'onore* designed by Edoardo Persico, Marcello Nizzoli, and Giancarlo Palanti with the sculptor Lucio Fontana. Although ephemeral, these installations were significant in their propagation of images that reconciled the ancient and the modern.

Piacentini, true to his word, engineered real opportunities for the architects of the avant-garde to build. In 1932 in the pages of the syndicate magazine, Piacentini announced the government's decision to build a new campus for the University of Rome. For the campus's sixteen original structures he selected a remarkable list of collaborators: Gio Ponti, lately of Muzio's circle in Milan; Giuseppe Pagano, now editing *Casabella*; Gaetano Minnucci, Libera's second in command at MIAR; Giovanni Michelucci from Florence; Roman Rationalists Capponi and Aschieri; Gaetano Rapisardi, who had worked with Piacentini on a League of Nations

6.16 Marcello Piacentini and others, Città Universitaria, Rome, 1932–35

competition project; and Arnaldo Foschini, who in this company seemed the arch conservative. Extremists, however, at both ends were excluded; they had no place in Piacentini's collaborative strategy. Piacentini sent all his selected architects on a quick tour of Greece (Minnucci, as head of a technical services office, was sent to tour Europe's university facilities) and organized their contributions in an overall plan of subtle authority.

A statue of Minerva designed by Arturo Martini appears repeatedly in Piacentini's initial drawings as a fulcrum, like Marcus Aurelius in Michelangelo's Piazza del Campidoglio. An avenue leads from the entrance down to a lateral area with the same dimensions as Piazza Navona. Within this axial arrangement, various elements could be easily subsumed, and Piacentini placed the individual designers in his plan according to their strengths. Piacentini himself designed the central administration building, a severe temple with a colossal tripartite porch of square piers without bases or capitals. Ponti and Michelucci were given the math and geology buildings respectively. They carry travertine facades that face the piazza space with classical dignity. Behind Ponti's taut facade, he broke away with a composition of delightful but no less functional curved and oblique volumes that contain the classroom auditoriums. Pagano and Aschieri were paired up in technically more challenging designs for the physics and chemistry labs, and so on.

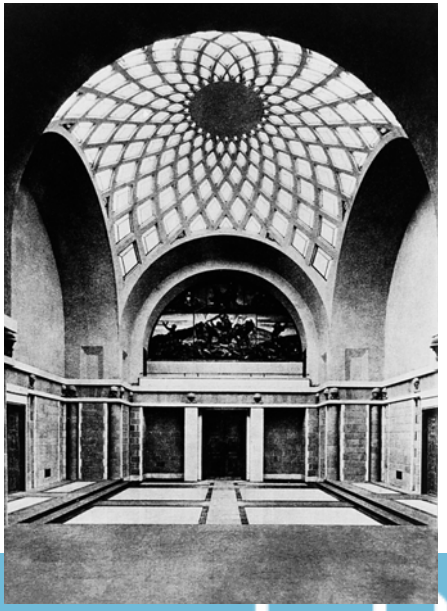
Piacentini's mediation did not consist merely of appropriate place settings at the banquet of Fascist public building commissions; his management was a profound act of bringing together a disparate group of impeccably qualified professionals in a real forum—a construction site—where, as he put it, the modern and the Mediterranean could meet. Of course, the inevitable compromises and approximations in their choral language roused critics at both ends of the spectrum, but Piacentini defended his moderate style with confidence and charm. The Città Universitaria was inaugurated in 1935. The Fascist authorities and the disciplined, black-shirted faculty gathered in the great hall of the Rettorato beneath freshly painted frescoes by Mario Sironi that express the aura of eternal values, of cultural conservatism and social control.

FASCIST PARTY ARCHITECTURE: *CASA DEL FASCIO*

The hierarchical order of the university reflects the nature of Fascist governance. To combat bourgeois individualism, the PNF contrived a militarization of society from national economic policies at the top down to family management programs. A new national chamber of commerce controlled the country's production through syndicates. To regulate Italian society outside the workplace, entirely original structures were devised: institutes for adult recreation after work and for maternity and infant care; paramilitary scout clubs for children; and for the aged, the war veterans' associations. These social groups gave Italians for the first time a clear sense of identity outside the traditional family and direct participation in the hierarchies of the state. Each new "family" therefore had its "house," or *casa*.

The Casa dei Mutilati is an example. The association of handicapped war veterans was founded independently in 1917. Piacentini was commissioned in 1924 to build the headquarters in Rome. All the collaborating artists, even the building contractor, qualified as wounded veterans, or *mutilati*. Construction was finished in 1928, and the building was enlarged again in 1936. On a triangular riverside site, directly opposite Piacentini's home and studio, the Casa Madre dei Mutilati asserts its ground between the Palazzo di Giustizia and the Castel Sant'Angelo. The powerful sense of compression gives the feeling of a fortress, appealing to the ideal of the veterans as valiant warriors. Mural decorations throughout the building lend ecclesiastical airs to this secular institution. The veterans' inner sanctum is flooded in light that enters through diamond-shaped perforations in a concrete vault with spiraling ribs. Piacentini again impresses with his capacity to wed essentially historicist architectural expression to modern structural opportunities.

The new order of Fascist social discipline required many new types of "houses," each supported by specialized technical research, such as Minnucci's report for the university. The B.B.P.R. group, a team of four young Rationalists who dressed in white lab coats and called themselves by the initials of their last names, applied scientific research methods to develop modular solutions for all sorts of new



6.17 and 6.18 Marcello Piacentini, Casa Madre dei Mutilati e Invalidi di Guerra, Rome, 1924–28; extension 1934–36

functional tasks. The most significant and most problematic of these buildings was the Casa del Fascio, the familiar name for the PNF headquarters in every Italian municipality. After Mussolini's coup of 1926, the offices of regional party coordinators replaced town halls as the focus of civic life. PNF meeting rooms, assembly areas, and the offices of administrative assistance and education were located in a Casa del Fascio. A sanctuary to Fascist martyrs was also required. More importantly, the Casa del Fascio in many villages supplied the only newspapers, projected the only films, had the only radio in town brought out on the balcony to broadcast Mussolini's speeches from Palazzo Venezia. The technologically advanced Casa del Fascio was for many Italians their link to the outside world—more specifically, to Rome. Therefore, it was a prime instrument of political and social formation, for disseminating the values of the new regime.

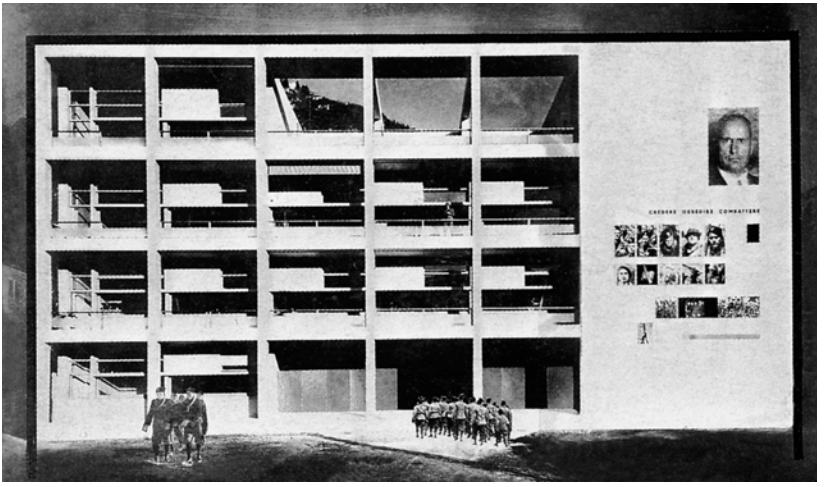
Como's PNF coordinator undertook the construction of his local Casa del Fascio in 1932. A site directly behind the cathedral was donated by the city under the auspices of Mayor Attilio Terragni, and his brother Giuseppe secured the design commission. The architect felt eminently prepared, because of his impassioned faith in Fascism, to interpret the regime's spirit as he had done two months earlier at the Mostra in Rome. Now he could work toward a permanent, durable form, "a House, a School, a Temple" to Fascism, he said. The project's drawings were checked and approved by PNF officials in December 1932 and were published by Bardi in the July 1933 issue of *Quadrante*.

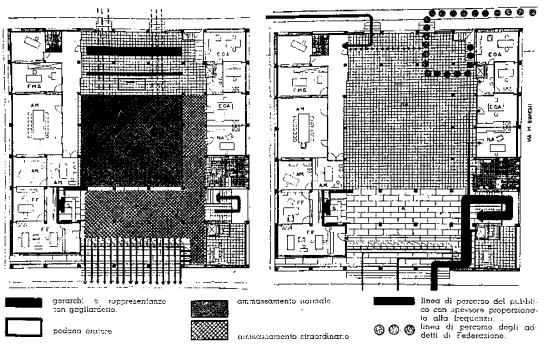
The plot for the Casa del Fascio allowed for a perfectly square plan from which Terragni developed a double square elevation, similar to a Renaissance palace. Its double-height central atrium is surrounded by four floors of offices looking outward through four different facades composed as much in relation to the diverse interior appointments as to surrounding urban contexts and exposures. The piazza facade features the basic elements of open loggia and solid panel, perhaps a residual tower form of medieval town halls. Terragni insisted on the use of uniform marble surfaces for a traditional look of durability and elegance. Mario Labò was the first to dub this Terragni's "Renaissance Rationalism."

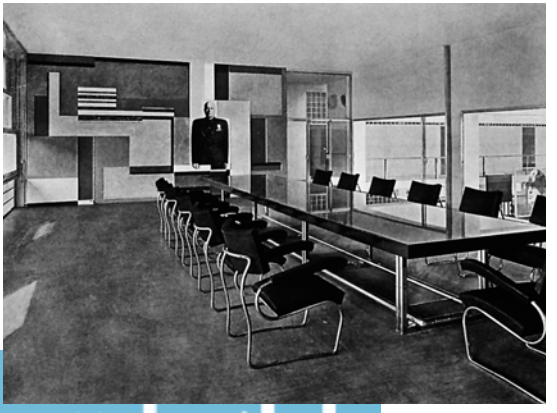
The marble sheaths but does not obscure the building's structure. The loggia reveals a skeletal structure like those defined by Le Corbusier, but here even the solid panels are load bearing. Glass held a nearly mystical power with Terragni. Large window walls, special illuminating panels, and glass doors open the building's interiors to the piazza and the atrium inside. Transparency is a metaphor for the Casa del Fascio that Terragni proudly attributes to Mussolini. " 'Fascism is a glass house,' the Duce declares; and the sense of the phrase translated [into architectural form] guides and indicates the qualities of organic clarity and honesty in the construction." This *casa* has no private zones, "no hindrance, no barrier, no obstacle between the political leaders and the people," Terragni explained. A careful analysis of PNF statutes and its rhetoric of order generated the idea of openness in Terragni's structure and plan. Terragni's diagrams of spatial organization, distribution, and public space explain how the corridors of power that characterized the old ministries of Rome were abolished for an "anti-bureaucratic" building.

Terragni designed the Casa del Fascio down to the last detail, including the tubular steel office armchairs, but hired a collaborator for the interior decorations, a local painter named Mario Radice. The second-floor conference room was articulated by Radice in abstract shifting planes of color with an overscaled photograph of Mussolini at vigilant attention dominating the space.

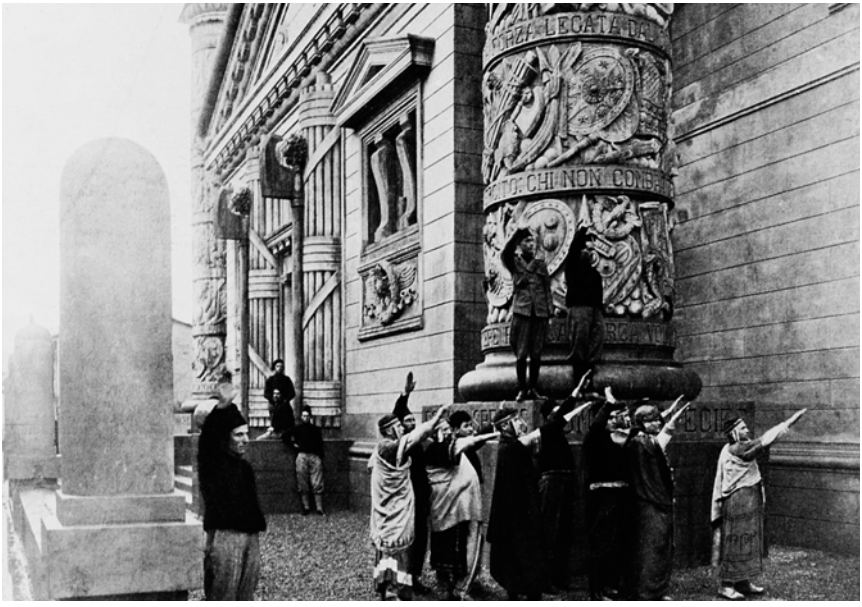
Exterior decorations for the large panel on the piazza were assigned to Marcello Nizzoli, a collaborator at the Mostra della Rivoluzione Fascista. Here too, Terragni suggested the use of gigantic photographs—easily understood images for enhancing the political consciousness of the viewer as dictated in the Fascist manifesto on mural painting. *Credere Obedire Combattere* reads the slogan under Mussolini, whose enormous presence shapes the lives of the citizens, all in uniform, who believe, obey, and fight in the new martial social order. The designer's photomontage was presented to the authorities in 1936, but objections arose that the facade's decoration did not make clear the representative function of the building, and after many delays and cost overruns, the scheme was cancelled altogether. Terrgani's combative insistence on Nizzoli's revolutionary proposal with PNF officials attests







6.19–6.21 Giuseppe Terragni, Casa del Fascio, Como, 1932–37. Photomontage by Marcello Nizzoli; "Programmi dei percorsi"; conference room interior decorations by Mario Radice



6.22 Adolfo Coppedè, Casa del Fascio, Lastra a Signa near Florence, 1928
6.23 Marcello Piacentini, Monumento alla Vittoria, Bolzano, 1928

to a real vitality at the heart of Fascist art-making. The party officials were conscious from the beginning of Terragni's architectural persona, and the regime had no problem with his modernist aesthetics; indeed, in 1941 PNF officials in Rome collected images of the Como Casa del Fascio for a compilation of building type exemplars.

Terragni's goal was to translate the party order into architectural form. The result balanced the building's functional requirements and its celebratory role "in the exaltation of political facts, military victories or revolutionary conquests. . . . The concept that has engaged me has been to match two aspects of a new order: art and politics." He continued, "The style, the tendency, the architectural impression will be the natural consequence in the spiritual translation of these social and political premises. We [Rationalists], who fight with intermittent fortune but with undaunted faith and courage for an architecture of the State, have now the great satisfaction to be able to carry out a propaganda and proclamation of the new architecture with built works for the regime." The Rationalists, however, were not successful at dictating—or having their aesthetic dictated—as the architectural aesthetic of the state. The bulk of the examples of the *casa del fascio* building type do not show Rationalist affinities.

At the other end of the aesthetic spectrum, Adolfo Coppedè's Casa del Fascio at Lastra a Signa, outside Florence, characterizes a dominant tendency in Fascist arts: the fetishistic use of emblems. Upon a standard Renaissance-style architecture, Coppedè assembled out-scaled fasces, ancient-style reliefs, and two Trajanic columns with Fascist slogans. Ancient emblems were thus transformed into potent political symbols that double as architectonic elements, like Depero's typographical architecture. Muzio, Libera, Andreani, and Piacentini all designed using supersized fasces, though in varying styles. Piacentini's Monumento alla Vittoria for Bolzano, also of 1928, replaced the columns of a traditional triumphal arch with colossal fasces. If the design was somewhat more modern than Coppedè's, the intention was essentially the same. The Casa del Fascio was the locus for party rallies. In Rome, they were held under Mussolini's balcony at Palazzo Venezia before the Altare della Patria, and modern designers contributed with ephemeral constructions, banners, special illumination, choreography, music, and

radical photography. Under Dino Alfieri, Mussolini's minister of popular culture, cinema also became an instrument of propaganda, broadcasting Mussolini's speech rallies in dynamic newsreels.

MUSSOLINI MADE THE TRAINS RUN ON TIME

The oscillation between abstract Rationalism and emblematic figuration that characterizes so much of the regime's architecture is most evident in its train stations. When the Ministry of Communications was created in 1925, Mussolini assigned to his son-in-law's father, Costantino Ciano, an ambitious program of modernizing the nation's train stations, ports, and post offices. The station at Florence, located behind the church of Santa Maria Novella, was targeted for upgrading with plans for a layout similar to Milan's. Ciano first assigned the project to the staff designer, Angiolo Mazzoni, a former associate of Piacentini, but Mazzoni's historicist designs were ultimately rejected, and Ciano asked the architects' syndicate to open a national design competition in 1932. By this time, Mazzoni had already begun construction of the auxiliary elements of the station, such as the long trackside platform canopies in reinforced concrete that replaced the traditional iron and glass vault. He also completed the power plant, a coal-burning installation painted dark red with spiral stairs and catwalks on the stacks that derived from Russian Constructivism.

With a deadline of three months, strict cost limitations, and the implicit exclusion of a historicist solution, the competition's conditions opened the door to Rationalist entries. Although the jury was made up entirely of conservative members of the Accademia d'Italia, the evident modernity of the building type led them to select "a commodious, technically perfect station, but not a monumental one: the ideal station for Florence will be less apparent, it will do everything not to appear to be a train station." The winning project was by the Gruppo Toscano, led by Giovanni Michelucci, a member of Piacentini's university campus team with a classical background but modernist sympathies.

6.24 Giovanni Michelucci and the Gruppo Toscano, Stazione Santa Maria Novella, Florence, 1933–35

The Stazione Santa Maria Novella is a long, low horizontal structure with slender cantilevered canopies. Three abstract fasces mark the facade. A glazed area spills over the ticketing hall and *porte-cochère*, counterbalancing the horizontality while recalling the vaults of traditional stations. The spaces within are open and efficient. All references to history and place seem to have been sacrificed to the modern aesthetic, except the materials chosen, a muddy orange *pietra forte* outside and green and white marble inside—the very materials used on the adjacent church of Santa Maria Novella. The station's flat horizontality and oblique orientation set the building in discreet counterpoint to the traditional city, while its simplicity and clarity retain all of its inherent virtues.

Predictably for Florence, there was mayhem in the press over the design. The designers were accused of plagiarizing foreigners; Brasini thought it lacked all artistry. The ruckus would have dragged on and possibly even derailed the project if Mussolini himself had not stepped in to make one of his most definitive statements about contemporary art. The Duce invited the Gruppo Toscano to the Palazzo Venezia in June 1934 to congratulate them on their fight for a modern Italian architecture. "Go and tell the young architects coming out of the architectural schools to don my uniform: 'Do not be afraid to be brave'. . . I do not want to see *case del Balilla* [junior sports groups] or *case del fascio* with the architecture of Depretis's day. . . . The Station of Florence is beautiful, and the Italian people *will* like the Station of Florence." It seemed like a victory for the Rationalists. In the first major train station since Milan, they had overthrown the tradition of colossal Piranesian grandeur with a machine of sleek functionalism.

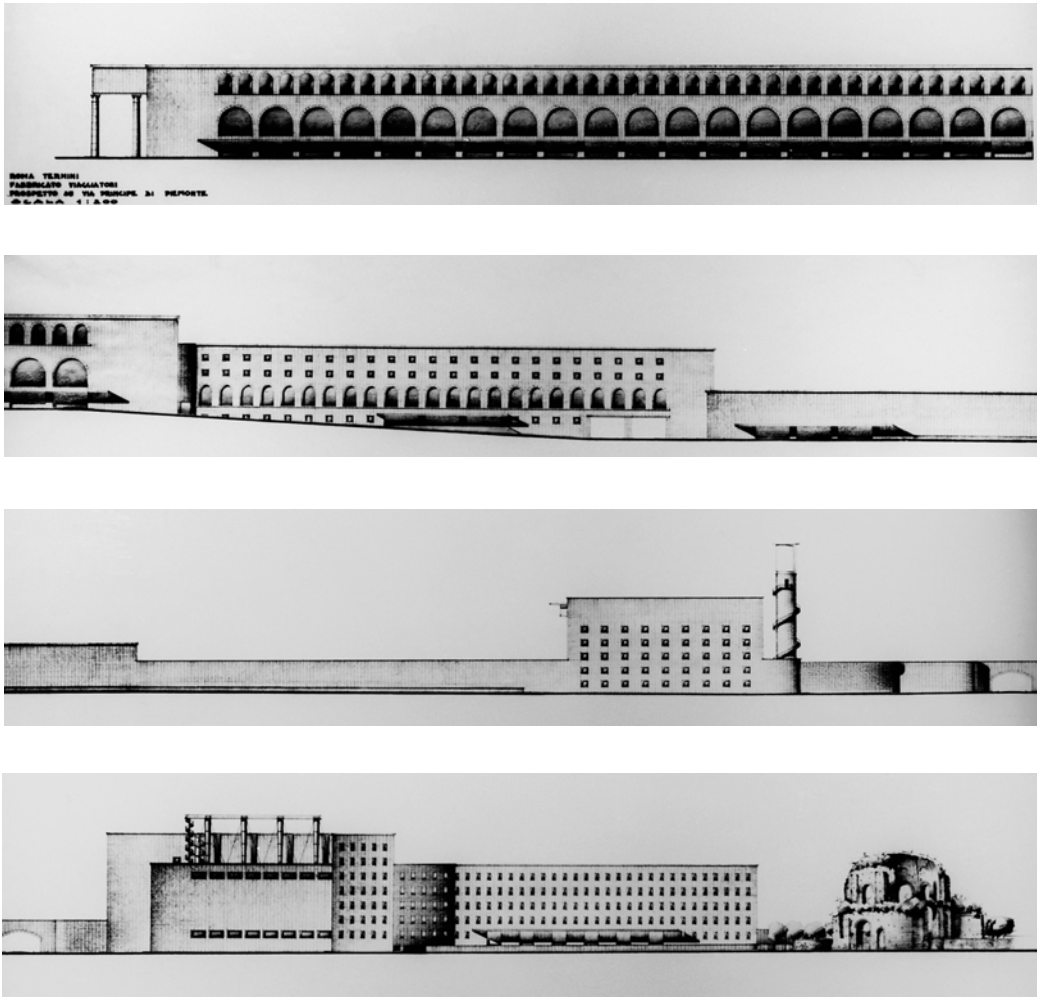
Mussolini's support of modernist architecture can be explained as a means of illustrating the regime's policy of technical modernization for the country. As seen at the Mostra della Rivoluzione Fascista, a progressive, revolutionary architecture was accepted as an appropriate idiom for Fascism. If one believes, on the other hand, that Mussolini approved the Florence train station plans thanks to his mistress Margherita Sarfatti, who, playing to the Duce's more literal-minded idea of architecture, noted that from the air it

looked like an enormous fasces, the seriousness of the Rationalists' victory falters. Mazzoni, meanwhile, piqued at being passed over, joined the Futurists and signed Marinetti's latest manifesto on "aerial architecture." His original power plant, which stands in sharp contrast to Michelucci's cool train station, became an icon claimed by that movement.

Mazzoni, in any case, had bigger stations to design, in particular the Stazione Termini in Rome. After the jubilee year of 1925, it was obvious that Salvatore Bianchi's old station had become insufficient for the capital. Instead of a new terminal outside the city, however, the ministry chose to adapt or replace the old station where it stood. In 1937, Mazzoni drew up several alternative design suggestions, some unabashedly replicating the glass cascade of the Florence station, others in a stripped classical style. The essential plan of separate flanking wings for arrivals to the east and departures to the west was retained, here connected by a galleria on the piazza.

The final drawings for the new Stazione Termini were ready in 1938. A model of the station project was sent to the New York World's Fair of 1939, and 80 percent of this design was constructed within the next four years. The memory of imperial Rome is echoed in the austere travertine arcade of the flanking wings. A row of structures follow the tracks along the Esquiline Hill, like the aqueducts the railway line passes. The blocks grow more bare and abstract down to the station's power plant and water silos. Here, Mazzoni mediates the modern functions and a classical spirit as Piacentini taught him. The effect at such a scale is hypnotic. The piazza facade was to have been the more monumental and classical element of the station, supported by Piacentini as a magnificent gateway to the city. The design for a colossal colonnade was approved, but fuss over the level of abstraction on its Corinthian capitals delayed the project until the outbreak of World War II interrupted construction.

Mazzoni also built the stations of Siena, Trento, Montecattini, Venice, Reggio Emilia, and Reggio Calabria, each functional and elegant in turn. The Stazione Centrale for Trieste was to have been his most impressive, with spartan brick vaulting over the train tracks,

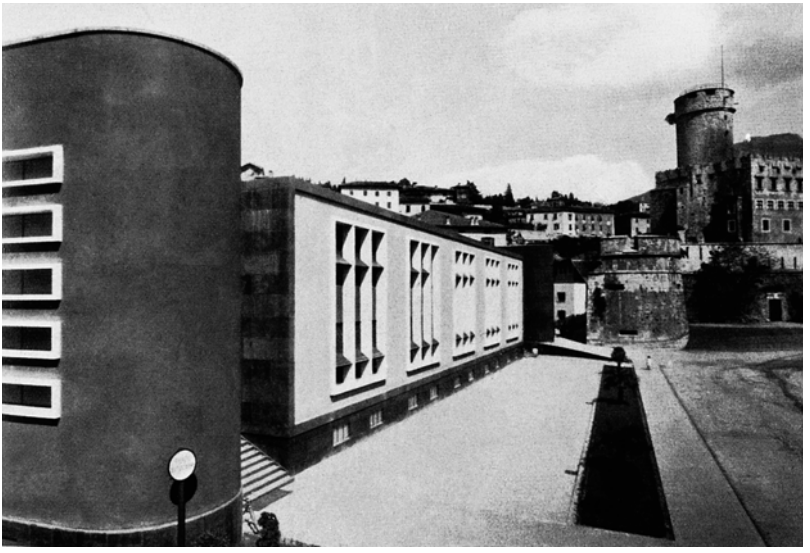


6.25 Angiolo Mazzoni, Stazione Termini, Rome, 1938–42

but it too was left unfinished. Piacentini described him as an "admirable figure," one who carried the weight of bureaucratic supervision yet always managed to produce something artistically worthy. The lack of pattern in his aesthetic solutions reveals the fluctuating, pluralistic nature of official architecture under Fascism.

Mazzoni also designed the post offices of Palermo, Agrigento, Ferrara, Venice, Trento, and Ostia. The new post office of central Naples went in competition to Giuseppe Vaccaro, and three new ones in Rome to former MIAR members: Adalberto Libera at Via Marmorata, Mario Ridolfi at Piazza Bologna, and Giuseppe Samonà at Via La Spezia.

Adalberto Libera's progress also reflects the trend of mediation between modernity and tradition under Fascist rule. After MIAR disbanded, Libera's first major built work was the result of a competition for an elementary school in Trento. The functional rationalism of its structural elements is conditioned by the historical nature of the site. Schools, as a building type, were the Rationalists' forte, but the site beneath the city's bastions begged a "simple but substantial sympathy of volumes and colors between old and new," according to an article in *Architettura e arti decorative*. Libera responded with earth-colored stucco on cylindrical stair towers and a loosely symmetrical plan that accommodated the irregular plot. This conciliatory attitude courses through all the best architecture of the 1930s and is a significant factor in the shaping of modernism in Italy.



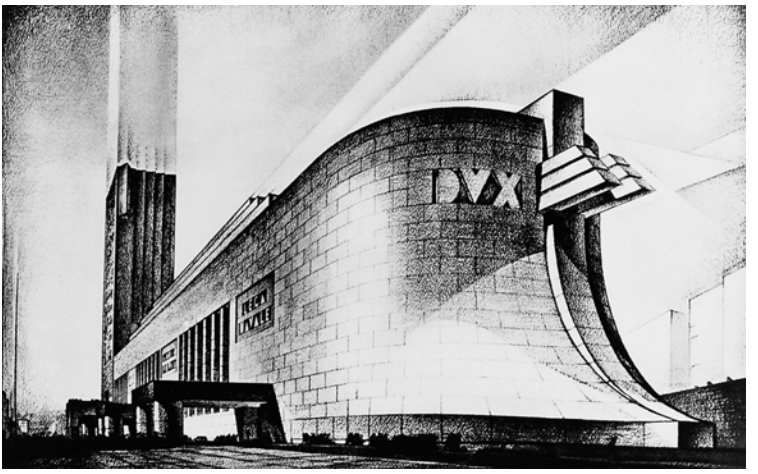
6.26 Angiolo Mazzoni, Stazione Termini, Rome, 1938–42
6.27 Adalberto Libera, Scuola elementare at Piazza Raffaello Sanzio, Trento, 1932

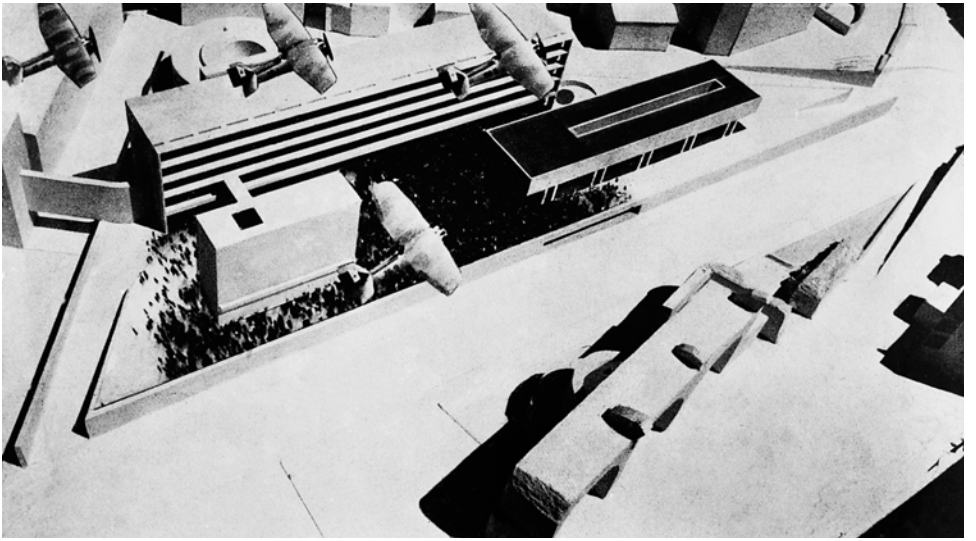
THE COMPETITIONS FOR THE PALAZZO DEL LITTORIO

One of the most significant of the many architectural competitions during the Fascist era was for the Palazzo del Littorio in Rome, a project that required a colossal program both physically and symbolically. With meeting halls and rally areas, the Palazzo was a super *casa del fascio*, uniting all PNF offices, providing a permanent installation of the Mostra della Rivoluzione Fascista, and housing the nation's Fascist martyrs' sanctuary. "The Great Edifice will need to be of a permanent and universal character, worthy of transmitting to posterity the Mussolini epoch," the competition program of 1933 suggested. Piacentini commented that what was needed was an architectural conception "correspondent to the grandeur and the power of Fascism in the renewal of the national life within the continuity of the Roman tradition." Beneath the Fascist rhetoric, this building program resembled projects for monuments in Rome throughout its history: it was to be something that worked upon the soul, exalted historical memory, and shaped future generations.

The site selected for the Palazzo del Littorio ranks second only to the Monument to Vittorio Emanuele II for its potency: a triangular plot stretching 300 meters from Via Cavour to the Colosseum, facing the Basilica of Constantine and the remains of the Roman Forum. The Velian Hill there was to be cleared and leveled. The program's site plan, prepared by Piacentini, stipulated an unobstructed view down the new boulevard to the Colosseum from Piazza Venezia, a massing that would harmonize with the ruins of the Basilica, and an open area large enough for mass rallies. The ruins of the ancient imperial forums would also play a decisive role in the project.

The participants had to be Italian, and their projects were reviewed by a jury of top PNF officials and the architects of the Accademia—Piacentini, Bazzani, and Brasini. The numerous entries—more than a hundred were submitted—varied widely in interpretations of Fascism between the extremes of literal figuration and abstract Rationalism. Examples of the former were the gigantic assemblage of Adolfo Coppedè, the hyper-historicist *Romanità* of





6.28 Mario Palanti, Palazzo del Littorio, competition entry, Rome, 1934
6.29 B.B.P.R. with Luigi Figini, Gino Pollini, and Arturo Danusso, Palazzo del Littorio, competition entry, Rome, 1934

Ulisse Stacchini, and the ship-of-state metaphor of Mario Palanti. On the other hand, lucid standardized structures arranged with machine-like precision characterized a project presented by the B.B.P.R. group. Libera, Ridolfi, Samonà, Vaccaro, Virgilio Marchi, and Gio Ponti participated with projects that juggled classical emblems and Rationalist structure.

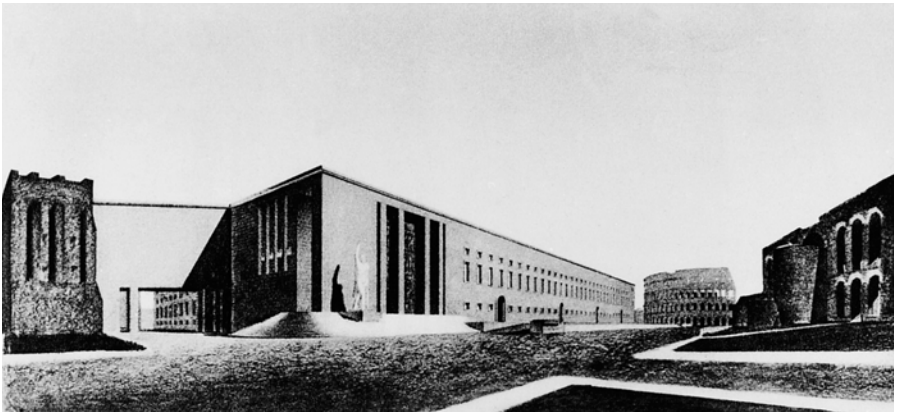
Terragni, in collaboration with six other designers (including Mario Sironi and Marcello Nizzoli), presented a scheme that convincingly united Fascist ideological and Rationalist formal concerns. The team articulated the three basic functional elements of the program—office block, Mostra galleries, and *arengario* (rally platform)—and aligned them with the ancient remains. An 80-meter curved plane of purple porphyry, suspended from granite piers and metal trusses, served as the dramatic backdrop for the Duce's speaking platform, which was thrust forward above the crowds. "Everyone will be able to see Him," reads Terragni's report. "He is like a God, outlined against the sky, above Him there is no one. The entire facade glorifies His power, His genius, standing alone, high above, surrounded by light, He will be visible from all sides of the great boulevard which is the heart of Rome, the pulse of the world, from Piazza Venezia to the arches of the Colosseum, the Duce will stand before adoring multitudes; He will belong to everyone, He will be one with everyone." Piacentini thought that the exceptional structural and expressive means were "cinematic" and wholly modern, while its references to the historic monuments of the site remained purely abstract. The ancient ruins, as Terragni explained, inspired him to a new grandeur fueled by a sense of organic continuity with the culture of ancient Rome. Terragni's more abstract features fared less well among the PNF officials in Rome, who were more conservative than those in Como.

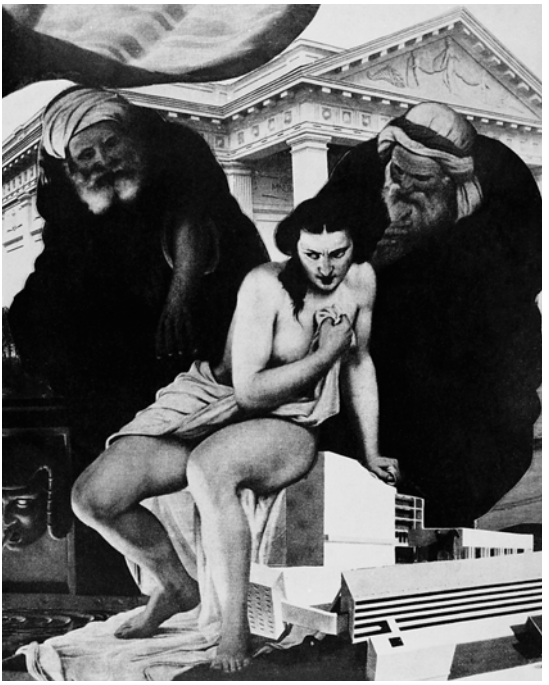
Middle-of-the-road entries predominated, like that of Arnaldo Foschini with colleagues Enrico del Debbio and Vittorio Ballio-Morpurgo. The monuments of the area are evoked in their design's essential horizontal massing and regular rhythms. Its concrete structures clad in traditional travertine represent a careful compromise between old and new. An air of sacredness underlies most of the competition projects. All projects controlled the use of natural light

for rich mystical effects; the Foschini group designed an ancient basilica open to the sky for their evocative sanctuary. All the entries evoke a religious monumentality, with the *arengario* often comparable to a benediction loggia.

Piacentini, the secretary on the jury, drafted an encouraging public notice of the preliminary results of the competition at a moment when it seemed to him that rivals Germany and Russia were showing signs of disorientation in their state architectural patronage. Italian architects seemed in their courageous modernity "more sure and closer to representing our epoch clearly and worthily" in a "maturity of a new Italian architecture." Pagano, who did not participate because the idea of building next to the Colosseum was in his opinion physically and psychologically impossible, predicted, rightly, that the traditionalist "defenders of *Romanità*" would clash with the functional modernists, as Bardi's hilarious photomontage of clashing interests parodied.

A debate in parliament erupted over the very idea of adding a contemporary structure to the highly historic area. "Remember the Florence train station and shame on you!" shouted reactionary parliamentarians. It was on this occasion that Mussolini met the Gruppo Toscano and when he said to them that "every age has its functional architecture." He could see from where he was standing the site for the Palazzo del Littorio, but the site must have proved in the end too difficult, because the finalists of the first competition were eventually invited in 1937 to redevelop their ideas for a different site. Foschini, del Debbio, and Ballio-Morpurgo won the contest, but their design was adapted to yet a third, completely neutral ground far out of town, and the program had been reduced to just the PNF office block. Construction was begun in 1938. Piacentini, nonetheless, maintained the spirit of the original competition by noting the boldness of the final design in contrast to earlier, more belabored buildings of state power, like Calderini's Palazzo di Giustizia, Carbone's Borsa in Genoa, and Stacchini's Stazione in Milan. Unlike the recent developments in architecture in Stalinist Russia and Nazi Germany, the outcome of the Palazzo del Littorio competition did not signal the suppression of modernist thinking in architecture. Terragni, who remained fascinated by the first difficult site, proposed a monument to Dante there that received approval in 1938, but was, however, never begun.





6.30 Enrico del Debbio, Arnaldo Foschini, and Vittorio Ballio-Morpurgo, Palazzo del Littorio, competition entry, Rome, 1934
6.31 Pier Maria Bardi, parody of Palazzo del Littorio competition, 1934. Photomontage

INDUSTRY, EMPIRE, AND AUTARCHY

Building projects of state patronage were by nature less avant-garde than private and industrial initiatives. The B.B.P.R. group and their Rationalist colleagues found crucial support and their first opportunities to build through their association with the Olivetti company. Adriano Olivetti inherited his father's booming typewriter business in 1933 and, like Agnelli at FIAT, reorganized the company according to American models of production. His father instilled in him socialist ideals, and it was from this background that he came to address the disparity between what he understood to be technological progress and anachronistic political structures. It was his reading of Le Corbusier's appeal to industrialists in *Vers une architecture* that spawned Olivetti's architectural laboratory of progressive social order at Ivrea. Le Corbusier himself was invited to the plant in 1934 to discuss his ideas with Olivetti. Like Crespi before him, Olivetti enlisted the latest generation of architects, selecting his design collaborators from the 1933 Milan Triennial, a venue of exhibition design in which the Rationalists excelled. He hired two pioneers of Italian Rationalism, Luigi Figini and Gino Pollini, who had collaborated on the Casa elettrica pavilion. They were founding members of Gruppo 7 and therefore particularly well suited to the vision of a collaborative process that was at the heart of Olivetti's industrial experiment.

Figini and Pollini adapted the original turn-of-the-century plant buildings at Ivrea with a series of successive extensions. In 1934 they built a structure of concrete floor slabs and continuous strip windows and in 1939 a building featuring a full curtain-wall facade. Walls were dissolved and interiors opened to the outside views. In company publications that explicitly expounded the principles of modern architecture, Olivetti lauded Figini and Pollini's "severity and simplicity" as "a reflection of the style of our organization . . . constructed on strictly logical and rational lines." Olivetti believed that with the help of his designers his factory would be an instrument to facilitate a transformation of society and the relationship of individuals to the means of production.

6.32 Luigi Figini and Gino Pollini, *ICO/Ingegnere Camillo Olivetti* factory extension, Ivrea, 1939–40

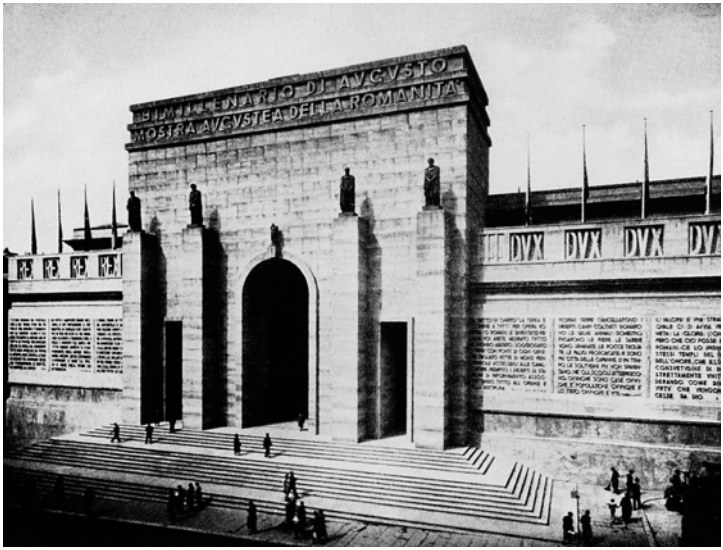
Marcello Nizzoli was hired to coordinate the look of the industrial products, which invested the office environment with logic, efficiency, and beauty. Other specialists in graphic design were hired, including Alexander Schawinsky from the Bauhaus, which had recently been closed by the Nazis. Ernesto Nathan Rogers, witness to all the most crucial moments of Rationalism's rise in Italy, explained the Olivetti experiment in this way: "The industrial aesthetic must imprint itself on every instrument, every expression, in every moment of the activity of production, and affirm itself in the most complete expression in the factory building that the architect must design to human scale, measured to man in pleasant contact with nature because the factory is made for man, not man for the factory."

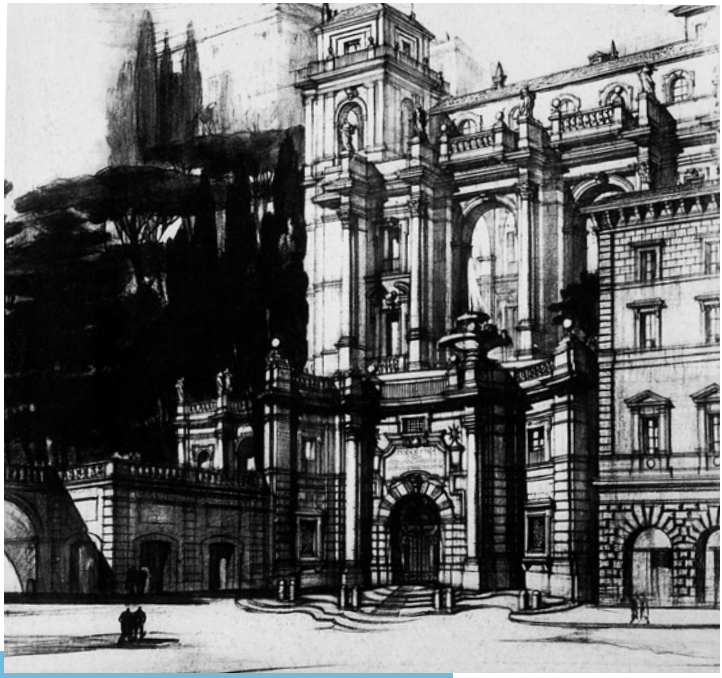
This totality of Olivetti's design conception extended from his factory buildings across all of Ivrea. Olivetti funded the construction of company housing and institutes of social services for his employees. Figini and Pollini built an acclaimed nursery school and worked on a master plan for Ivrea that, like the school, broke down the usual enclosures to link architecture more sensitively to the natural landscape. They developed urban plans of low, open, and asymmetrical blocks. Architecture and urban planning were employed to implement Olivetti's ideal of modern society, aims that were in many ways parallel to the Fascist regime's aspirations, although diametrically opposed in its means. Olivetti's efforts extended to setting up a cross-disciplinary research team headed by the B.B.P.R. group to work up a planning scheme for the entire Val d'Aosta, the secluded mountainous region to the north of Ivrea. Their methods included a unique reliance on a combination of geographical surveys, demographic statistics, the study of potential energy resources, knowledge of regional history, and ethnographic studies of indigenous living habits. The Val d'Aosta regional plan, exhibited in Rome in 1937, presented a utopian image of a self-sustaining society in which the former tensions of city and the countryside were resolved in symbiotic productive unity. Although only the structures directly related to the factory at Ivrea were realized according to Olivetti's plan, the unconditional support he gave to the early Rationalist movement was crucial, especially at this moment in the mid-1930s when two factors arose that threatened to undermine the modern movement in Italy.

In October 1935, Italian troops seized Ethiopia, and the Fascist regime triumphantly proclaimed its ambition to rebuild the ancient Roman empire. The initial revolutionary character of the Fascist movement gave way to a more resolute, conservative trend commensurate with the aspiration of an imperial guiding force. Military aggression in Africa brought on international sanctions that chafed Fascist pride. A policy of national economic self-sufficiency, or autarchy, curtailed all imports. In this political and economic climate, the future of modernist architecture was jeopardized by a trend in public building programs toward more explicit imperial grandeur, and by the depletion of the steel supply upon which so many modern structures relied. Lodovico Belgioioso's eleven-story Feltrinelli office building in Milan of 1935 was the first and last use of steel-frame construction during the years of the regime. Consequently, accentuation of traditional imagery, local materials, even vernacular methods of bearing-wall construction characterized Italian architecture under autarchy.

Imperialism was both mirrored and fueled by an exhibition celebrating the two-thousandth anniversary of the birth of Emperor Augustus: the Mostra Augustea della Romanità, which ran from September 1937 to September 1938. The propagandistic exploit was curated by the archeologist Giulio Quirino Giglioli and consisted of an encyclopedic collection of artifacts of Roman imperialism all in cast copies and scale models. The Palazzo delle Esposizioni was once again completely transformed for the event, this time by Alfredo Scalpelli with what was called "a severe arch of triumph that in very modern lines perpetuates the glorious Classical tradition." No opportunity was lost in drawing parallels between Fascist and ancient achievements, from the projection of population figures to visionary projects in land reclamation, and of course the reconstitution of the empire. In one display on imperial architecture, Piacentini's triumphal arches of Bolzano and Genoa were matched to Emperor Augustus's. Numerous studies on Augustus by black-shirted academics compared the ancient emperor to Mussolini.

The Mostra Augustea affirmed an obvious classical strain that courses through the official works of the regime. But more broadly, the evidence of Roman greatness became ideologically charged by





6.33 Alfredo Scalpelli, Mostra Augustea della Romanità, Palazzo delle Esposizioni, Rome, 1937–38
6.34 Armando Brasini, Palazzo dell'Istituto Nazionale per l'Assicurazioni contro gli Infortuni sul Lavoro/INAIL, Rome, 1928–31

the Fascists as the depository of civilization's universal virtues. Archeology itself became an instrument of Fascist image-making. New magazines like *Roma*, *Capitolium*, and *L'Urbe* presented the latest archeological finds in light of rising nationalism. Mussolini's 1925 admonition to liberate the great Roman monuments—the Pantheon, the Capitoline Hill, the Mausoleum of Augustus—of accretions triggered archeological activity and urban plans that focused exclusively on the mythic power of selected monuments at the expense of minor stratified structures. Hastened by political pressures, Giglioli cleared the area of the ancient imperial forums without following established excavation procedure, while Antonio Muñoz planted the pine trees and bushes that provide the fragmented landscape some shape and shade. The unadorned brick supports used to consolidate the ruins reflect the period's rational aesthetic for functional and formal purity.

The influence of Rome's ancient archeological remains on architecture in these years can be seen in the work of Armando Brasini. His career since his design of the Italian pavilion at the Paris fair of 1925 had flourished with appointments: completion of the Monument to Vittorio Emanuele II, the addition of a museum of the *Risorgimento* behind it, impressive government seats in the southern cities of Foggia and Taranto, and modern interiors for the Palazzo Venezia. In 1931 Brasini designed the offices of the Istituto Nazionale per l'Assicurazioni contro gli Infortuni sul Lavoro, or INAIL, the state agency of workers' disability insurance. He treated the compact site with a remarkably unconventional series of layered facades and rising levels in brick and travertine, each slightly shifted in axis and composition to form a complex dialog with neighboring elements. Rather than a new addition to the city fabric, Brasini's building seems made of accretions or layers pulled back, a giant complex ruin with a strong structural presence but inexplicable internal contradictions.

FASCIST URBANISM

Mussolini's urban vision for modern Rome was inspired by imperial nostalgia: "In five years Rome must appear marvelous to all the peoples of the world, vast, ordered, powerful, as it was in the time of the first empire of Augustus." The need for improving traffic circulation was joined now with more explicit political programs to invest civic space with clear ideological value.

With the Fascist reorganization of the city government under an appointed governor instead of an elected mayor, the state regained uncontested control over the city of Rome for the first time since antiquity. The committee that Mussolini put together in 1930 to develop a new master plan, which included Piacentini and Gustavo Giovannoni, could therefore implement its decisions with supreme efficiency. Their 1931 solution concentrated on making more traffic arteries using Giovannoni's method of "thinning" the urban fabric like weeding a garden to give sufficient light and space to what remained. The plan also specified area zoning by building type: upper-class mansions in the Parioli Hills beyond Villa Borghese, subsidized housing development in Garbatella, and archeological parkland inside and outside the walls. A centralizing configuration first advocated in the 1883 plan now took on greater imperative. The Fascist administration focused on Piazza Venezia. Broad plazas were opened left and right at the Altare della patria, and two more radiating streets were completed: Via del Mare and Via dei Monti. Clearance of "parasitic" buildings around the Capitoline Hill opened the entire area, while the building of Via dei Monti ironically leveled the hill (this street was later renamed Via dell'Impero). Much demolition had already begun even before the legal approval of the plan in 1932. The Vittoriano, the Column of Trajan, and all the imperial monuments in the city center were reframed to take advantage of the greatest scenic possibilities. Mussolini himself yielded the pickax that initiated the clearance.

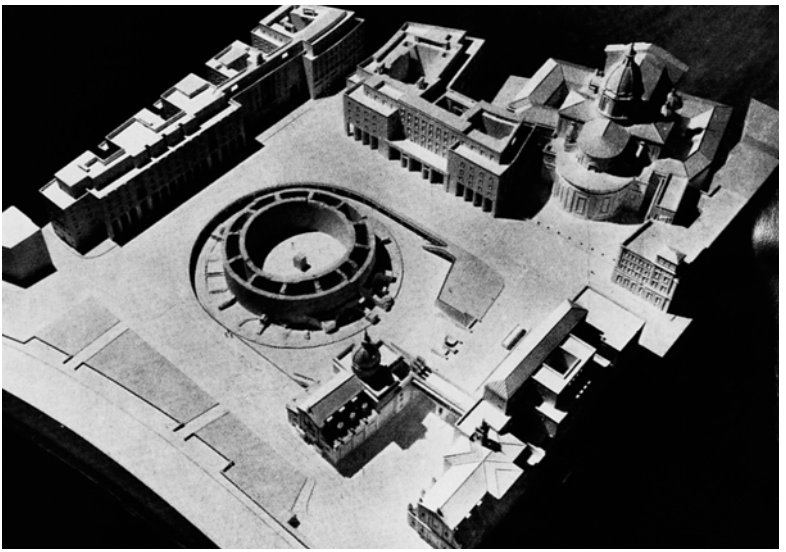
Since Napoleon's time, the ground above the ancient city center had been slowly depleted of activity, and the Fascist government continued to clear it in order to reveal the monuments it considered

6.35 Mussolini undertaking the demolitions for the Via dell'Impero. Cover of *La Domenica del Corriere*, 3 March 1935
6.36 Via dell'Impero, Rome. Annual parade in honor of the foundation of the Empire, 9 May 1937

to be of greatest significance: the Arch of Titus, the Basilica of Constantine, the medieval tower of the Conti family, the headquarters of the Knights of Malta, the ancient Roman Senate House, the Column of Trajan. More than six hundred apartment units were swept away and nearly two thousand persons displaced in a cultural restoration ostensibly about traffic and hygiene, but more truly about ideological scenography. The Via dell'Impero was laid across the cleared area and inaugurated on 28 October 1932, the tenth anniversary of the Fascist March on Rome. The area in front of the Vatican was also cleared in 1936 to open a thoroughfare, the Via della Conciliazione, designed by Attilio Spaccarelli with Marcello Piacentini. Its axial route links the cathedral to the city in visual correspondence to the political reconciliation of church and state established fifty years after the siege of Porta Pia by the Lateran Pact of 1929.

The clearance of the area around the Mausoleum of Augustus represents all the features of Fascist urban operations in Rome. The imperial burial mound was surrounded by accretions, and its circular interior area served successively as a garden, a bullfight ring, a concert hall, and a foundry. The 1931 planning committee studied new traffic routes through the area and vistas to the monument. Mussolini, keen on personal connections to Emperor Augustus, initiated the demolition himself in 1934. Everything was to be cleared from the area, although the churches were protected by the Lateran Pact. The completion of the work was scheduled to coincide with the Augustan celebration for which the imperial shrine would be returned to its original function and symbolic purity.

Excavations at the mausoleum turned up nothing, so the Ara Pacis, the first-century altar of peace erected in honor of Augustus that had long been trapped under a Renaissance palace on the nearby Via del Corso, was finally extracted and recomposed and brought to this new location. The concentration of Augustan artifacts was an entirely artificial choice motivated by the political aims of the regime's self-celebration. Vittorio Ballio-Morpurgo, of the Foschini-del Debbio team contending at the Palazzo del Littorio, was appointed in 1934 to design the new constructions of the gutted



6.37 Vittorio Ballio-Morpurgo, Piazza Augusto Imperatore, Rome, 1934–42
6.38 Marcello Piacentini, Piazza della Vittoria, Brescia, 1932

area. His buildings, in a ponderous classical style, were large enough to house the social security administration, a seminary, and a planned philharmonic hall. The structures were also made tall enough to screen the irregular perimeter of the monumental area and massive enough to match the mausoleum's hulking form. The area was also opened to the river, Mussolini's own idea, by eliminating the wall of buildings along the delimiting Via di Ripetta. There, on a tight wedge of land next to the Lungotevere roadway, a modest concrete and glass structure protected the ancient altar. The Ara Pacis, the social security administration, and the churches form a carefully constructed political demonstration of the piety and charity of government, virtues Mussolini sought to express at the Piazza dell'Augusto Imperatore through historical parallels.

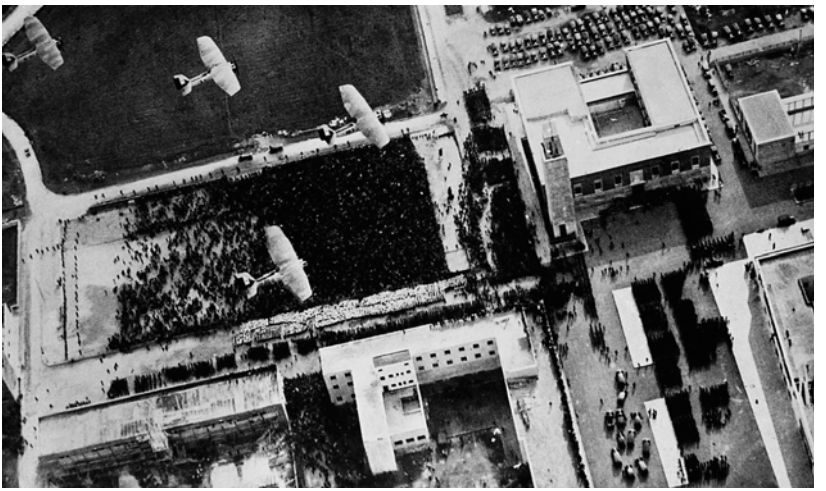
The inner city clearances meant the displacement of more families to the peripheral zones of the 1931 master plan. Indeed, migration to the capital made Rome the fastest growing city in Italy, with population topping one million in 1936, another fact that drew comparison to the Augustan era. The concentration of the urban population, however, ran contrary to the antibourgeois Fascist idea and raised the risks of an uncontrollable urban proletariat. The work of the Istituto Case Popolare (housing authority) was stepped up. By 1930, more than sixty thousand persons, or 7 percent of the population, lived in municipal housing, a percentage second only to Vienna at the time. Under Gustavo Giovannoni's direction, the ICP built up the Garbatella area near San Paolo with a picturesque garden city plan and buildings in a lively "barochetto" style. More isolated countryside developments also sprang up; city residents were forcibly displaced to these *borgate* on the pretext of providing them healthy country air. In reality the *borgate* were squalid, poorly built complexes that lacked even the most basic community necessities and, most pointedly, transportation connections back to the center.

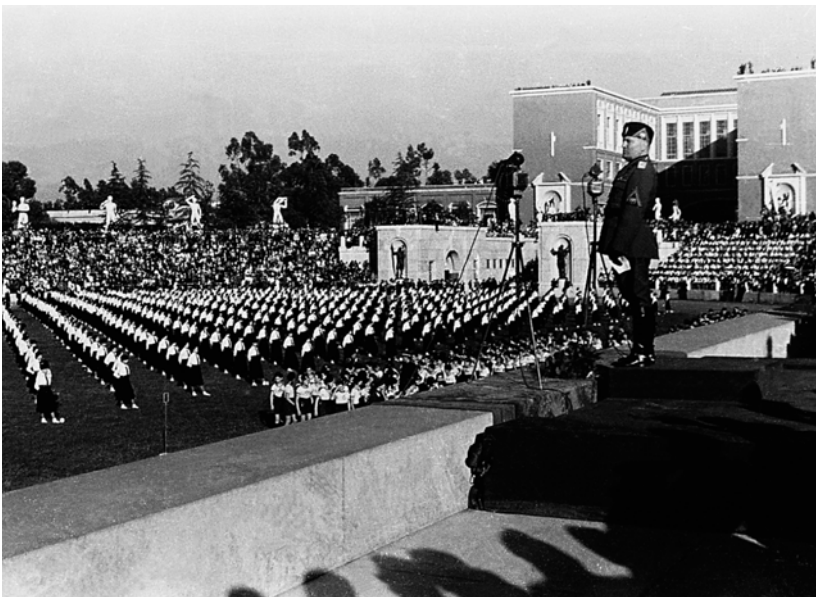
Many Italian cities received the indelible marks of Fascist urban transformation. The Lombard city of Brescia had been untouched by any nineteenth-century modernizations, and when its 1928 competition for a city center renovation project proved fruitless, Marcello Piacentini was hired. A new square, the Piazza della Vittoria, opened in the old center in order to draw modern traffic. The

varying block heights, forms, materials, colors, and textures were "derived from the physiognomy of the city," according to Piacentini. Loggias and towers became porticoes and skyscrapers in a composition of banks, insurance agencies, a hotel, and a post office. The new urban space is complete but not enclosed. It is both a dynamic traffic node and a place to stop, wrote Piacentini. The Piazza della Vittoria was inaugurated in 1932 with rousing rallies that brought it to life. Piacentini so liked the nature of this kind of work that he had the Brescia plan frescoed onto the wall of his studio in Rome.

As cities continued to swell, the Fascist dictatorship developed a two-pronged policy for control of both demographic movement and the nation's agricultural economy. Mussolini's idea of reruralization of society and production, first announced in 1927, focused on both land reclamation and then new town building in the Pontine region. The task was assigned to the veterans' administration, in order to provide employment for some of the most desperate able-bodied veterans, a "New Deal" of sorts. They were dispatched in a "war" against hunger and inactivity armed with shovels. The draining of the Pontine marshes, begun by Pope Pius VI, was finished by the Fascist administration. The new farms were 35 to 75 acres each with farmhouses that provided minimum requirements. Settlement was at first unstable, given the veterans' general lack of farming experience, poor harvests, and personal desperation. Indeed, their retreat was hampered only by a total lack of public transportation routes out of the area. Rewards offered for high yields, along with vacation packages and free radios, helped stabilize some 2,500 farmsteads. Mussolini made many personal visits to the region and in his typical fashion improvised the next steps in the regional development, including the creation of an administrative center for the new province and a new town named Sabaudia.

After the Florence train station, the Sabaudia commission was the second great opportunity for young modernists to apply the principles of Rationalism, now to urban planning. It was won in a competition in 1933 by a team of former MIAR colleagues led by Luigi Piccinato, an apprentice of Piacentini. Sabaudia is sited on the peninsula of an intercoastal lake, an idyllic natural setting. An access





6.39 Gruppo Urbanisti Romani: Luigi Piccinato, Gino Cancellotti, Alfredo Scalpelli, and Eugenio Montuori, Sabaudia, 1933–34. Inauguration ceremonies, 15 April 1934
6.40 Enrico del Debbio, Foro Mussolini, Stadio dei Marmi, and Scuola Superiore Fascista di Educazione Fisica, Rome, 1928–32. Gymnastics pageant, 24 May 1935

road leads straight to the civic center, which is dominated by the tower of the town hall. The disposition of the public buildings recalls the clarity of an ancient Roman military colony, but the elements are here reinterpreted in a dynamic ensemble of asymmetries. The civic buildings radiate out from the tower. The Casa del Fascio, slyly commanding several street vistas, veterans' office, gym, school, cinema, market, and hotel (for visiting officials down from Rome) are all set in careful relation to town hall and to each other in a manner that spatially structures the social realm. The tower is emblazoned with party emblems and inscriptions, with a public-speaking platform commanding the politicized public space. Meanwhile, the church is shifted to a decidedly ancillary position, dignified in its quiet isolation. The architectural style adopted in Sabaudia's buildings is severe and unadorned, and constitutes the first large-scale expression of functionalist modernism in Italy. Even the church's flanks look like grain silos. In its pure, smooth surfaces Piacentini perceived the *Mediterraneità*, "a healthy modernity informed by the spirit of our tradition liberally understood." Sabaudia's most daring individual work was Angiolo Mazzoni's post office, a dynamic creation with vivid blue forms in the Futurist spirit.

It may seem an inherent contradiction that a program of ruralization produced cities, but Piccinato keenly distinguished the "rural town" from cities in the traditional sense. The "region-town" would not exploit the agricultural countryside but serve it as part of an integrated system. He noted that the scale of the public buildings might seem large for a place of only five thousand office workers and shopkeepers, but they were scaled to the region's entire population of fifteen thousand. In his report, Piccinato related the Sabaudia plan to the latest international experiments in urban design: English garden cities, Russian industrial towns, the Spanish linear city, and Frank Lloyd Wright's Broadacre, all recently published in Italian magazines.

FORO MUSSOLINI AND THE FASCIST CULTURE OF SPORT

Sports events, like cinema and mass rallies, proved another effective means for the organization of Fascist society. Sports were choreographed manifestations of the Fascist ethic. Magnificent sports stadiums were erected in Bologna and Florence, designed by Giulio Ulisse Arata and Pier Luigi Nervi, respectively, both of which unite modern construction with a revisiting of the ancient building type. Piacentini returned to the stadium he built for the 1911 world's fair, adding a monumental facade that, with its heavy massing and robust sculptural figures, emphasized the new ethos of virility.

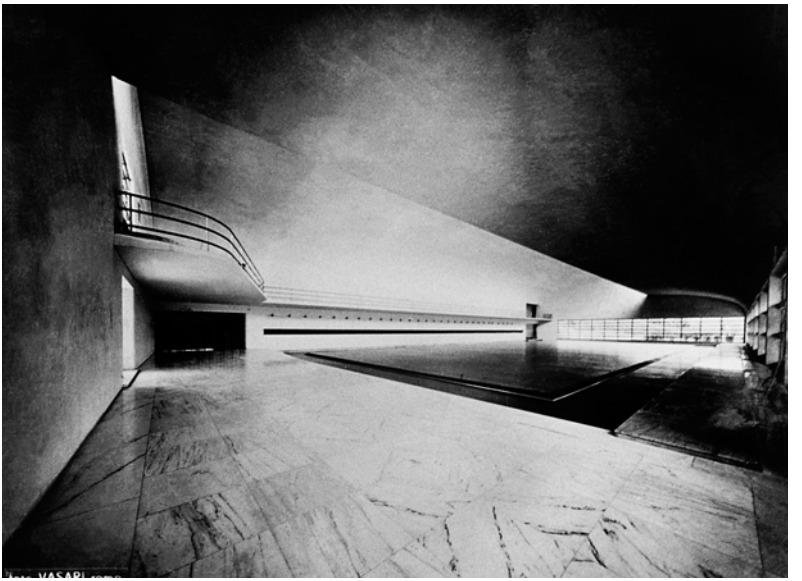
The sports facilities realized in the 1930s were the only permanent structures in Italy designed specifically to hold the mass audiences that characterized totalitarian regimes of the period. Renato Ricci, a charismatic young undersecretary at the Ministry of National Education, led a campaign for physical education and helped to found the Opera Nazionale Balilla, the organization in charge of paramilitary youth groups. The ONB lured the nation's young people away from religion-based extracurricular activities into what Ricci called a "school of courage, of virility, of combat." They were trained in aggressive sports of individual struggle—wrestling, boxing, fencing, sharpshooting, gymnastics, swimming—but not team sports. Fascist sport instilled "the strength of will and the quickness of decision," characteristics constantly extolled by and in Mussolini himself, in a program "for the physical advance of the race." Ricci's work at the ONB was received enthusiastically by Italians, and had positive results on the international stage: Italian athletes carried back more than three dozen medals from the Los Angeles Olympic Games of 1932.

ONB sports facilities, called Case del Balilla, were subjects of intense research especially among Rationalist architects, but in 1927 Ricci appointed Enrico del Debbio as ONB staff architect. Del Debbio was very well connected with the architects' syndicate and both he and Ricci were from the city of Carrara. Del Debbio organized an exhibition in 1929 that was the syndicate's response to the first MIAR attack, and he continued to navigate confidently in

the bureaucratized culture of Fascism. As Gaetano Minnucci had for the university project in Rome, for the ONB del Debbio culled examples of sports facilities types from across Europe and the United States in preparation of an in-house design manual for Case del Balilla. Del Debbio's dozen, graduated design patterns were based on rational distribution of functions, construction with reinforced concrete, and decoration with Italianate details derived from Muzio's work.

In Rome, del Debbio erected the Scuola Superiore Fascista di Educazione Fisica, a teachers' college for grade school gymnastics coaches. Construction was begun on a site north of the city in 1928. Against an H-shaped building of concrete, painted Pompeian red, del Debbio set contrasting decorative emblems and statuary in white Carrara marble. The simple volumes, set in dynamic internal asymmetries "reflect outwardly the fresh serenity of the adolescent inside," according to Piacentini. Through the central cleft of the school's mass, an axial passage leads directly to the playing field behind. This was dubbed the Stadio dei Marmi because its seats were made of Carrara marble and encircled by sixty colossal marble statues, each a naked sportsman, such as discus throwers and shot-putters. The ONB sports complex was inaugurated in 1932 with synchronized gymnastics pageants that brought to Mussolini's attention the inherent adaptability of the sports facility for mass political ritual.

Encouraged by the success of the ONB, Ricci continued to expand the facilities at this location. In addition to the small marble stadium, originally conceived only for the school's needs, del Debbio planned a Greek-style theater, a natural earthwork of grassy terraces and shade trees, up the hillside behind. The growing complex became known promisingly as "Foro Mussolini" and evolved, like so many Fascist initiatives, in a rapid series of discrete, improvised phases. A definitive political focus of the complex came with the erection of an obelisk. It is the largest single piece of Carrara marble ever quarried, emblazoned with Mussolini's name. By 1932, del Debbio had worked up larger ideas for the area, planning to double the school building with a covered pool, erecting dormitories for visiting youth groups, adding more playing fields, fountains, and a new bridge access.



6.41–6.43 Luigi Moretti, projects for the Foro Mussolini, Rome: Casa delle Armi, 1933–36; Palestra del Duce, 1936; Piazzale dell'Impero, 1937

Piacentini commented that the evolving complex was taking on the "Hellenic beauty" and casual asymmetries of the Villa of Hadrian while others observed a renewed spirit of *Romanità*, an imperial forum.

Ricci exercised enviable executive control over the Foro project, designating not only the materials but also the designers of his choice. Only the bridge was open to a proper competition. While del Debbio became more involved in syndicate politics, eventually in 1935 becoming its general secretary, Ricci brought in other much younger designers. Luigi Moretti designed two Case del Balilla in late 1932, in Piacenza and Rome, and gradually took over del Debbio's role altogether at Foro Mussolini. Moretti altered the tone of the Foro with his subtle and splendid Casa delle Armi, the militaristic fencing academy, begun shortly after Italy swept the sport at the 1932 Olympics. Its clear, articulated volumes corresponded to its diversified interior functions, including a library for the study of the history of combat arms and a gymnasium roofed with interlocking cantilevered coves. The interior surfaces are covered in the highest quality stucco, untinted and unbuffed, the exterior with finely joined Carrara marble panels. Moretti compared the Casa delle Armi to the Parthenon for the perfection of its golden section proportions and the precision of its construction.

All of Moretti's design skill was concentrated on the creation of a private gym Ricci wanted to offer to Mussolini in 1936, the Palestra del Duce. Within the complex's pool building, Moretti shaped a large open space with simple screens of rare *pavonazzetto* marble. Gilded bronze statues populate the abstract flowing spaces. Linoleum floors and tubular steel furniture counterbalance the traditional elements in a design of great refinement. Mussolini, however, disdained the gym, thinking its precious luxury unbecoming to his political persona, and far preferred the obelisk outside for its literal appeal.

With this in mind, Ricci cleverly redirected the Foro's iconography to extol the larger Fascist themes by having Moretti add the so-called Piazzale dell'Impero. Between the existing obelisk and fountain, Moretti shaped a gently flaring trapezoidal space with a

mosaic floor bordered by twenty-two rectangular blocks of white marble and a smooth, elevated surface—like a fashion runway—down the center. The marble pylons were inscribed with the deeds of the regime, with the last five left blank for future accomplishments. The space was ideal for commemorative events, with Fascist leaders parading through gathered crowds who had been taught to chant the slogans spelled out in the mosaics underfoot: "Duce Duce Duce."

By 1937 Ricci's plans were to make the Foro Mussolini the largest sports complex in the world as part of Italy's bid to host the next Olympiad of 1940. The Berlin "Sportsforum" from the pomp-addled 1936 Olympic Games was Ricci's benchmark. Del Debbio's earthwork stadium was rebuilt in stone and a rally ground for 400,000 was demarcated. Ricci's ambitious program developed entirely within the scope of the ONB, outstripped even central PNF plans and brought down upon him the jealousies of top officials who were having difficulties getting their own projects built. Ultimately, Ricci lost control to higher party officials who used the Foro Mussolini site for the construction of the Palazzo del Littorio.

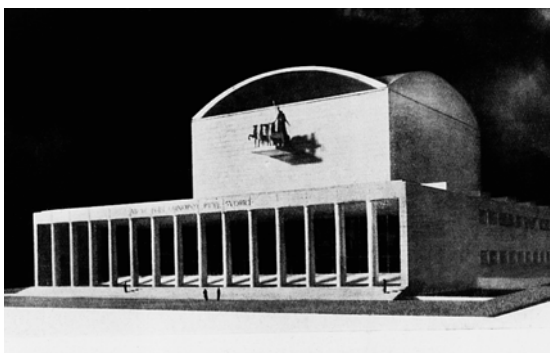
Moretti's work at the Foro Mussolini presents the most coherent demonstration of a Fascist aesthetic in architecture. Moretti follows neither abstract rational functionalism nor figural or emblematic historicism. His poetic Rationalism combines undeniably refined functional planning with the compositional principles divined from a perennial classicism for an entirely modern world of form, space, and light.

E42

The last great Fascist initiative in architecture and urban planning concentrated on a world's fair for 1941, thirty years after Rome's first hosting. In 1935, the Italian government expressed its intention to host the biennial event, and despite the negative repercussions of the Ethiopian invasion, the international fair governing body scheduled Rome for 1941, following Paris 1937 and New York 1939. Italian authorities understood the world's fair as an opportunity to present the accomplishments of the state to the world. Ignoring the authorized schedule, the planned date for the fair was shifted to 1942 to coincide with the twentieth anniversary of the Fascist regime. The exposition of 1942, or "E42," was designed to avoid the usual commercial features and focus on elevated spiritual issues such as the progress of humanity. "The Olympics of Civilization, Yesterday, Today and Tomorrow" was the theme adopted by the exposition's general commissioner, Vittorio Cini. Modern Italian culture prepared once again to confront the world, to showcase Rome as the synthesis of indisputable, universal values.

Commensurate with the policies of urban decentralization and new towns, the fairgrounds were not set within the historic city. Instead the buildings were to be permanent constructions that would serve after the fair's closure as the nucleus of a new development. Marcello Piacentini was commissioned by Cini in 1936 to lay out E42. As was by then his established practice, Piacentini assembled a team of recognized experts: Luigi Piccinato from Sabaudia; Ettore Rossi, the pontifical architect and an expert on building typologies; Luigi Vietti, known for conservation and urban issues; Gaetano Minnucci, again in charge of compiling the technical material; and finally Giuseppe Pagano, who thought the cordial, collaborative nature of the team under Piacentini's direction was nothing short of a state of grace for contemporary Italian architecture.

A site was designated several kilometers beyond the walls of Rome, on green hills overlooking the Tiber. A metropolitan railway and a six-lane highway, Rome's first, called the Viale Imperiale, were planned to connect the satellite city to the center. The E42 plan has a symmetrical disposition of structures along a ridge and an orthagonal



6.44 Marcello Piacentini and others, E42/Esposizione Universale di Roma, 1938
6.45 Ernesto Bruno La Padula, Giovanni Guerrini, and Mario Romano, Palazzo della Civiltà Italiana, EUR, Rome, 1938
6.46 Adalberto Libera, Palazzo dei Congressi, EUR, Rome, 1938

layout on a gently sloping plateau that leads down to an artificial lake. The monumental core of the development was designed around the Viale Imperiale, which served as an axis. A classical spirit of traditional materials and construction techniques was designated for the component elements (steel and glass structures in large quantities were not possible given current government import policy). After the planning team completed its work and was disbanded at the end of 1937, architectural competitions were held for the major permanent buildings. The competition prescribed "bold and grandiose" forms and the jury of PNF officials predictably tended toward a grand *Romanità*. One contestant, Ludovico Quaroni, clarified that the strongest influence on the architects was the classicism of their common education in tradition. Even Pagano welcomed the opportunity to show that modernists "could also build with history." The design of the pavilion for the Italian exhibitions, the Palazzo della Civiltà Italiana, was won by Ernesto Bruno La Padula, who had designed the Italian pavilion at the New York fair of 1939, with Giovanni Guerrini and Mario Romano. Here too they expressed a *Romanità* in six floors of identical arches sharply cut out of smooth travertine surfaces with statues and inscriptions. Its nickname, the "square Colosseum," summarizes the design's inherent historicism, yet its reinforced concrete structure, its 12,000 square meters of open interior exhibition space, glass walls, and elevator banks have brought modernity in close relationship to the historical model.

For the Palazzo dei Congressi at the other end of the E42 central axis, the jury found a more subtle solution in a design by Adalberto Libera. Libera's talents for understanding the abstract and evocative values of historical models in the service of modern tasks culminated in this design. Its relationship to the Pantheon escaped no one. A columnar front porch joined to an ultramodern conventional hall behind that reworks the Pantheon's geometric balance and dramatic passage into a lofty, luminous interior. Libera admitted to other historical references with the building—to early Christian basilicas, for example—however, his allusions are never simply literal. Tradition and modernity were nowhere fused in a more sophisticated fashion.

Giuseppe Pagano, who was unable to garner any further role at E42, turned bitterly against the project and its prevalent traditionalist

tones. All the promise of the first gleaming ideas had been dumped, he wrote, "in the mud of rhetoric and academic banality of a vague stylistic internationalism." So acrimonious was his opinion that his magazine, *Casabella*, was sequestered by PNF authorities. Although his personal motives for such biting criticism were questionable, Pagano did emphasize a most delicate issue: to what limits can tradition and modernity be compromised without each losing its coherence.

As at the university, the wide range of architects was united under the guideline of classicism. Competition runners-up were given secondary elements to design. Arnaldo Foschini designed the new city's Cathedral of Saints Peter and Paul. Libera planned, but never built, an immense crowning arch in aluminum to straddle the complex, evidently before Saarinen proposed his for St. Louis. The B.B.P.R. group's post office, by nature of its implied efficiency, was the most frankly modernist of the buildings but its architects' most classical work.

While B.B.P.R. may be attributed with the development of the first ideas for an exhibition of Italian culture, Ernesto Nathan Rogers, the "R" of the group and a Jew, was the first at the E42 project to feel the brunt of the 1938 racial laws adopted in Italy under pressures of the Nazi alliance. Rogers's expulsion from the syndicate was ironic, since it was B.B.P.R. that expressed in the most succinct way the nature of the whole E42 venture: to demonstrate "to the masses the magical continuity, the universality and actuality of Italian civilization." Gio Ponti described E42 as "an architectural ecstacy that transposes the classical schemes in a lyric and abstract evocation." Vittorio Cini, not the architects, pointed out the functional usefulness of E42: "A city worthy to stand alongside the ancient but with something more that within its severe and powerful framework of architecture it will be capable of accommodating the multiple dynamic of life of today and tomorrow."

FASCIST ARCHITECTS AND MODERN ARCHITECTURE

It was during the two decades of Fascist rule that modern Italian architecture finally acquired focus. The Fascist government was indeed the most prolific Western state in its support of modern architecture, and a comparison to any contemporary building in Washington, D.C., demonstrates the progressive nature of Italian work. In sharp contrast to Nazi Germany and Communist Russia, modernism in Fascist Italy was never perceived as unsuitable as an official architectural idiom. This was due less to enlightened patronage than the consonance of the early Fascist ideology of revolution with the Rationalists' polemical goals and with their sympathetic exploration of the values of Roman classicism. Voices ranging from the Gruppo 7 to Fascist cultural ministers called for a harmonious collective in service of a new civilization. The Rationalists had at first clamored for a single official style, authorized from the highest command, but their pure forms never garnered widespread support until they learned to compromise with *Romanità*. If modernism lost the purity associated with Bauhaus functionalism, in the Italian context the movement was validated by its association with history, and the only contention with academic traditionalists remained the degree of stylistic imitation.

Architects supported the idea of a national art and they worked hard to proffer images to Mussolini in individual attempts to define it. But the mission was essentially futile, hampered by an ambiguity of the concept of Fascism itself. For all its effective bombast, Fascism was never a lucid system but an improvisational process built on rhetoric characterized by contradictory polarities, a strategy for wide appeal but unstable ideology. Given this vague direction, architects under Fascist rule fostered what was a surprisingly malleable culture, at least for a totalitarian regime. A triptych painted by the Futurist artist Alessandro Bruschetti in 1935, *Fascist Synthesis*, captures the spirit of this fervent universe in which old and new, urban and rural, agricultural and military, are merged in a dynamic aesthetic conflagration.

Mussolini led Italy into the catastrophic swirl of the Second World War and, through a series of improvised maneuvers, managed

6.47 Alessandro Bruschetti, *Sintesi fascista*, triptych painting, 1935

to lodge his country between the aggressive machinations of Nazi Germany and the unconditional demands of advancing allied forces. Ousted from Rome, Mussolini and his Fascists were sustained only in the puppet republic of Salò until, fleeing to the Swiss border, the former dictator was captured and hung by his feet from the cantilevered roof of a Milanese gas station. The resistance movement against German occupation was marked by heroic and tragic episodes, such as the strike against a column of soldiers passing in Via Rasella on 23 March 1944 and its terrible reprisal. Rome was liberated on 19 July 1944 in an arduous northward sweep of the peninsula, not without heavy damage to many city centers. On 25 July, one of Libera's blank pylons at the Foro Mussolini was inscribed "FINE DEL REGIME FASCISTA"—End of the Fascist Regime.

Reflecting objectively on Fascist architecture has proven difficult for Italian architectural historians, principally because the writers were themselves the architects who inherited the debris. The vaguest hint of the classical was tainted with the damning memory of the regime's rhetoric. In re-establishing a viable architecture, the writing of history became a sharp-edged tool. Bruno Zevi and Giulia Veronesi, for example, revealed their own urgent postwar agendas as social critics when they equated Rationalism with anti-Fascism—a patently untenable assertion—yet they gained with this revisionism an unquestioned consensus.

Studying Giuseppe Terragni's architecture in exclusively formal terms extracted from a political context—as Zevi, Veronesi, Giulio Carlo Argan, Reyner Banham, Peter Eisenman, Colin Rowe, and Manfredo Tafuri have all done—may seem preposterous when we note that Terragni took up arms in the defense of the Fascist cause and seems to have committed suicide rather than face its downfall. Monographs on Adalberto Libera favor the architect's most unpoliticized project: the Villa Malaparte on Capri of 1938. The most clever historiographic revisionism was deployed to protect Giovanni Muzio behind a screen of supposedly ironic detachment in a metaphysical world of formal poetry. Del Debbio was also rehabilitated under the irrelevant "metaphysicist" formal rubric. Even the mosaics and statues of the Foro Mussolini are apparently

appreciated for their kitsch value and arcane eroticism. At least Luigi Moretti's story is clear, if rarely told, because it is irrefutably Fascist. He followed Mussolini to Salò, where he helped Ricci reconstitute the ONB and renew the Fascist movement until he was arrested and jailed in 1945. Scholars squeamish of his politics continue to write superficially of Moretti's rarified timelessness and elegant mannerism without ever mentioning the "F" word. Foreign scholars, notably Diane Ghirardo, Dennis Doordan, and Richard Etlin, have shown themselves more ready to confront the architecture of the Fascist era without axes to grind, and only very recently, fifty years since Mussolini's fall, has a single Italian scholar, Emilio Gentile, admitted that "moving between the myths, rituals and symbols of a political religion that has revealed all its fragility, we may be tempted to represent this material with a caricatured and moralizing intention, scourging the past that displeases us with a derision and sarcasm that are more often surrogate of an irony deprived of historical intelligence."

Study of Fascist architecture in its context dispels the pervasive myth, nurtured by revisionist scholars, that the regime "persecuted" the modernist movement. Terragni triumphed at the heart of the regime. Bardi and the MIAR architects clamored to be let into the party hierarchy. Pagano extolled the strides architecture and urbanism made under the auspices of the PNF until he was excluded. Even the uncompromising B.B.P.R. group willingly served the regime with their modernist works until the racial laws, odious to all Italians, denied Rogers and dissuaded his colleagues. They joined the partisan resistance movement in the defense of ideals much greater than architecture. Gian Luigi Banfi and Lodovico Belgioioso of B.B.P.R. and Giuseppe Pagano were captured and deported by the Nazis, and two of them died in concentration camps.

No period of Italian architectural history is more complicated by shifting ideologies, but it is clear that the language of Rationalism, developed in Italy to express Fascism, cannot at the same time have connoted a covert struggle against Fascism. If any Italian architect was "persecuted" for his architecture it was Angiolo Mazzoni, who was convicted on charges of professional impropriety, technical

incapacity, and influence peddling for having hired Piacentini's wife for some mosaic decorations. Unlike Piacentini, who like so many second-echelon Fascist officials sat still through the postwar trials, Mazzoni did not master the art of politics or timing and he and his Stazione Termini were purged in the unconditional surrender of *Romanità* before the courts. Mazzoni left Italy in 1947 for a self-imposed exile in Colombia, where, with exquisite irony, his true convictions emerged and he designed numerous buildings for Bogotá in the International Style.

In large part, the built works of the Fascist era survived Fascism's downfall unscathed. The University, the Foro Mussolini, Piazza Augusto Imperatore, and the Bolzano triumphal arch all still display their unedited inscriptions. Unlike Hitler's buildings in Berlin, which were left in ruins, Mussolini's chief works are today still standing and fully functional. Del Debbio, Foschini, and Ballio-Morpurgo completed their Palazzo del Littorio in 1955 for the postwar foreign ministry, dropping only the Fascist sanctuary and emblems from the original program. In every Italian city, a monument to the fallen of World War I, who never knew Fascism, remains in form and symbolism an unadulterated expression of Fascist political propaganda. Giuseppe Samonà has commented that the regime's buildings stand among us like the forlorn temples of former gods, but they are no less powerful and meaningful to us in their haughty emptiness.

7.1 Roberto Rossellini, *Paisà*, 1946. Film shot on location in Florence

Chapter 7

POSTWAR RECONSTRUCTION, 1944–1968

Bombs of the allied forces helped liberate Italy from Nazi occupation, but they also inflicted extensive damage on city centers and major public buildings. San Lorenzo fuori le mura in Rome took a direct hit, the abbey of Montecassino was carpet-bombed, Caserta stripped of its fixtures, and Santa Chiara in Naples gutted. Damage was done to the Teatro Massimo in Palermo, Teatro Carlo Felice in Genoa, the Cisternino in Livorno, the Loggia della Mercanzia in Bologna, the Naples Archeological Museum, the ruins at Pompeii, and—in Milan alone—the Galleria, La Scala, the Brera, the Palazzo Ducale, and the Castello Sforzesco.

Florence's losses were acute. On the night of 3 August 1944, the retreating German army blew up all the Arno bridges, sparing only the famous Ponte Vecchio, which they wreaked havoc on by dynamiting more than one hundred adjacent medieval buildings in order to clog access to the bridge crossing. The Italians' reflex to rebuild was immediate; indeed, reconstruction efforts in Naples, for example, had already begun while war still waged in the north. Giuseppe Pagano wrote: "Better to let bombardment contribute more or less brutally to the problems of a real and radical thinning out of buildings rather than allowing the false culture of theatrical archeology to realize the providential voids in the tangle of old cities." Legislation of March 1945, two months before the Nazi surrender of northern Italy, prioritized urgent works and streamlined processes by which an emergency intervention could be carried out despite a city's master plan.

In Florence, a committee was formed of historians, architects, and writers. Bernard Berenson, the American specialist in Florentine art and longtime resident, opined that all the damaged buildings should be rebuilt *dove erano, come erano*, where they were, as they were. Ample photographic documentation could assure authentic reconstruction of

the exteriors. Berenson's position recalls that of the Romantics in the debate over the burned San Paolo fuori le mura a century earlier, and he relied upon what he judged to be prevalent public opinion. Indeed at San Lorenzo fuori le mura in Rome and the abbey at Montecassino, American funds, which poured in to repair what American bombs had wrought, built seamless reconstructions that ease the consciences of latter-day tourists. In Florence a more thoughtful way was forged thanks to the critical intervention of the leading archeologist Ranuccio Bianchi Bandinelli, who was on the national commission on reconstruction. "It would be extremely false . . . to construct in a cold draughtsman-like manner this living organism that had been formed by slow spontaneous motion," he wrote in response to Berenson's letter. The uniqueness of a work of art cannot be repurchased, and a reconstruction of ruined Florence would result in an illusion, a travesty, "merely so as not to delude the tourists who expect the stereotype postcard view of the Ponte Vecchio." He went on, "We refuse to be mere museum custodians. We claim the right to live in a living city."

In 1947, twenty-one proposals were received in the general competition for rebuilding the Ponte Vecchio area. No convincing overall architectural language or reworking of traffic patterns emerged, so the jury remained undecided. The city council went on to approve a series of small, rather bland proposals, parcel by parcel, from 1948 to 1957, essentially following Bianchi Bandinelli's admonitions. Giovanni Michelucci's modest intervention on the Via Guicciardini is typical of this work. The former exterior volumes were retraced where they were, with towers and irregular street facade setbacks, but the concrete structures were all modern. Sensitive to the organic nature of the medieval city fabric, Michelucci accentuated the unexpected spatial releases and worked unhampered by any stylistic preoccupation. He let the careful composition of local materials in horizontal stratification evoke the dense accretion of the historical city, intentions not at all dissimilar to what Marcello Piacentini had done at Brescia twenty-five years earlier.

The reconstruction of war-torn Florence was a test, the first response to an urgent nationwide problem, but its results were not taken as paradigmatic. More often, in sensitive city centers, especially in the north where damage was heaviest, reconstruction efforts

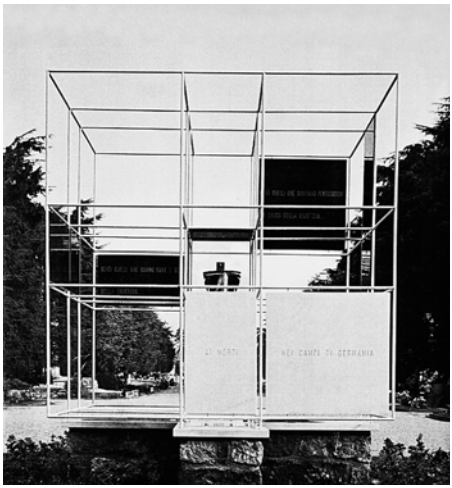
colluded with speculative interests, which wanted tracts of partially damaged buildings hastily razed to provide larger plots and greater volumes for assured return on investment. The new republican government led by the Christian Democrat party opted for laissez-faire private economic development on all levels. Architects anxious to serve the nation and its new democratic society were the first to feel the effects of these decisions, as they saw their well-laid urban and regional planning efforts overturned by short-term speculative interests exploiting "emergency" situations.

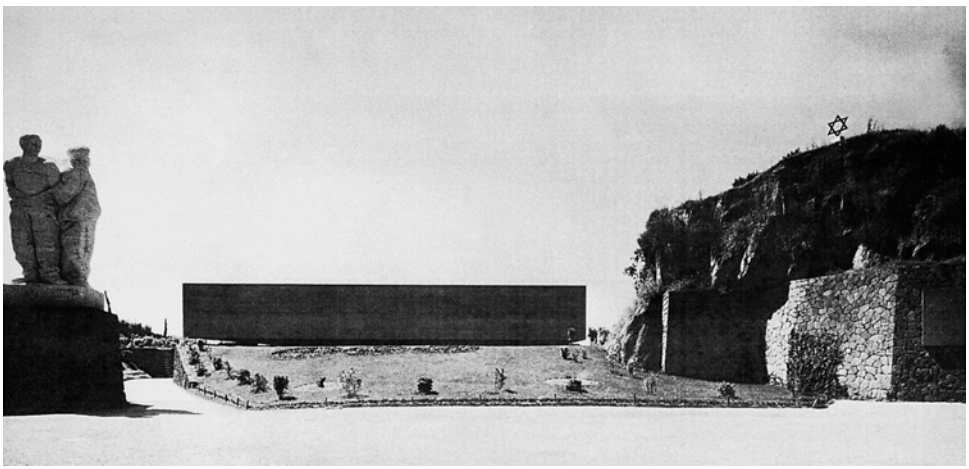
Meanwhile the people celebrated the return of democracy, a shift expressed with a wave of name-changing in the renewed republic. Piazzas "della Repubblica" arose everywhere. Street names honoring Fascist martyrs were replaced with names of martyrs under Fascist dictatorship, the most ubiquitous being Giacomo Matteotti. The new Pontine town Littoria became Latina. Symbols were shaved from building facades while at the Foro Mussolini, now called Foro Italico, a few more of Moretti's pylons were inscribed for the historical record, including "1 GENNAIO 1948, COSTITUZIONE DELLA REPUBBLICA ITALIANA." Beyond such public displays, the state of the Italian people was desperate. Neorealist movie directors like Roberto Rossellini and Vittorio De Sica expressed the actual struggle of a nearly shattered nation searching for reason. Meanwhile, the architects of postwar Italy aspired to reflect the ideals of the renewed society in every aspect of their work.

WAR MEMORIALS

The B.B.P.R. group had from its beginnings in the 1930s defined the idea of the nation in Rationalist terms. When news of the extermination of one of their team, Gian Luigi Banfi, brought the horror of the holocaust home, the remaining team—Lodovico Barbiano di Belgioioso, Enrico Peressutti, and Ernesto Nathan Rogers—put that language of Rationalism to the test in a commemorative monument. (In memory of Banfi, the B.B.P.R. partners retained the initial B in their name.) Erected in 1946 in Milan's Cimitero Monumentale, the construction consists of slender iron rods welded together to form a 2-meter cube with internal divisions defined by the golden section. Black and white marble panels inscribed with short odes are inserted in various patterns on each of the four sides. Greek crosses are traced by the intersecting geometries as well as in the rough stone base. An urn containing earth from the camp at Mauthausen, where Banfi was murdered, is at the center. The fragile construction went through a series of revisions, first in 1948 to larger dimensions and in more resistant bronze. Edgar Kaufmann of the Museum of Modern Art in New York offered to purchase the primitive version, thereby contributing to the costs of its replacement. Later on, the second version was deemed too ostentatious for its grave purpose and a third construction was erected in steel. The steel version was identical in design to the first, with the exception of a diplomatic substitution of NAZI for the more general GERMANIA in the panel's inscriptions.

Faithful adherents to the precepts of Rationalist modernism, B.B.P.R. reconstructed a universe of light and reason around the horror of the holocaust. Christian symbolism is conjoined with Cartesian logic; their architectural language, liberated from emotional inflection or rhetoric, is here as pure as a sculpture by Alberto Giacometti, to which the monument is often compared. Its calibrated and harmonious lines measure out a calm world of hope, clarity, and infinite justice. Through logic and light, this lyric homage to modernism purges the tragedy while searching for the rational tools for reconstruction.





7.2 B.B.P.R., Monumento ai Morti nei campi di sterminio nazista, Cimitero Monumentale, Milan, 1946

7.3 Mario Fiorentino, Giuseppe Perugini, and others, Monumento ai martiri delle Fosse Ardeatine, Rome, 1946–48

The B.B.P.R. monument sanctioned the moral rehabilitation of Italian Rationalism from its former collaboration with Fascism. Rationalism's survival was assured by the personal histories of Pagano and Banfi in particular, both committed Rationalists through the 1930s who were active in the partisan resistance movement in the 1940s. Rationalism was redeemed by association, and in the postwar period it grew to symbolize anti-Fascist resistance, a compelling notion for those architects who needed it. But only in Milan did Rationalism return with any force, largely thanks to the city's paucity of imperialist images—either Fascist or ancient—its long experience in the resistance movement, and its freer economic renewal. Meanwhile, Rogers led the concerted effort of "building a society," teaching at the Milan Politecnico and editing *Casabella,* which he renamed *Casabella-continuità.*

Rome's monument to WWII, on the other hand, dictated a different direction for postwar architecture. When the bodies of 335 civilians in a mass grave were discovered under the rubble of the dynamited caverns on the Via Ardeatina, the need for a proper burial and acknowledgment of their tragic end led to a design competition for a monument. Finalists in this, the first architectural competition in the democratic era, were asked by the jury to present their designs in person. In the end the jury asked Giuseppe Perugini and sculptor Mirko Basaldella to collaborate on the built project with Mario Fiorentino and his team of designers. At the site of the caves, a massive stone slab hovers on the knoll outside, but it is the pathway leading into the caverns that invites witness to the site of the massacre. At the deepest recess, a serene light streams down from the collapsed vaults, creating naturally an effect startlingly similar to Libera's earlier Fascist sanctuaries. Wandering back underground, one finally emerges from the hill only to slip quickly under the slab as if crawling into a closing tomb. The rows of bronze-faced graves look up to the suffused light that plays under the slab's gently concave underside. The sunshine of the piazza and the documentary display located in a separate structure on the hill behind bring visitors back.

The overt expressiveness of the monument of the Fosse Ardeatine relies upon the communicative force of its strikingly essential forms, the

dramatic path, and the natural effects of light. Its operatic force differs significantly from the effect sought by the Milanese Rationalists. The Roman designers have distilled their tradition of massive monuments while carefully clarifying it of any obvious rhetoric. Painful memory is condensed into elemental signs. The differences between the Milanese and Roman memorials describe two radically different responses to the trauma of the war and to the idea of continuity with architectural traditions, and their differences would continue to divide these two cities' architectural cultures for decades to come.

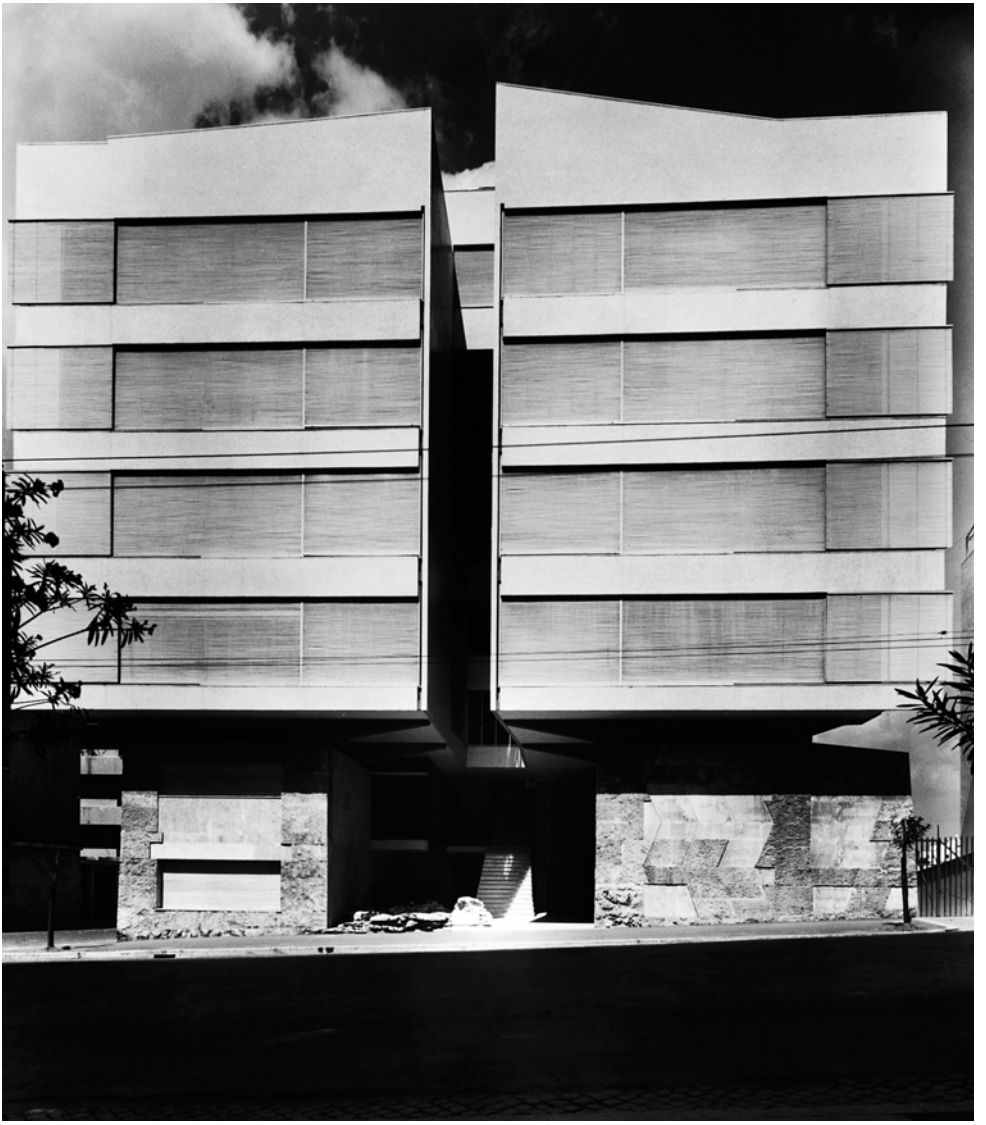
CONTINUITY WITH PREWAR WORK

The force of Roman traditions drew many architects uncomfortably close to the problematic issue of continuity with prewar projects. Although the new democratic administration immediately halted all building when the Fascist regime fell, most projects were eventually taken up again and completed after the war, albeit with new names and altered intentions. The Palazzo del Littorio, the Fascist party headquarters at the Foro Mussolini, was finished in 1955 as the Italian Republic's foreign ministry. Many buildings of the E42, now referred to as EUR, were finally completed, each by the same architects originally commissioned in the 1930s. Armando Brasini continued even his most megalomaniacal projects, like his monumental Via Flaminia bridge now, ostensibly, to welcome 1950 Holy Year pilgrims. Even Marcello Piacentini returned after a brief period, cleared of all accusations against him for politicizing his work as an architect. Although he never detached his name from the regime, he continued to design at the university, at EUR, and at the Via della Conciliazione, and he even proposed an auditorium for the Via dell'Impero site, by then renamed Via dei Fori Imperiali.

Under the facile name changes and symbol stripping, continuities with former Fascist ways were still everywhere evident, particularly in academic institutions. None of the nation's architecture schools except Venice were affected by the fall of the regime that had helped build

them. The old guard like Enrico del Debbio remained firmly ensconced, discouraging even the politically righteous Rationalists from seeking academic positions. The real difficulty for architects in navigating the transition across the clearly demarcated political dateline of 1944 lay in defining a clear and thereby condemnable Fascist culture. They were unable to do so, and critics writing in the 1950s like Giulia Veronesi and Bruno Zevi projected their anxieties onto the past by exaggerating the political "difficulties" architects faced under Fascism. The crisis of continuity expressed itself in increasingly politicized intellectual criticism from which only dead architects like Terragni could avoid being accused of a lack of consistency.

Luigi Moretti rode impervious across the polemical tide. Moretti was the only major architectural personality actually imprisoned for his unrepressed political activity in support of Fascism through its last days at Salò. He embarked on new opportunities in 1945 when he founded the Cofimprese construction company with Adolfo Fossataro, financier, film producer, and his former prison mate. Cofimprese flourished first in reconstructing Milan then Moretti's native Rome. The once lush, rolling Parioli Hills behind Villa Borghese were now being filled with large, elegant apartment buildings in the postwar period of laissez-faire speculation. Fossataro catered to the booming bourgeois clients, like those who saw themselves mirrored in the *dolce vita* films he was producing. On Parioli's Viale dei Martiri Fascisti—by then of course renamed for Bruno Buozzi, the anti-Fascist freedom fighter—the Cofimprese group erected in 1947 what would be both Fossataro's own luxurious home and Moretti's masterpiece, the Casa del Girasole. Four stories of apartment units lie behind a paper-thin plane of white mosaic and sliding aluminum window screens. A U-shaped plinth of animated travertine blocks sets off the upper parts in vivid contrasts of texture, weight, and gesture. The entire composition is dramatically split up the center from the open street-level entrance vestibule to its asymmetrical peaked roof points. Light penetrates the narrow crevice to reveal the frank concrete structural supports within. The forms seem to shift in relation to the changing light, like a sunflower, for which Moretti named the building. The distinctive cleft



7.4 Luigi Moretti, Casa del Girasole, Rome, 1947–50

of the apartment building creates a focal point of the intense and mysterious center, from which, using Moretti's vivid imagery, the design explodes, shattering the structure into shiny splinters above. In the distinctive roofline, some saw the peaked hat of the police uniform, for others it was a residual classical pediment. Both suggest Moretti's modernist response to the context of Roman tradition. Although the comparison would be loath to them, Moretti's exploration of an expressive drama is akin to the exactly contemporaneous Fosse Ardeatine monument by Fiorentino and Perugini: "to condense the reality of utility, of needs, into expressiveness," Moretti wrote in 1950, "to reach with minimal means a most acute and emotive transfiguration."

Moretti's career in the 1950s, despite his absolute estrangement from the politically corrected currents of thought, was secured by his clever attention to the economic realities of the new postwar capitalist society. After Cofimprese's dissolution in 1956, he became the staff designer for the real-estate giant Società Generale Immobiliare in Rome. In that role he, in collaboration with Vittorio Ballio-Morpurgo, built their headquarters and a matching one for Esso Italia as the new twinned entrance elements to EUR. Aristocratic connections, solidified by his marriage to an Albani heiress, brought in commissions from the Borghese princes and Torlonia descendants. In a series of interrelated seaside villas at Santa Marinella, Moretti pursued his most personal formal research in fluid space. *Spazio* was the name of his lavish, privately published, and self-promoting magazine and the name of his art gallery from which he sold works of contemporary and baroque art. Moretti strove for an architectural unity that could create order out of reality, but his theoretical meditations were often excessively ambitious and oblivious to prevailing postwar Rationalism. As a forty-year-old architect he was in the prime of his creative abilities, but his arrogance and fondness for self-promotion repelled would-be followers and denied him any public commissions. For the first time since the eighteenth century, an Italian architect needed to develop his career outside Italy, and by 1960 Moretti was working simultaneously for Saudi, Palestinian, Canadian, and American clients. Luigi Moretti was

the architect of Montreal's Exchange Tower and Washington, D.C.'s Watergate complex. In Italy, Moretti was condemned by an ideological and intolerant left-wing press that continually recognized the Fascist in him, in his formation, his corporate client base, his profitable personal connections. Moretti's poetic liberties of form, gifted products of his unity of language, stretches unperturbed across a political divide everyone else felt compelled to mark solemnly.

TRANSFORMING STAZIONE TERMINI

Among the architectural projects continued after Fascism's fall, the Stazione Termini held a special position for its obvious utility. In 1947 a national design competition was opened to modify the station's organization and imagery. The new program for the postwar Termini was designed to eviscerate the organizational logic of Mazzoni's station by shifting the orientation of movement from a bilateral disposition of arrivals and departures in the flanks to the conception of a centralized head house, or *galleria di testa*, like Stacchini's station in Milan. All the functions located in Mazzoni's completed flank buildings were now to be moved to the facade on the piazza with a transverse circulation space across the tracks' heads, a central ticketing hall located at the piazza entrance, an office block for the new, enlarged ministry of transportation, and a new restaurant. The program was conceived in terms of uninterrupted movement from the piazza to the tracks, so waiting rooms disappeared from the modern train station experience. The top two entries from teams led by Annibale Vitellozzi and by Eugenio Montuori were judged to be equal, and the two teams were asked to collaborate.

The Montuori-Vitellozzi design features four distinct formal elements corresponding to the functional program. Across the tops of the track heads there is a transverse corridor 23 meters wide, a covered street constructed of aluminum-clad iron with a great glass wall. Circulation from the track platforms passes across the gallery and under

7.5 Eugenio Montuori, Annibale Vitellozzi, and others, Stazione Termini, ticketing hall, Rome, 1947–50

an office block raised up on *pilotis* that rest upon Mazzoni's colonnade foundations. The office block is clad in the travertine Mazzoni had delivered in 1938 and it is articulated its entire length with continuous windows, two bands per floor, to render the building an abstract screen of simple horizontal lines and obscure the existing buildings from the piazza view. The ticketing hall shows Montuori's talents best. Thirty-three reinforced concrete vault ribs of constantly changing curves launch outward from their hinge supports under the office block toward the piazza. Vitellozzi's original competition entry had featured a parabolic arch construction, while Montuori's vaulted forms had been concealed in a boxy form not dissimilar to the Fosse Ardeatine design. Their final collaborative project integrated transparency with considerable formal flair. Like Giuseppe Mengoni's success in the nineteenth-century Galleria in Milan, the postwar Stazione Termini design ably synthesized a variety of good design proposals and satisfied the general public with generously scaled spaces. Unhindered by stylistic preoccupations, Montuori and his team pushed structural possibilities toward maximum formal expression that match the grand public structures of antiquity, such as the Servian walls featured on the site.

When the transformed station reopened in 1950 it was universally recognized as a reflection of all the positive elements of the new democratic society, in its flowing functional plan, its lightness and transparency, its lack of any stylistic references. It embodied a new tendency in architecture dubbed *organica* by Bruno Zevi, "an attribute," he had written in 1945, "that has as its basis a social not figurative idea, in other words, it refers to an architecture that wants to be more than humanistic, to be human." Zevi had just returned to Italy from the U.S., where he had waited out the war, and he brought back with him a fresh manifesto, *Verso un'architettura organica* (Toward an organic architecture), principles of action for the troubled architecture of Italian reconstruction. He founded the Associazione per Architettura Organica (Association for organic architecture), or APAO, whose constitution stated: "Organic architecture is at once a social, technical and artistic activity directed to create the setting for a new democratic society. It means an architecture for man modeled to the human scale according to the spiritual, psychological and actual

necessities of associated mankind. Organic architecture is therefore the antithesis of monumental architecture that serves statist myths." Zevi provided an intellectual path out of the anxiety over Fascist continuities. Frank Lloyd Wright and Alvar Aalto were the revered masters of Zevi's organic architecture. Both were active in postwar Italy: Aalto with a church, Santa Maria Assunta in Riola di Vergaro, near Bologna, eventually erected through the agency of an Italian architect, and Wright in an exhibition curated by Carlo Ragghianti in Florence in 1951. An Italian acolyte invited the American master to Venice, and he accepted. When the student, Angelo Masieri, died suddenly, Wright designed a youth hostel in his memory for a site on the Grand Canal, but the Venetians were hostile to any modern intrusion. Although *organica* became a catchall for anything politically correct, it offered to all who needed it an escape from the shadow of Fascist continuities. Samonà appointed Zevi to the chair of architectural history in Venice, where Boito had a century earlier made architecture a social cause. With the critical axe of democratic dogma, Zevi's compelling history lessons cut down the forest of the recent past to leave standing only Antonelli, Terragni, and Michelucci.

THE HOUSING CRISIS

In 1945 another important book had appeared, Carlo Levi's *Cristo si è fermato a Eboli* (Christ stopped at Eboli). Levi, who had suffered censorship and marginalization under Fascist rule, was interned in a God-forsaken town in the deep south. In his book he described the appalling living conditions of Matera, where a neighborhood of squalid cave dwellings called the *Sassi* stepped down a rocky slope into a dank valley below. The disclosure of the stone-age habitat of Matera horrified the nation, and an Italo-American task force of sociologists, anthropologists, economists, and urbanists was sent to investigate. The scandal brought attention to the nation's housing shortage. Italy had lost 6 percent of its housing—over two million rooms—to war

damage, and housing quickly became the focus of the reconstruction debate. Rogers the Rationalist welcomed this opportunity to redress a chronic deficiency of Italian modernism. The 8th Milan Triennale of 1947 was solely dedicated to the issue of housing. By 1949 national housing legislation, called "INA-Casa" after the funding national insurance agency, was ratified and would stay in effect until 1963, subsidizing much building nationwide. Adriano Olivetti, the industrialist from Ivrea, contributed by helping to create the Istituto Nazionale dell'Urbanistica (National Institute for Urbanism), INU, which focused on Matera and the 250 families of the *Sassi*.

The earliest INA-Casa projects in Rome included a development near San Paolo fuori le mura by Saverio Muratori and Mario de Renzi, and another along the Via Tuscolana. Adalberto Libera, who garnered a post in the INA-Casa design office, explored minimal housing typologies elaborating on the single-storied atrium house modules in "horizontal" cities inspired by, he said, Mediterranean vernacular. The most characteristic INA-Casa development in Rome is found along the Via Tiburtina, 7 kilometers beyond San Lorenzo fuori le mura, which Foschini entrusted to Ludovico Quaroni in 1949. Quaroni's experience in urban planning began at E42 and had matured during the war, when he was imprisoned in India. He was a participant in Zevi's APAO and Olivetti's INU and the Matera team. For the INA-Casa Tiburtino complex, Quaroni collaborated with Mario Ridolfi and Mario Fiorentino and their students in Rome. Most of the young students were members of APAO and were at first hesitant to accept the potentially compromising invitation from the former Fascists in the INA-Casa administration. Quaroni persuaded them that this was an opportunity too great to pass up. Quaroni oversaw the site arrangement while Ridolfi guided the designs of the various units.

The Tiburtino complex houses four thousand people in 770 units in various building types: row houses, five-story apartment blocks, and taller free-standing towers. These are laid out in a casual manner following the natural undulations of the existing terrain. The elements are built of "common" materials in uncomplicated planar shapes, most

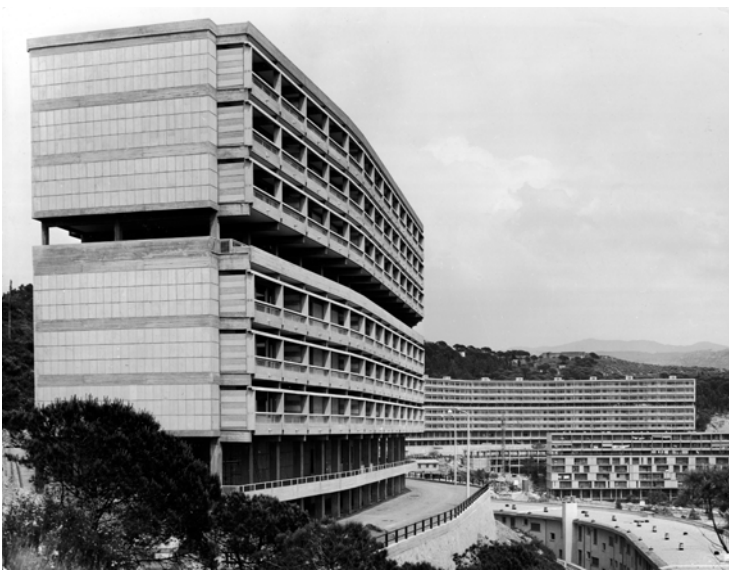
often, brick with plaster surfaces tinted in colors derived from local iron ore deposits. The buildings' rotation and staggered arrangement create casual open spaces as suggested by a pamphlet of design guidelines that had been published in conjunction with the housing legislation. The architects created the feeling of a rural medieval village, less dense, more intimate, and a bit bucolic. The whole suggested a preindustrial society just beyond the fringe of the city. The designers saw their solutions in terms of Zevi's organic architecture. Rationalist impulses were rejected in search of a spontaneous vernacular, "a dialect," explained Carlo Aymonino, one of the young collaborators. The Tiburtino housing project represents the aspirations of a new democratic society defining itself in humble yet dignified terms. "Neo-Realism" became the label for this kind of architectural work, analogous to established trends in literature and cinema by which a psychological authenticity is achieved through apparently artless, unrhetorical concreteness. The neo-Realist experience was the first important stylistic experiment after the war, and it proved a decisive crucible for a generation of architects often referred to as the Roman School.

But the engagement proved brief when the Tiburtino project fell almost immediately to withering criticism from the project's own designers. Aymonino admitted the risks of artificial picturesqueness. Quaroni pointed out the self-deluding suggestion of spontaneity, calling the results "baroque," meaning in 1957 only arbitrary and absurd. Pier Paolo Pasolini, the famous Roman neo-Realist poet and cinematographer, recorded that Romans named the place after Alice's Wonderland, an enchanted village with zigzags and pointed roofs. The neo-Realism of the Quartiere Tiburtino had no effect upon the direction of INA-Casa architecture, or even upon the immediate surrounding area. The disillusioned architects of the Roman School stood helpless as private real-estate speculation and obliging laissez-faire policies wrapped the city of Rome in a swath of nightmarish mediocrity.

NEO-REALISM

Mario Ridolfi was not as critical of the Tiburtino work. Ridolfi's long career began in the 1920s under Piacentini's influence at the new school of architecture at Rome. He apprenticed in del Debbio's office on the Foro Mussolini designs and was included with Capponi and Aschieri in Libera's MIAR exhibition of 1928. Ridolfi had traveled through Germany, where he was impressed with the works of recent German Expressionism and Bauhaus Rationalism, before returning to Rome. Ridolfi is best remembered for his work on the *Manuale dell'Architetto*. The research for this textbook on traditional building crafts and material resources began in the late 1930s. For Ridolfi, craftsmanship is the invention of solutions not from abstract notions but discovered while working; solutions suggested by a comprehension of the organic nature of the material and the specificity of design problems. In a 1942 article published in Gio Ponti's magazine *Stile*, Ridolfi wrote, "We must love the materials we use, get to know them, support their technical and aesthetic qualities to extract the maximum results from them." The *Manuale* was published with U.S. funding in 1946 and distributed free of charge to all registered architects in Italy. Mario Fiorentino, Luigi Piccinato, Pier Luigi Nervi, and Bruno Zevi were all also involved in compiling the textbook. The *Manuale* helped to normalize material elements and building practices for effective reconstruction efforts. It is deliberately low-tech in order to be comprehensible by the underqualified labor force recently absorbed into the construction industry. The *Manuale*'s concreteness was perceived as populist, an architectural unifier based on an American-style empiricism that effectively precluded the issue of monumentality, which was causing considerable anxiety among architects of the time.

Ridolfi's own built works were taken as the purest example of the neo-Realism of the *Manuale*. In 1951 Ridolfi took on the INA commission in Rome for some housing units at the far edge of town in the so-called Quartiere Africano. Eight rectangular towers rise along Viale Etiopia aligned diagonally and close enough together to suggest a cluster of medieval towers. The ground area between the ten-story



7.6 Mario Ridolfi, Quartiere Africano,Viale Etiopia, Rome, 1951–54
7.7 Luigi Carlo Daneri and others, Quartiere Forte Quezzi/"Il Serpentone," Genoa, 1956–58

units is freed for garden plantings. Garage space is underground. Shops line the street frontage. The vertical piers of the reinforced concrete structure diminish in thickness as they rise and the profiles of the horizontal members throw rain water off the walls. Infill panels of brick, colorful ceramic tiles, or glass block, with window or door fixtures from the *Manuale,* leave the structural grid evident. Unlike the disputed results of the Tiburtino "baroque" village, Ridolfi's work at Viale Etiopia has not the slightest tinge of a romanticized picturesque. The volumetric purity of so much of Ridolfi's work may be attributed to an unflagging classical foundation of the architect's education with Piacentini. Yet Ridolfi's empirical realism incorporates the conditions of the building industry and the needs of a growing city, which made his designs an eminently expandable initiative. Ridolfi's later career bears out this success on a professional if not personal level. He moved to the Umbrian city of Terni in 1951 to nurture a genuine, participatory architecture in close contact with the society of the war-damaged city. His own country house and studio retreat near the Marmore cascades, his "Casa Lina," proved a masterpiece. He built it for his wife, Lina, with the money from an INA insurance policy awarded to him after a 1961 car crash that left him disabled. He shared the house for only three years with his wife before her death, and it was the place of his melancholic isolation until he committed suicide in 1984.

LUIGI CARLO DANERI AND LE CORBUSIER'S INFLUENCE

Luigi Carlo Daneri earned a degree in engineering in 1923 in his native Genoa, followed by the new architecture degree offered in Rome. Some of his early work, like the Church of San Marcellino in Genoa, of 1932, earned Piacentini's approval and his support. The Fascist party secretary of Genoa's Sturla neighborhood hired Daneri in 1936 for a Casa del Fascio, and the resulting white box on concrete *pilotis* with strip-windows makes explicit references to Le Corbusier's Villa Savoye. Gio Ponti was struck by Daneri's choice of lightness, clarity, and transparency over the prevailing trends toward

monumentality. Like Terragni's comparable work in Como, Daneri's design was given symbolic power through its clear Rationalism and the bold graphics emblazoned on the facade.

In 1934 Daneri designed an apartment complex for the area adjacent to Piacentini's Piazza della Vittoria. Eight slender high-rise apartment slabs articulated with continuous balconies are arranged with strict geometric but generously spaced regularity along the beachfront. Once again his source is Le Corbusier, in this case the master's sweeping visions of the contemporary city. A confident Daneri sent photos of the built works to Le Corbusier and published them in Italian architectural magazines. Daneri found his guiding ideas through recurrent connections to Le Corbusier. He remained an unshakable adherent to modernist principles of structure, materials, and function and he always remained indifferent to political polemic. The Genovese housing construction was completed after the war in 1958 without the lightest alteration to its original guiding concepts.

Daneri soon became the recognized expert in modern collective residential architecture and all the INA-Casa projects for Genoa involved him. At Genoa-Sturla, he built a series of white crystalline structures, quite different from neo-Realist trends elsewhere, dispersed among the trees. On a site in a less forgiving urban environment outside the Porta degli Angeli in Genoa, Daneri also experimented with Le Corbusier's idea of a self-contained *unité d'habitation*, the largest INA-Casa development for Genoa. It is a complex of 850 apartments in five massive structures near the hilltop Forte Quezzi. Daneri headed the project's team of thirty-five designers and built the largest part of the ensemble, called popularly "the Serpent." The site for such a large housing development was found only far beyond the city's edge, high on the mountainside. Daneri concentrated the project in five linear structures that are sited across only one third of the available terrain. Their asymmetrical arrangement accentuates the irregularity of the undulating site while at the same time affording panoramic views from all units. The designs for the largest building, ready in 1956, were shortened from eleven stories to seven after gauging the effect, Daneri

tells us, viewed from the Piazza della Vittoria downtown. The adjustment preserves the view to the real ridge and fortress above. The similarities to Le Corbusier's 1931 Plan Obus project for Algiers are numerous, from the location of a large linear structure high above the port to the insertion of an internal pedestrian street midway up the block. Daneri inserted a middle circulation section reached by elevators so that he could reduce the height of the stair towers to a maximum of three flights for all residents and provide a panoramic public promenade. All of Daneri's solutions were guided by specific functional considerations. The apartment unit modules are relieved of their serial monotony by the variety of views along the flowing facade line. Open space also characterizes the apartments' interiors with the central areas kept open.

Daneri's formal solutions were born from an evolution of the structural possibilities afforded by reinforced concrete, the natural site, and the industrialized building procedure he adopted, as well as the formal explorations of Le Corbusier's postwar works. Daneri harnessed industrial production, which had been avoided by the neo-Realist designers of the Tiburtino in Rome. In the face of the population growth in the postwar city, Daneri proposed the first major attempt to redefine traditional Italian urbanism with new typological structures and progressive technologies. "The Serpent" is a megastructure on the scale of a new city, but it was never self-sufficient. It lacked the service buildings—such as church, school, pharmacy, which had been planned but not ultimately built—and the transportation links remained inadequate. The upper pedestrian promenade is unusable on windy days. The planned buffer zone of parkland below the area was eventually sold to real-estate developers. Daneri's principled, composed, and disciplined work had no effect upon the city. It stands instead like a dam holding back the chaotic speculative development that sloshes up the valley.

ADRIANO OLIVETTI'S LAST EFFORTS

Adriano Olivetti continued to be a key patron of modern experimentation. In the last days of the war he drafted a manifesto on the social obligations of corporate capitalism in harmonizing labor practices through rational industrial management. These ideas guided the multidisciplinary think tank at Ivrea of economists, sociologists, psychologists, industrial designers, architects, urban planners, and poets. Olivetti-sponsored publications such as *Comunità* and *Zodiac* promoted discussion of illuminated capitalism: the uniting of moral and material cultures, controlling economic growth and means of production to strengthen social and political structures. As an industrial producer of office instruments, typewriters, and now electric adding machines, Olivetti encouraged a meeting of dependable function and pleasing form in a search for a persuasive expression of his social goals. His industrial designers synthesized product design, advertising, the architectural spaces of his factories, and urban and regional configurations of their environments. Guiding social principles were manifest in fine style, the result of "work ruled by progress, guided by justice and fired by the light of beauty," as Mario Labò, the prophet of early-twentieth-century modernity in Italy, described Olivetti's lifetime of experiment. The recognizable style of Olivetti products constituted a clear picture of the life of the firm. The modern office environment with Olivetti machines confered dignity on the executive and secretary alike. Showrooms opened worldwide emphasized the integral aspects of the Olivetti design ethic. The New York store on Fifth Avenue was designed by B.B.P.R., who by 1954 had moved from orthodox Rationalism into organic forms expressive of rich material traditions and talented Italian craftsmanship.

Olivetti's style-makers were always team players, like Marcello Nizzoli. Once of Arata's Nuove Tendenze, then Depero's Futurist advertising systems, Terragni's collaborator at the Casa del Fascio in Como, and Persico's at the 1936 Triennale, Nizzoli was an ideal designer for the company. Figini and Pollini, the Rationalist masters from the 1930s, continued their relationship with Olivetti also after

the war. Their design for the Nuova ICO, the 1955 extension of the Ivrea factory complex, offers proof of continuity of Italian Rationalist architecture. Its differentiation of workshop floor expanses and vertical service towers reflects knowledge of Louis Kahn's university research labs in Philadelphia, while the hexagonal geometries of their contemporaneous Social Services Building across the street suggests Frank Lloyd Wright's influence. Luigi Figni and Gino Pollini envisioned Ivrea as not just a place of production and economic development. Maurizio Pollini, the concert pianist and the son of the architect, gave recitals for the factory workers because, as Adriano Olivetti expressed at the inauguration of the Social Services Building in 1958, "one who lives a long day in the workshop does not leave his humanity in his work overalls." Ridolfi and Quaroni designed school buildings for the children of Olivetti's employees, introducing their naturalistic environmental planning of the Tiburtino work also to Ivrea area neighborhoods.

Olivetti's sponsorship of innovative urban planning followed from the earlier groundbreaking conceptions for the Val d'Aosta of the B.B.P.R. group and his continuing support through INU. In 1948, he brought out the periodical *Urbanistica*, a forum for discussing democratic processes in planning the human environment and dismantling outmoded conceptions of political administration that differentiated city from country. Olivetti's idea of urban planning never advocated social control; instead, he supported design as a means of transforming society and its built landscape to mutually benefit rural agriculture and urban industrial production. This was his intention at Matera and other sites of the south where INU was active. Luigi Cosenza, a Rationalist architect working in Naples, designed a factory for Olivetti in Pozzuoli, outside Naples, in 1951. The use of concrete *pilotis* and glass walls open to the lush Mediterranean gardens was derived from Le Corbusier's ideas. Interior color schemes were developed in collaboration with Marcello Nizzoli. The building's joyous qualities brought encouragement to an area entirely deprived since the eighteenth century of any productive structures, social services, or area planning. Even the health of the natural landscape was precarious. "How industry

can contribute to a better way of life," wrote Labò the year of Pozzuoli's inauguration, "is not purely material." Landscape views and surrounding flower gardens cultivated social well-being.

Olivetti's attempts at institutional, professional, and political reform ran up against prevailing economic interests in Naples that were characteristic of all Italy's cities to a certain degree since the industrial revolution and national unification. His failure to influence national legislation on matters of urban and regional infrastructure planning left the Italian landscape vulnerable to uncontrolled exploitation. The destruction of Pozzuoli is today total. Olivetti's interdisciplinary idea held only in Ivrea. Everywhere else a rigid separation of professional competencies in the related urban planning field set in, and the discipline became mired in ideological debates with little connection to the harsh realities of exploitative market economics. Olivetti's death in 1960 ended any idealist architect's hopes of a truly effective collaboration of architecture and urban planning with political power.

TWO TOWERS FOR MILAN: PONTI'S PIRELLI VS. B.B.P.R.'S VELASCA

Architecture expressive of industrial power, from FIAT to Olivetti, became a requisite in corporate image-making and public relations, as can be exemplified by the skyscraper built in Milan for the Pirelli company. Giovanni Battista Pirelli outstripped his rivals in industrial development by the continual reinvention of his production, from tubes and wires to rubber and tires. His factory interiors were painted by the artists of the Nuove Tendenze. The linoleum he produced supplied cost-conscious architects in Milan the flooring for ICP housing. Since its founding in 1872, the Pirelli plant was located to the north of the city and run on electricity, and the eventual relocation of the new train station to the site immediately adjacent to Pirelli's is no coincidence since Pirelli sat on the municipal urban planning commission. At the Sempione exhibition of 1906, Pirelli industrial products—those little joints that make modern gadgets work—were featured, and Fortunato Depero recognized a potential client when he

pitched his Futurist typographical architecture-as-advertising to Pirelli in 1925. The company flourished by supplying pneumatic tires for automobiles during the Fascist era. The plant, however, was destroyed in the 1943 bombing of Milan, yet the site did not lie fallow; soon a large billboard advertising their ladies' latex stockings rose there.

Alberto Pirelli guided his father's company into the postwar era with an ambition to erect a work of architecture, like an American-type skyscraper, that would be an effective corporate symbol. The Milanese, from Arata to Portaluppi to Sant'Elia, had always dreamed of building skyscrapers, and now that an underground metropolitan rail system was becoming a reality, construction need not be concentrated in the traditional city center. The new Milan city plan of 1953 designated a zone for these larger office buildings, called a *centro direzionale*, at the train station. Alberto Pirelli imagined a very tall structure, pulled back from the street edge to stand boldly above the city. When its uncommon height was approved by the city authorities, the company hired Gio Ponti to develop the project. Ponti was ideally suited to the Pirelli job. He was, with Muzio, the domesticator of classicism in the pages of his *Domus*; he was the designer for industry with ceramic products for Ginori and products for furniture manufacturers; and he was a proven team player at Piacentini's university and E42.

Pirelli wanted a stylish design, "a monument," the architect promised, that "would do honor to the city and society" and create "an intrinsic dignity defined by proportions, simplicity, purity, correctness of the materials, and extreme care in the details." Ponti assembled a team of designers, as was common in America and Germany for such buildings. The structural engineer Pier Luigi Nervi was brought in. The design began with functional considerations of interior movement: the office workers required unencumbered floor areas serviced by central elevator banks and corridors. The width of the corridors, they realized, could diminish, as traffic to their ends diminished. A tapered, lens-shaped plan resulted. Ponti had recently defined a similar plan with Nervi for the Italian Cultural Institute in Stockholm, and the tapered idea may also be related to typologies Le Corbusier had proposed for Algiers in 1931. Reyner Banham, the London-based architectural critic who followed the progress of Italian architecture, noted that Ponti's design process was

7.8 Gio Ponti and Pier Luigi Nervi, Pirelli Tower, Milan, 1956–58
Photograph for fashion designer Alberto Fabiani, 1961
7.9 Gio Ponti, "Superleggera" chair, for Cassina, 1957

not a style-oriented formalism, despite the elegance of his solution, but one initiated, as the masters of the modern movement taught, in essential functional planning to which all was integrated. But unlike pure engineering solutions of infinite applicability, the art of architecture can achieve a definitive state, a "finite form," a visible perfection Ponti also called "crystalline."

The Pirelli tower is an elegant blade of a building, 127 meters of sheer glazed facade with tapered and cleft ends. Nervi worked closely with Ponti on the possible structural solutions. Nervi, Ponti repeated often in his many articles in *Domus*, was a master of structural invention: "He prophesies form." At the Pirelli tower, thirty-one cantilevered floors hang like branches of trees from two pairs of reinforced concrete trunks that taper upward according to the diminishing load. The solid facets on the tower's edges are folded triangular stiffeners. A *courtain wall*, as the Italians called it, hangs smoothly down the center. Despite their terminology, Ponti and Nervi aspired to create a skyscraper system different from standard American models, emulating Frank Lloyd Wright's innovative work in the building type. The designers had freed themselves from the strict prose of rational engineering to express a poetic intuition of structural possibilities. Finally, formal refinement followed, crystallizing the structural solution without betraying functional premises. This is where Ponti exercised his classic good taste to endow construction with the allusions he considered indispensable to architecture. He cited as an example of this idea Venice's Ca' d'Oro on the Grand Canal, whose lightness transposes mere construction to a poetic plane. An easy elegance can be seen in all Ponti's work, especially his acclaimed industrial designs, like the Superleggera chair he produced for Cassina in 1957. Its fusion of function, structure, and form pared down to essentials promises a comfortable, no-nonsense elegance. These design principles cut across all the arts in Ponti's view, from architecture to fashion design, to endow each with "a dignity of style through the totality and sincerity of its expression." Style, lyrical and elegant, was Ponti's ultimate goal. The office furnishings in the Pirelli tower, all designed by Ponti, share the same quality of dignified efficiency. Unobstructed 25-by-7-meter office floor areas were divided as needs

required into cubicles with brightly colored partitions in the company's own Viniltex panels. Larger areas for conferences, staff cafeteria, and parking are tucked under the tower's raised platform. Cars can drive up ramps surfaced with brilliantly patterned Pirelli rubber to deposit VIPs at the tower's doorstep.

Banham's review of the Pirelli tower captured how Ponti had managed to make his architecture more effective in corporate image-making than any advertising agency's work. The stylized lens-shaped plan became *uno slogan grafico,* as Ponti called it, which he emblazoned on all his printed materials. A clear architectural image promoted the company and the company's publicity promoted the architect in an orchestrated campaign of stylish, sunny modernity. Of course, Ponti concurred, architecture is an efficient advertising tool. The Pirelli tower was designed like the billboard for latex stockings it replaced on this site, an advertising image complete with its own nighttime illumination. The international critical response was overwhelmingly positive. Edgar Kaufmann, for example, thought the Pirelli a magnificent conception, like Frank Lloyd Wright's work, capable of opening up new prospects for skyscraper design. Indeed, derivations of their distinctive lens-shaped tower sprang up almost immediately, but, like New York City's Pan Am tower, they are mostly dull in comparison. Ponti rode the wave of his new international fame after 1960, garnering commissions in Singapore, Salzburg, Denver, Baghdad, and more. Perhaps it was envy or embarrassment at Ponti's success, perhaps it was his indifference to the political agendas that gripped other architects, but Ponti's tower was almost entirely ignored by his Italian colleagues. Rogers's *Casabella-continuità* remained noticeably silent, and Zevi dodged the Pirelli for two decades of editions of his history. They were reluctant to recognize Ponti's sophisticated image as a reflection of their postwar society.

What gripped politically conscious Italian architects was an entirely different, exactly contemporaneous Milanese tower, the Torre Velasca. For the reconstruction of a bombed-out block on Via Velasca, 450 meters from the Duomo, a Milanese developer turned to the B.B.P.R. for a tower that, in exchange for an underground parking garage and open ground-level space, was allowed some extra height.

The city zoning commission favored the project because it combined office spaces with apartment units, redressing a disconcerting trend in the downtown area of increasing business density at the expense of the resident population. B.B.P.R. preferred steel and checked their preliminary design with an American structures consultant, but the developer balked at the higher costs and opted in 1952 for reinforced concrete. Small offices fill the first ten floors of the tower, with studio apartments in the mid-shaft and larger living quarters on the top. In order to provide greater floor area and enclosed balconies for the family units, the top six floors expand outward, cantilevered 3 meters out on diagonal supports. The structural engineer Arturo Danusso, who had assisted the B.B.P.R. group on their Palazzo del Littorio competition entry twenty years before, helped the architects develop wedge-shaped rib profiles for the struts. Its precast concrete infill panels are pressed with crushed Veronese stone and integrated into the structure in alternating patterns according to various interior requirements. Construction was begun in 1956 and finished by the end of 1957. The upper expansion of the tower liberated the forms from the constrictions of its irregular plot while contributing to the Milanese skyline a striking profile, like a geyser shooting from the depths of the medieval city. The vertical load-bearing columns of its concrete skeleton recall the Duomo's Gothic buttresses while the muddy colors of its surfaces refer to the tonalities of old Milan. The overall effect is of a heavy, accreted thing, a bit artless, but something that quite effectively evokes a local medieval character.

Ernesto Nathan Rogers stated that their intentions at the Velasca tower were to pursue an approach to the function of architecture in modern society, in opposition to Ponti's spotless mirror of placid affluence. Function needs to be re-examined in a broader sense with consideration of psychological and historical issues because architecture draws its vitality from the environment, Rogers wrote, which helps in turn to form that environment. Rogers ventured a critical review of aspects of the progressive modern movement that Ponti had taken on faith. In a series of editorials in *Casabella-continuità* around the Velasca tower, he emphasized the importance of historical consciousness that helps to establish within any given new work a more precise relationship

7.10 B.B.P.R., Torre Velasca, Milan, 1952–57

between form and content in order to "localize" artistic production and define its relationships in place and time. Rogers explained his point by analyzing his magazine's new hyphenated title: "Continuity. . . signifies a historical consciousness. It is the true essence of tradition in close compliance with a tendency that, for Pagano and Persico as for us, is the eternal variety of the spirit against any formalism, past or present." The tower was praised for its structure, color, and rhythms that established a connection with the city's prevalent textures. Rogers elaborated: "The agreement with the existing factors of the environment, be they natural or artistic, is never understood in a naturalistic, imitative, or analogous sense, but it is made of a sympathy toward the things around us from which we seek to gather up the significance in our composition through the perception of essential character but not according to a deductive analysis." The gritty reality of the Velasca rose in sharp polemical contrast to the elegant blade of the Pirelli, which cut through its environment like a sword. All observers have commented on the aggressive quality of B.B.P.R.'s Velasca tower; it may be a homage to an all but vanished medieval Milan, but it breaks the logic of the urban fabric in a radical attempt to redefine it. The B.B.P.R. made the Torre Velasca the container of the tense contradictions of the historical city and its modern architecture. As a willful provocation against a disharmonious city, the Velasca had a particularly poor popular reception.

When Rogers presented the Velasca design to CIAM, the international convention of modernist architects in 1959, everyone else saw Big Ben. Its crude modeling and seeming arbitrariness of structural gesture was nothing like Ponti and Nervi's apparently scientific, structural formalism, which they far preferred. Moreover, foreign critics like Banham, who liked Luigi Moretti above all, refused to accept images that carried the visual impression of an earlier architecture. Rogers's testy response contended that his detractors were nothing more than "refrigerator custodians" and that they had forgotten that the true meaning of the modern movement in architecture was continual evolution with the changing context of contemporary life. On Moretti, Rogers closed his argument: "He negates the theoretical and above all moral assumptions of our struggle

which abhors all aestheticism and intellectualizing tricks." Rogers assessed the outcomes of forty years of Rationalist architecture and found desiccated, placeless formulas. The reduction of elements to the level of abstract typologies made it impossible in his opinion for architecture to carry meaning. The Italian challenge to modern Rationalist orthodoxy brought on a crisis within the modern movement so strong that CIAM never convened again.

What contemporary architecture needed, according to Rogers, was a "sense of history." History, which is the present's perception of the past, is always written in contemporary work. Without an architecture that engages that knowledge, people are deprived of enrichment. With an established relationship to the past, architecture can pursue a more communicative content, something that speaks to the present concerns, especially the concerns of Italian cities' histories with those ineffable qualities that tie an architecture to a place. Rogers's approach was not, however, convincing to his critics; he said one has to proceed case by case in interpreting the *preesistenze ambientali*. "We must have the courage to imprint the sign of our times and the better we are connected to tradition the better we will be also modern, and our works will harmonize with the pre-existing aspects of the environment." Given Rogers's authority in Italy, his suggestions—not Ponti's—were expounded by numerous followers.

HISTORY'S CHALLENGE TO THE MODERN MOVEMENT

Roberto Gabetti and his partner Aimaro Oreglia d'Isola were just out of school in 1953 when they undertook the commission that thrust them to the center of Rogers's international debate on modern architecture. Angelo Barrera, a well-known Torinese bibliophile, hired Gabetti and Isola to design his house, library, printing press, and rare book shop named "Bottega d'Erasmo" after the Renaissance publisher once hounded by the Inquisition. The site, immediately across from the Mole Antonelliana, had been gutted by a war bomb, and local authorities had already determined the

maximum volume to refill the plot. Gabetti and Isola designed a solidly built structure of concrete piers over which they folded a delicately calibrated facade of brick surfaces, triangular balconies, bow windows, and stone panels fastened with iron clamps. Gabetti, himself a bibliophile and prolific scholar, seems to have brought an appreciation of Piedmontese materials and building traditions to bear on their design. He admits in a 1957 article introducing their work that Turin's building traditions are on the whole not flamboyant, but he values them along with Antonelli for their municipal virtues of rationality, discipline, and modesty. However, much more than that is evoked in the Bottega facade: a medieval flavor, iron engineering, even elegant Art Nouveau styling.

The main themes of Gabetti's research revolved around the changing means of production of architecture in the modern era, histories of the profession with an awareness of refinement of material, and design against banal mercantile pressures. Gabetti and Isola's consciousness of craft and its vulnerability informs every aspect of their work, from architecture down to furniture design. In the Torinese context and the particular nature of this private commission, the results exude a precious sophistication. They have described their design procedure as an "intense and ferocious exercise." Their research "always began at the beginning, picking up at the usual starting points then altering them according to the circumstances . . . [such as] the conditions of production that could change with time and from place to place but could be quite precise for each single intervention." Thus, "we avoid all the big stumbling blocks, like utopian thinking, synthetic visions, schematic program and methodologies, to turn with a consistently friendly eye to free research that focuses on concrete problems with confidence and a bit of fun." Their sense of experiment brought out subtle secondary tensions, often left unresolved. Gabetti and Isola invite us to follow the particular complexities of the design process, decomposing and recomposing the difficulties of their facade.

The Bottega d'Erasmo was published in *Casabella-continuità* with an editorial by Rogers. Behind the Bottega's gentle facade and the epistolary style of the architects' writing lay a disquieting doubt cast

upon the tranquilizing certainties of mainstream modernism. Their return to tradition with pragmatic concreteness implicitly critiqued modernist ideology in its denial of history. Rogers's editorial makes the troubling questions clear: Can the modern movement go on? Can its original spirit of experimentation reinvigorate schemes stiffened by rote? The modern movement, he argued, is not a style but a method of continual evolution with society, just as Gothic evolved into Renaissance and Renaissance into baroque. History too should not be understood as styles but as method. The pages of Rogers's magazine became an open forum. Vittorio Gregotti quipped that what was needed was a comfortable armchair into which the disillusioned bourgeois could weep over his lost utopia. True to his word, Gregotti designed the chair, the "Cavour" armchair, in 1959, with a limp back and droopy arms that nostalgically recall Liberty style of the *belle époque*. Less generous critics labeled Gabetti and Isola's work "neo-Liberty." Certainly the term, which caught on, does not render the phenomenon. The Bottega d'Erasmo may recall specific Liberty features, from its bow windows to the preciousness of its forms, seen by some to relate to Mackintosh, and, like Art Nouveau in Italy, "neo-Liberty" spread among bourgeois industrial centers of the north and communicated private affluence.

At this point, Reyner Banham weighed in accusing Italian architects of a "retreat from the modern movement." The social responsibility and modernist consciousness in Italy, Banham said, had been sustained only by foreign relief programs and corporate publicity campaigns. Now with programs ended and campaigns waning, Italian patronage of architecture has reverted to the government and the bourgeoisie who do not have much use for "out-and-out modernism." The English critic does admit that he views Italy "from the wrong side of the Alps" and foreign observers have the tendency to project upon Italy their own aspirations, but Gabetti and Isola's eclecticism and bourgeois taste "at its queasiest and most cowardly" "call the whole status of the Modern Movement in Italy into question." This is, Banham accuses, "an infantile regression" and "the whole body of Italian modernism must share the blame."

Many rose to defend Italy's take on modernism. Paolo Portoghesi explained the progress from neo-Realism to neo-Liberty in terms of an underlying humanitarian impulse that had always rejected alienating abstraction. Bruno Zevi apologized for any gauche provincialism and put in a plug for his organic architecture. Despite the agendas of its apologists, the "neo-Liberty" phenomenon ignited a cultural rediscovery. The precariously idealistic world of modern architecture was reintegrated with vital currents of historicist thought through the risky research of young Italian architects.

After this clamorous debut, Gabetti and Isola went on to a rich career of experiment and success. They remained dedicated, like Muzio before them, to the premise of a regional cultural context, building almost exclusively in the Piedmont. Their residential complex for Olivetti in Ivrea dismantled the traditional crescent row house typology by clarifying its specific functions and reassembling the lucid whole in the rolling landscape like a berm. The architects have compared their works to gardens, meant to be strolled through. Their work is full of questions and their manner elliptical, leading to critical reflection and constructive reaction to poorly aging modernist premises.

The Bottega d'Erasmo sparked an international polemical debate, to which already others like Ignazio Gardella were quietly contributing. Gardella descended from a line of Genovese architects; his grandfather, who worked with Carlo Barabino, instilled in the younger Ignazio sound academic ways. The classic *Mediterraneità* of Terragni and the inflection of Rationalism to local conditions come through in Gardella's first built work, a 1936 medical dispensary in Alessandria in Piedmont. Gardella's postwar work abandoned the white and planar for the inflected and textured, akin to contemporaneous neo-Realism, as in the employees' housing he designed for the Borsalino company also in Alessandria. In 1954 Gardella received a commission to design a twenty-five-unit apartment building adjacent to the church of Santo Spirito on the Zattere in Venice. White parapets drip from a red facade in a rhythmic cascade down to a white base of Istrian stone on the water's edge. The full-length windows on the facade bring in views down to the water, and their ledges are specially designed to shed rain. The design has

a feeling of familiarity with its surroundings. Gardella's sense of Venice is "pictorial," he said, "made of the weave of transparencies, of atmospheres." The mimetic component is stronger here than in Gabetti and Isola, or in B.B.P.R.'s Velasca tower, with stylistic features clearly reminiscent of local vernacular.

Zevi, one of the first to review the Zattere building, claimed it evokes all the plastic and coloristic aspects of Venetian traditions without imitating a single one. Recalling the Frank Lloyd Wright hostel project, Zevi hailed Gardella's work, comparing it favorably to the arid modernist buildings like the Bauer Grünwald hotel recently erected near Saint Mark's. Gardella's approach is sensitive, conscious of the delicate nature of the historical environment. The Zattere apartments follow the Velasca tower in the issue of existing environmental conditions. Gardella has revisited Venetian architecture in an attempt to retrieve a secret character of the city by evoking the atmosphere of an imagined Venice. In a lecture delivered at Harvard in 1986, he attributed this quality in his work to a sense of "the presence of the past." History, he explained, "is not what is past, but that which is present," and architecture can make the link of history to our present. Architecture, like music and poetry, involved cultural instruments, as he called them, that cannot be confined to definitions. Gardella, like Rogers and Gabetti and Isola, avoided statements of fixed principles. Zevi explains: Gardella proceeded empirically, guided by a secure sensibility for the place. The consideration of the past is indispensable because only through the presence of the past can a work of architecture communicate effectively. With a touch of sarcasm Zevi asks: "Here, is it the modern that has infiltrated Venice or Venice that has infiltrated modern architecture to dissolve its 'principles'?"

Franco Albini was also one of the older generation of originally Rationalist architects who re-examined modernist premises. Albini graduated from the Politecnico only three years after Terragni and the Gruppo 7. He began with Ponti yet moved to Pagano at *Casabella* and worked with Persico on Triennale exhibitions. Through the 1930s, Albini realized a series of significant designs for exhibitions, furniture, and interiors that placed him firmly within the avant-garde movement. But after the war, Albini too moved from Rationalism's

7.11 Ignazio Gardella, Casa Cicogna alle Zattere, Venice, 1954–58
7.12 Franco Albini and Franca Helg, La Rinascente department store, Rome, 1957–61

abstraction and utopian ideology toward neo-Realist material craftsmanship, but Albini's career developed primarily with work on interiors. In 1951 the Genoa area superintendent of fine arts, Caterina Marcenaro, approached Albini for the interior renovations of Palazzo Bianco, the sixteenth-century palace that houses the city's Renaissance painting collection. Rejecting the idea of interiors stylized to the pictures' themes, Marcenaro sought with Albini's expertise to provide spaces that might be reduced to essentials, spaces in which the collection's selected works could shine with distinct and precise identities. Albini devised walls of luminous gray panels dividing the original stucco ceilings and dark red floors. The paintings are hung without frames on wires or placed on metal supports in the open area to define gently flowing spaces. Luigi Moretti, who had his own art gallery, remarked that Albini's spaces "ring anew in lean rhymes." Albini helped Marcenaro completely renew the art museum in Italy.

The problem of designing museums, especially if it entailed restoration work, forced a number of Italian architects to deal with history. After Albini, the B.B.P.R. took on the problem when they restored the Castello Sforzesco in Milan to house an art collection that includes Michelangelo's Rondanini *Pietà*. Far from a neutral response to the complex site, their work was intended as a "poetic exaltation," they said, of the museum as a compendium of civic history. Gardella did the same for the Villa Reale at Monza. Zevi declared that this group of Italian architects was ready to serve with humility the particularly demanding client, the work of art. Albini led this group with a masterpiece of museum design, the Tesoro di San Lorenzo in Genoa. In 1952 Marcenaro brought Albini to the archbishop of Genoa, who wanted to have an appropriate place for his cathedral's relics and liturgical objects. A church's treasury displays a small, fixed number of objects, but the designer needed to balance a sense of safekeeping with accessibility for their periodic use. The Tesoro di San Lorenzo has been fitted into the cathedral's limited property in the cloister, directly behind the church's apse under the courtyard's paving. A series of small circular chambers of stone walls with ribbed concrete vaults, entirely underground, are accessed by stairs from the sacristy. The precious

objects in illuminated glass cabinets float brilliantly in the dark, close space. The sacred values of the forms are timeless while the architect's structure and materials have remained entirely up to date.

Albini was a versatile designer, confident with any program and with any scale. He, like so many of his colleagues in the 1950s, also designed furniture. The department store chain La Rinascente, for whom he designed some wicker chairs, had acquired the Magazzini Boccioni in Rome, but the city prohibited the new owners from altering the existing structure on the Via del Corso. Instead, the company commissioned Albini in 1957 for a store on a new site on the Via Salaria near Villa Albani. City ordinances limited the volume of buildings in this area in order to keep traffic in check. An early design proposal envisioned escalators on the outside of the building and a parking lot on the roof to maximize the space for the sales floors and street-level movement. Albini's revised second version expresses floor levels with a kind of trabeation in steel members that gives the building a scale reference and emphasizes its palazzo-like form. On the piazza facade a group of windows forms a single emblematic opening that reads at a larger scale. All the mechanical ducts, for air conditioning, lighting, and fire protection, are brought down from the roof along the building's exterior, hidden in the folds of the corrugated surface of prefabricated concrete panels. The exterior walls are surfaced with a crushed red stone, and the folds form a pleated curtain wall that resembles drapery. Rationalized function and metaphorical expression are balanced in equal measure. Franca Helg, Albini's collaborator and wife, explains how they proceeded from their first Futuristic design to the second, classical one: they thought more deeply on the conditions of the environment. Rome required a dialogue "to enter its stratified history with attention that balanced two concerns: the respect for tradition on one hand and the necessity to express ourselves in a way congruent with our times on the other." The prescribed volume set their design in relation to the nineteenth-century blocks opposite, and yet Albini and Helg brought out more classical qualities with allusions in their steel structure to column orders, entablatures, and a cornice. The department store claims the dignity of the Roman tradition

without any monumentality. As Rogers put it, if the design, which he didn't entirely approve of, "loses some of its objective rigor, some of its conceptual clarity, it gains a greater wealth of vibrations." Helg, again, explains: "Tradition is the collective awareness of the continuity of the past and the present, the continuous integration of customs, ethics and culture of all times, a sort of collective recognition of permanent cultural values." She describes their process as a "patient ardent effort to reach a solution" in which constraints became incentives. The method, Rogers recognized, was rigorous but the Rationalism was loose and applied empirically, yet it led to a profound reinvention of tradition. All of Albini's work explores tradition in the most modern ways. "A chain of events," the architect clarified, "is not in itself tradition; it becomes tradition when it enters the human consciousness. . . . Tradition, as a discipline, is a safeguard against fantastical license, against the fleeting quality of fashion and the damaging errors of mediocrity." His achievements were recognized with numerous honors, including the Olivetti Prize for architecture in 1957 and the commission of Olivetti's Paris store in 1958.

Saverio Muratori also struggled against what he deemed the simplified and inefficient premises of the Rationalist movement. Muratori participated in the first wave of Italian Rationalism at the university and E42, but his projects fused Rationalism with the *Romanità* of Foschini, his teacher, and a touch of the Scandinavian architect Alvar Aalto, whom Muratori admired. After the war, Muratori designed INA-Casa's first postwar housing project in Rome, at Valco San Paolo in the outskirts behind the famous basilica. The main line of Muratori's research was the phenomenology of cities. Attentive to the failures of Rationalism in dealing with existing urban environments, Muratori studied the particular varied building types that make up the *genius loci* of Venice and Rome. A single work of architecture, he understood, can relate more effectively to its larger environment through values drawn from local tradition. The discipline imposed in accepting parameters established by the existing environment can assure a building's validity while helping to forge a greater "unity, coherence, organicity" with the city fabric. In 1952 Muratori received a commission for a public medical assistance building, ENPAS in

7.13 Saverio Muratori, ENPAS building, Bologna, 1952–57
7.14 Saverio Muratori, Democrazia Cristiana headquarters, EUR, Rome, 1955–58

Bologna. He designed a thin tower along the street with the public waiting rooms and pharmacy on the ground floor behind. Its structure of reinforced concrete is largely covered in red brick for an overall unified effect, but the compositional rhythms of its vertical supports and attenuated window elements emerge from the sidewalk portico to its spiky roofline. Many features recall a Bolognese tradition Alfonso Rubbiani would recognize. In Muratori's words, the design has "achieved an evident unity entirely new and typically Bolognese without relinquishing a rigorous use of modern materials." The ENPAS building does not, however, reflect the design qualities of the immediate surroundings, a late-nineteenth-century area off the Via dell'Indipendenza; rather, the architect echoed an emblematic mythic medieval Bologna. It "encounters the old city," he explained, "that is the real essence of the city, expressed substantially in its unity and continuity (and not in a pictorial detail of nineteenth-century ambiguities)." Its volume, construction methods, and materials share "a vibration, an environmental resonance, stimulating a cohesion through its fundamental rapport with the urban setting."

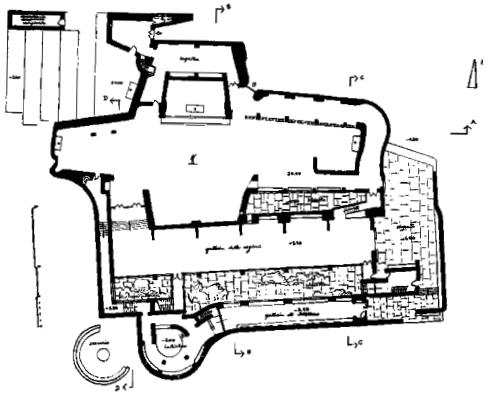
Muratori brought his ideas to Rome in a 1955 competition for the headquarters of the Christian Democrat majority party to be built on a plot in EUR, the old E42. Vittorio Ballio-Morpurgo, the head of the party's building commission, could not convince Muratori to team up with the competition runner-up, Adalberto Libera, so he was given the project outright. Muratori's initial Gothic structure of a building mushrooming off a single central stalk was modified to take on more relevant local characteristics. The architect cited Michelangelo's Capitoline palaces as akin to his clarity of structural systems. Golden Roman bricks, the building's blocky form and internal courtyard, and suggestions of pediments over *piano nobile* windows bring to mind the Palazzo Farnese. Both pick up a prevalent civic tradition in the Roman palazzo building type. Muratori said of his buildings that they carried the mark of his decade's experience in re-examining history. Muratori puts history to work, playing into contemporary architecture by using the specific characteristics of a place to establish a connection between the contemporary and the classic.

Collectively, Gabetti and Isola, Gardella, Albini, and Muratori raised important questions for Italian architects on the validity of the modern movement in their cultural context. The consciousness of history posed a decisive challenge to the commonly held principles of International Style Rationalism, yet none of their proposals were entirely convincing to Rogers, whose commendation seemed paramount. Rogers, whose widely recognized authoritative role in postwar architecture paralleled Piacentini's for the earlier generation, could not control the field as his Fascist predecessor had, and Italian architecture plunged into a kind of existential crisis.

GIOVANNI MICHELUCCI'S SACRED ARCHITECTURE

Of all the personal histories of doubt-ridden postwar architects Giovanni Michelucci's is most poignant. His career spans the first half of the twentieth century, from the Liberty style of his family's bronze foundry in Pistoia and the thrill of Futurism, the certainties of Rationalism and on to reconstruction and recovery in war-torn Florence. The architect's existential crisis is understandable. Gio Ponti called Michelucci "the most admirably, the most nobly unhappy architect of us all." Michelucci turned, like Giovanni Muzio in his old age, to sacred architecture, realizing six churches in twelve years, the "exertions of consciousness" of a seventy-year-old man with an irresistible "will to recount discouragements and new hopes," as he expressed himself in a letter to Luigi Figini. While Pope John XXIII's pastoral voice guided the church through a troubled period of the Cold War, Michelucci followed his inner voice toward new goals for modern architecture. "Many things at first obscure cleared up for me or appeared to me anew. It's because at my age I feel the surprise of discovery and the desire to understand what I have discovered . . . and to exalt it in praises to life and everything both connected and related to it practically, and above all, morally and spiritually."

The Church of San Giovanni Battista is a memorial church designed by Michelucci and dedicated to the workers who died on the



7.15–7.18 Giovanni Michelucci, Church of San Giovanni Battista/"Chiesa dell'Autostrada," near Florence, 1960–64

construction of the nation's highways. It is situated halfway between Rome and Milan along the A1, also known as the Autostrada del Sole, at Campi Bisenzio outside Florence. The church had already been commissioned of a mediocre designer, the engineer Lamberto Stoppa, and the foundations were under way when in 1960 Stoppa's model was presented to the pope. Its kitschy effect was lampooned by the popular press, who dubbed it "la chiesa dell'autostrada." The pontifical commission recommended that Michelucci revamp the project. Michelucci was required to use Stoppa's foundations and accommodate the previously commissioned reliefs, stained-glass windows, and liturgical furniture in his new design.

His many small models in clay, plaster, and cast bronze freely explore a dynamic interplay of exterior volume and interior space. They capture the sense of external forces that can be caught within the form, like a Futurist sculpture by Boccioni. Michelucci acknowledged that he was interested not in pure construction but in rupture and change, something thought-provoking even if it lacked a kind of perfection or completion. The forms pick up the qualities of the environment, the lines of the highway or the distant Tuscan hills, and elevate them into a full-scale environmental gesture. The suggestion of a billowing sailcloth held down by tielines expands upon the initial idea of external forces working inward. All these suggestive spatial forms were explored in models and drawings before Michelucci started to think of its material. A metal roof-sail was considered but Michelucci opted for less expensive concrete, which was cast in place. The roof is covered in oxidized copper, the perimeter walls in golden stone from Pisa. The prevailing textures and colors and the surrounding grove of olive trees give the building an unmistakable Tuscan feeling. The visitor enters Michelucci's church through gentle folds of the perimeter edges and into a narthex that wraps around to the left, turning the orientation of the interior space 90 degrees. Here, the reliefs that represent the cities through which the A1 passes are laid out along the route as one moves through the interior space. The procession spirals as the inner space rises up under the tent. Michelucci had to eliminate his original idea for a walkway that climbed the roof ridge outside to the cross at the peak, but the suggestion of a Via

Crucis for the modern pilgrim, is still clearly suggested. Gio Ponti remarked, as all observers have, that Michelucci's metaphoric images have brought to life a biblical landscape without resorting to mimicry. Metaphoric suggestions continue throughout the building. The engineering of the lofty concrete structures could not be managed by the available canons of calculation and Michelucci insisted on following the construction at every step, guiding, discovering, and transforming the pylons in a perpetual metamorphosis. Hundreds of his sketches fuse ideas of gnarled tree trunks, skulls, tents, and crucifix-like forms that synthesize symbolic figuralism, structural invention, and free spatial configuration. Michelucci attributes the multiple interpretations of these flaring forms to the contributions of all the workmen on the project who devoted their diverse hopes, doubts, and contradictions of human experience. Inside, all the metaphors combine to create a new mysterious vision of an ineffable space. Michelucci's passion materializes in an anguished and ultimately transcendental experience.

Michelucci's radical late work bears similarities to a precedent of passionate expressionism by another modern master, Le Corbusier, especially his church at Ronchamp of ten years earlier, which Michelucci knew and sketched from photographs. Both Le Corbusier and Michelucci broke decisively from traditional church architecture for a deep meditation on the meaning of sacred space, and both sought a way out of the confines of earlier Rationalism they championed. Inaugurated in 1964, the Chiesa dell'Autostrada was welcomed by a vast public as an architectural event of considerable visibility and notoriety. Paolo Portoghesi was horrified by its violence; the images of desiccated trees "suggests a sense of desolated lament, of horror, like the hard and dry tongues of the open mouths of figures in Picasso's *Guernica*." Michelucci was well aware of the ambiguity of his expressions, recounting the reactions of a young visitor ("the church is perfect but it's also terrifying") and an elderly visitor ("I don't understand how through the drama of these forms I feel a great serenity and a certainty"). Michelucci confessed that he found it impossible to talk of the pure beauty of steel and crystals, as architects dressed in white lab coats used to do; since the explosion of the atom

7.19 and 7.20 Giovanni Michelucci, Church of San Giovanni Battista/"Chiesa dell'Autostrada," near Florence, 1960–64

bomb he could not bring himself nor wish us to return to inhuman glass cubes and steel tubes. For Michelucci, architecture needed to go beyond rational limits with the help of fantasy to explore the intimacy of human experience. Michelucci defied all the mortifying formulas and stylizations that made contemporary architecture, like Stoppa's, utterly banal. His response was a challenge, crude and unpolished, provocative and unsettling. "This is what counts in my opinion," Michelucci declared, "that the architecture take you by the hand and accompany you in discovering something of yourself with all the uncertainties, the incongruities, the failings of which we are compounded and that it bring us to judge the substance of our spirituality. . . or our humanity."

PIER LUIGI NERVI'S ENGINEERING SOLUTIONS FOR ARCHITECTURE

Pier Luigi Nervi also confronted the crisis of modern architecture with a surge of creative intuition. Nervi was a civil engineer by training whose extensive practical experience instilled in him the habit of always searching for the most economical solutions. Establishing his own firm with Alfonso Nebbiosi, his first major work in 1929 was a stadium for 35,000 spectators for Florence. They won the competition purely on cost efficiency, but the design also had aesthetic appeal. Michelucci, Piacentini's magazine, and others praised the work for its wise use of reinforced concrete and as a bold work of engineering that is also beautiful architecture.

Nervi went on to collaborate as a structural engineer with many of the top architects of his day. Giuseppe Pagano recognized that Nervi, although indifferent to their intellectual discourse, had arrived at a true Rationalism. Rogers also begrudged Nervi his agnosticism regarding aesthetic issues for the authority of his material production. They all agreed with Nervi when he said that "a revealed structure can provide the greatest effect of beauty and can be real architecture." The engineer never talked politics. In 1945 he safely ventured a comment on how

frightening the influence of rhetoric had been on Mazzoni's now halted Stazione Termini with its "insincerity and exaltation of purely formal values." Nervi, on the other hand, had been building several hangars on the Tuscan plains for the regime's air force. Wartime restrictions encouraged a reduction of material (especially the steel needed for reinforcing concrete), an increase in use of manual labor, and the development of prefabrication methods. The results in Nervi's hangars, which were destroyed by German troops at the end of the war, were the dramatic opposite of Mazzoni's work. Slender triangular-edged elements spanned areas 50 by 100 meters in a light, thinly covered geodesic framework. Nervi noted that methods of construction had to take into consideration the realities of local technical capabilities.

Immediately after the war, Nervi applied his knowledge to the design of permanent expo pavilions in Turin with roof spans of up to 100 meters. The hiatus of the mid-1940s was for Nervi a period of vital experimentation. His experience at the stadiums showed him the inherent formal limitations of pouring concrete in wooden forms, so Nervi explored the possibility of fusing membrane covering and structural network into one cohesive building element. Following his instinct of material reduction, he developed the idea of spraying semi-liquid cement on wire mesh, which he called *ferrocemento*: lightweight, very thin, resistant plates formed into any desired shape on reusable molds. Stiffening ridges could also be incorporated. The Gatti wool factory, built outside Rome in 1953, convincingly demonstrated the ferrocement system. A reusable 5-by-5-meter mold was wheeled through the site at the height of the concrete piers. From pier to pier, ribs trace the lines of force within the material for extra support. "The design of the ribs adheres perfectly to static necessity and achieves considerable aesthetic expression. . . . The result of the ribs disposed in this way," Nervi said, "is a clear reference to the mysterious affinities that can be found between the laws of physics and our senses."

Nervi the engineer was concerned about the state of contemporary architecture because of the rift between rational calculation and artistic intuition, two forces that great architects of the past like Brunelleschi had held in equilibrium. The masterpieces Nervi admired from history—Brunelleschi's dome, Gothic cathedrals, Greek

7.21 Pier Luigi Nervi, Airplane hangar, Torre del Lago, under construction in 1940 (demolished 1944)
7.22 Pier Luigi Nervi, Gatti wool factory, Rome, 1953

temples—were, he recognized, all constructions conceived with the most advanced technology of their times. Although we have a tendency to classify these works by stylistic terms, their real meanings, Nervi maintained, lay in their structural achievements and their satisfaction of specific functional requirements. Because contemporary structural technologies were more complicated, an architect needed to synthesize basic structural concepts to keep his intuition within the parameters of the buildable. Nervi's writings constantly reiterate the tenets of correct building: fulfillment of functional requirements, stability of structure, durability of materials, and balance of costs. "Building correctly is synonymous with truth to function, technique and economy and is the necessary and sufficient condition for satisfactory aesthetic results." Gio Ponti, the master of style and Nervi's collaborator on the Pirelli tower, praised Nervi's work because it achieves immediate beauty through the universality of its essentials. Like all the architects of the period except Moretti, Nervi inveighed against formalism, the "imitation of external appearances without deep reasoning," that often resulted in structural exhibitionism and vulgarity.

Coverage of Nervi's works in English-language publications in the 1950s created a demand for his expertise abroad in the 1960s. He taught at Harvard, built for the Port Authority of New York, and engineered structures for Luigi Moretti in Montreal and Pietro Belluschi in San Francisco. As with other designers like Moretti and Ponti who ignored current ideology, Nervi's international fame was irksome to his compatriots. Nervi's involvement in the Rome Olympics, while providing the opportunity to design some of his most acclaimed buildings, also compromised his reputation among his more politically minded critics both for the nature of the designs and the commission. Rome's city council won its bid to host the 1960 Olympic games and the Fascist-era sports facilities at the Foro Italico were finally put to their intended use, along with other structures added to EUR. In collaboration with Annibale Vitellozzi, Nervi designed the Palazzetto dello Sport, a covered arena for five thousand spectators. Its domed structure is made of diamond-shaped plates of ferrocement and seems as light as a handkerchief, tied down rather than supported by its Y-shaped buttresses. Light slips in around the

entire perimeter and illuminates the low dome from below, inverting the experience of mass and light in the Pantheon model. At EUR, the larger Palazzo dello Sport for sixteen thousand was erected, greater in span and more complicated in structure and wrapped with a steel-and-glass facade designed in collaboration with Marcello Piacentini. The design of these works and the association with the old architects accentuated an essential classical underpinning. His plans, for example, have a conventional geometry that evokes the spatial articulation of ancient buildings—forum grids in his factories, Pantheonic circles in the Olympic domes, basilican halls for his vaulted expo centers—but they never carry the rhetorical classicism of Fascist *Romanità*. Giuseppe Vaccaro, who built widely under the regime, recognized Nervi's acute skills with ancient models. There was something antique yet modern. Others have noted, however, that without design collaborators Nervi's structures would not have achieved architectural resonance.

Nervi was evidently sensitive to the problem of architectural expression when, late in his career in 1963, he took on a Vatican commission. The 1963 Vatican Council on religious reform effected some significant changes with regard to religious practice, which of course affected religious space. The council directed that the Catholic priest face the faithful while officiating at the altar, that he speak in the local tongue, not Latin, for direct connection and effective participation. In an address to church authorities, Nervi elaborated on the implications of the council's reforms on architecture. Building churches is a modern architect's most challenging problem because the tasks go beyond the fixed material principles of function, stability, and economy into immaterial functions of inspiring spirituality, the only poetic context that Nervi admitted for his architecture. Many contemporary works, in Nervi's opinion, lacked a spiritual dimension felt, for example, in the Gothic cathedrals because the industrial process has squelched any spiritual investment of their builders, and may in worst cases lack even a morality of construction principles. Ideally, churches should reflect their builders' investment; have well-planned sightlines, lighting, and acoustics; be comprehensible; and, like Gothic cathedrals, employ the latest technologies. Cardinal Giovanni Battista Montini, just before

7.23 Pier Luigi Nervi, Aula delle Udienze Pontificie Paolo VI/"Sala Nervi," Vatican, Rome, 1963–71
7.24 Mario Fiorentino and others, Corviale housing complex, Rome, 1973–77

his election as Pope Paul VI in 1963, commissioned Nervi for a large public space in which papal audiences could be held for the growing masses of jet-age pilgrims. The site for a hall to seat nine thousand was carved out within Vatican City next to Marchionni's sacristy. Nervi rejected traditional church plans for functional reasons of sightlines and acoustics, using a fan-shaped plan. The underside of the vault surface is perforated and corrugated. The perforations let light filter in while the folds hide lighting and ventilation ducts and control acoustic reverberation. The floor is gently concave to provide an unobstructed view from every seat, and sightlines follow the vault's forty-one ribs as they converge toward the papal throne. The space encourages any number of possible symbolic readings: a celestial protection over a valley, a bridge between pontiff and his people. Nervi approached issues of architecture through intelligent engineering solutions, successfully uniting Rationalism and intuition, reason and emotion, as Alessandro Antonelli had united classic and Gothic qualities in the nineteenth century for remarkably transcendent results. When material issues are resolved sincerely, spiritual aspects inevitably result. For the cause of modern architecture in Italy, Nervi, as Ponti noted, had a "prophetic intuition of invisible physical realities."

1960s URBANISM AND MEGASTRUCTURES

Like all cities that host the Olympic Games, Rome used the occasion in 1960 to reinforce its permanent facilities and urban infrastructure. The 1,350 apartment units that housed the athletes, designed by a team including Adalberto Libera and Luigi Moretti, were used after the games as low-income housing. Major traffic routes, like Armando Brasini's bridge, were amplified with an elevated highway viaduct through the Olympic Village. Politicians also used the Olympics to boost the image of Rome (and detractors exposed their underlying economic interests). For the same reasons that Mayor Ernesto Nathan had turned down the idea of hosting the Olympics of 1908—

encouraging real-estate speculation—Mayor Salvatore Rebecchini of the Christian Democrat party accepted. Neither the coincidence of the Olympic Games with the nation's centennial nor the opportunity to re-evaluate the overall urban plan for Rome elicited any interest in the ruling local government. The two sites chosen for the games, Foro Italico and EUR, not only brought back to life images of the Fascist regime, but required the longest and most costly highways to link them. Two were built, running north-south at either edge of the city, and stimulated real-estate development all along their routes. The continuing effectiveness of Rome's 1931 urban plan was one of the most lasting elements of the Fascist era. It was in effect until 1965 for several reasons—bureaucratic expedience, economic favoritism, general lassitude of local administration bordering on criminal negligence—all denounced by the era's most vociferous critic, Italo Insolera. Destruction of the historic center continued according to Fascist plans until citizens' groups rose up in protest to block them.

The population of Rome had grown tenfold in one hundred years, fueling a building boom, especially for apartment blocks for the middle class. Enormous fortunes were made, and cities like Rome fell prey to uncontrolled growth. Besides Moretti's Casa del Girasole, the neighborhood of Parioli remains ungraced by interesting architecture, while its erstwhile garden city plan became saturated with bulky buildings. The Società Generale Immobiliare with Moretti as staff architect was responsible, with investment from the Vatican, for a great amount of the voracious construction. Other fine architects participated in another pervasive form of the city's exploitation: designing additional floors on top of existing structures.

The private sector could not be denied. It outpaced any government efforts, such as INA-Casa, in supplying jobs and producing homes. Neo-Realist craft turned out to be ineffective against the economic pressures of industrial standardization, although on the whole Italian building technology remained at an unsophisticated level. The Tiburtino experiment is today engulfed by high-density blocks so congested that parked cars clog every public space, sidewalks and traffic medians included. Public space along Via Tiburtina does not exist. The idea of a city, Insolera notes, is simulated

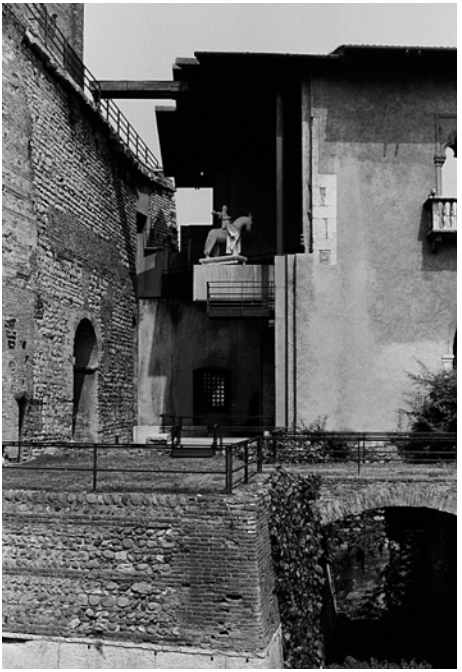
there only in consumerist symbols of shops. Real-estate speculators exploited the suburban areas without the slightest hindrance from local authorities. In twenty years of aggressive building of the Roman periphery, they erased from the city any memory of the urban intelligence of Sixtus V, Viviani, or even Mussolini, as well as any public pride of collective space. The desolate modern landscape of Rome's new slums was the background for neo-realist films, most notably those by Antonioni and Fellini. The architects had utterly lost the battle. Their city—Rome and a hundred others—was sieged and sacked. Michele Valori, in an article typical of the period, characterized the drama of contemporary urbanism as "the cruelest finale in which not only do all the characters die, but the theater itself collapses burying everyone present in a pile of rubble."

Architects and urbanists retreated to rarefied visions of radical utopias. Ludovico Quaroni, for example, would have resolved the urban expansion of Rome or Milan, even Siena, with single colossal projects to focus the city around new forceful lines. They used the terms *megastruttura* and *centro direzionale*. These enormous, vacuous gestures reveal the misery of Le Corbusier's outdated offspring in Italy. Rome has an example: Corviale, a government-financed housing project begun in 1973. Twelve hundred apartments are set in a single linear concrete megastructure, one kilometer long, placed at the western edge of Rome like a battlement wall to hold back the unruly city. Mario Fiorentino led the large design team of architects and engineers that included Michele Valori and others who were on the Tiburtino team. The dream that began in the immediate postwar at Tiburtino has its nightmarish end at Corviale. It stands guard as the confusion of the city continues to ooze toward it. The horizon of Italian architecture was in the 1960s bleak.

CARLO SCARPA

Carlo Scarpa was not a certified architect, but he, like Antonio Canova before him, intervened in the culture of architecture at a critical moment to propose highly personal but powerful work. He studied fine arts before the educational reforms in his native Venice and stayed there teaching industrial design and collaborating with the glassmakers of Murano. In 1931 Scarpa joined the local MIAR chapter and signed a curious declaration that read: "He will be a great artist who employing reinforced concrete and applying it to the needs and rational goals of a building will know how to introduce the spiritual and fantastical element making of it then an artistic expression." Without an architect's license, Scarpa worked principally redoing interiors and with Persico's critical encouragement excelled in exhibition design. Continuing after the war with innovative gallery installations for shows of the paintings of Paul Klee at the Venice Biennale of 1948, of Antonello da Messina in 1953, Mondrian in 1956, and an exhibition of Frank Lloyd Wright's drawings in 1960, his settings were said to engage the exhibited art's innate qualities in a subtle dialogue. And the exhibited artworks in turn enhanced Scarpa's personal design development. Wright was Scarpa's most important source of inspiration without, however, ever entirely consuming him. Scarpa followed Wright's career only through Zevi's Italian publications until 1967, when Scarpa made his first visit to the United States.

Success in exhibition design introduced Scarpa to the circle of museum curators and opportunities for some permanent installations. After the Messina show, Giorgio Vigni, superintendent in Palermo, had Scarpa rebuild the interiors of Palazzo Abatellis as the regional painting gallery. Vittorio Moschini in Venice employed Scarpa for new rooms for the Accademia and for the Museo Correr inside the Ala Napoleonica. Moschini also sent Scarpa to Possagno to design an addition to Canova's Gipsoteca. Scarpa's white walls with glazed junctures slip away from the side of the nineteenth-century exhibition building to create an abstract world in which the plaster figures float in the bright light on thin supports. Following on Albini's innovations in Genoa, Scarpa continued the revivification of Italian museum design.



7.25 Carlo Scarpa, Gipsoteca Canoviana addition, Possagno, 1956–57
7.26 Carlo Scarpa, Museo del Castelvecchio, Verona, 1958–64

He was invited on a collaborative consultation with Ignazio Gardella and Giovanni Michelucci for new rooms in the Uffizi in Florence. Scarpa's growing success, however, brought on the ire of jealous architects who reported him in 1954 for unlicensed practice. Adriano Olivetti came to Scarpa's support by awarding him that year's coveted prize for architecture and the commission of the new Olivetti showroom in Venice. Olivetti did not have a vending license for the rented space on St. Mark's Square, so he asked Scarpa not for a store but a "calling card." Scarpa said he liked the constraints of working in such a tight and historic place. The design is contemporaneous with his work at Possagno but the materials are far richer: marble, mahogany, mosaic, bronze. The ingenuity and delicacy of the design solutions are Oriental while the richness is Byzantine, relating to some of the designer's favorite Venetian qualities.

Scarpa preferred projects that involved long-term collaborations and slow gestation. The invitation from Licisco Magagnato, director of the Castelvecchio, the civic museum at Verona, proved particularly fruitful. The Castelvecchio, built by the fourteenth-century Scala lords, functioned as a stronghold through French, Austrian, and Italian rule until it was converted in 1926 into a museum with some neo-medieval restorations. Magagnato first hired Scarpa for a temporary art exhibition, then extended the engagement to redesign the ground floor sculpture galleries and eventually to restructure the entire castle. They proceeded in successive steps of peeling back and opening up the stratified site with selective demolitions by which the castle's history was revealed and, in a word, curated. Scarpa's drawings demonstrate an unhurried design process that evolved in often unpremeditated directions. The exhibited pieces, their number much reduced from the earlier displays, were placed in relation to the natural light and in freer, more open spaces that suggest no fixed or principal view. Instead, visitors experience a relaxed circuit of looking, shifting, and meditating. As Magagnato has explained it, the sculptures and paintings are grouped in ways to draw out the movement of each work and to encourage our movement around them. He compared the technique to the cinematographic experience. "Scarpa has brought out the points of friction and conflict between the different phases of

construction and transformation . . . to show the traces of these events in their expressive articulations especially in the nexus, the placement of the equestrian statue of Cangrande, . . . pivot of the whole system." The last bay of the construction was peeled back and dug down, and the Cangrande della Scala statue was given back some of its original spatial rapport placed high up and exhibited in the outdoors. The visitor passes below and later back across on cantilevered bridges offering a variety of views.

The secrets of Scarpa's work lie in the details. His materials are never neutral and the seams between his new fabric and the old are conspicuously revealed. Floor surfaces pull away from the walls, steel beams project beyond the roof crest, marble slab steps cantilever over the ground. Scarpa's joints are indeed voids, margins across which the intrinsic differences between epochs are made evident. The new is another clearly deposited layer on the existing stratification, both in mutually advantageous juxtaposition. "If there are some original parts," wrote the designer, "they should be conserved; any other intervention has to be designed and thought through in a new manner. You can't say 'I am modern—I'll use steel and glass' when wood or even more modest material could be better. How can you assert these things if you're not sensitized? Sensitized, as Foscolo said, to 'histories,' that is to a vast knowledge?" The museum at Castelvecchio is a paradigmatic museum experience where conservation of the past meets creation of the present in vibrant, dialectical exchange.

When the cofounder of the Brion-Vega electronics company, Giuseppe Brion, died, his widow hired, in the spirit that made her husband's company famous, a challenging contemporary designer for his mausoleum. Scarpa was commissioned for the project in Brion's hometown cemetery at San Vito d'Altivole, not within the drab early-nineteenth-century communal precinct, but on a large area wrapped around the back. The program included a small chapel, a shrine for the Brion clan, lawns, pools, and an entrance pavilion. As in all his projects, Scarpa began by developing design ideas in drawings that overlap plan, elevation, and section, working out details in the margins, thinking of material, color, even plantings and human presence, cultivating all the elements simultaneously in real terms. Scarpa drew to visualize his

solutions. "Things come to me slowly." His drawings are not representations of finished ideas; his trusting clients did not require them. They are maps of mental processes. "I never finish my works," he said. Scarpa worked closely with his craftsmen to construct the wooden forms for the poured concrete, and their intricacy and the imprint of the wood grain suggest fine Oriental boxes. On the tombs, marble, granite, mahogany, bronze, intarsia, gold paint, alabaster, and mosaic are used scrupulously, in sharp contrast to the maudlin decorated stones in the common burial ground. Over the tombs, Scarpa conceived a structure he called the *arcosolium,* referring to early Christian burial forms. It revisits the analogy of a closing slab in the Fosse Ardeatine and evokes a rising wing, a wind-filled canopy, a protective hull, two gondolas under a bridge. The *arcosolium* is only one in the series of poetic fragments Scarpa orchestrated here; each element in this spatial collage contributes to further meditation. "The place for the dead is a garden," so unlike the typical Napoleonic graveyards, "which are awful!" said Scarpa. "I had what I consider a rather socially minded idea: a place that belongs to everyone, where children could play, for example. I would go there when I lived in Asolo nearby. It's a place of meditation: peaceful, pagan if you will, very beautiful. I mean you enjoy being there." The Brion tomb is a walled garden, individual, Islamic, Venetian, and Japanese in equal measures, yet there is no overall harmony or single point of view evident. There reigns a shifting uneasiness and a feeling that Scarpa's architecture cannot be easily read. It has a dense symbolism, but its meaning remains obscure. We have come full circle from the certain Rationalism of B.B.P.R.'s memorial to a meditation on death's uncertainties, accepting the impossibility of shaping life according to rational values.

During the construction of the Brion project, Scarpa accidentally fell into an excavated pit and broke seven ribs. Traveling later in Japan, he died expectedly due to complications from the fall. He was buried in a nook back in the Brion complex, signing his most complex work with his presence. Scarpa had remained throughout his career distant from the radical discourses of late modern architecture, working alone or with his son Tobia in Asolo or Vicenza. He disavowed, even scorned, the intellectualizing debates on architecture, retreating in his obsession with

artificial crafts and emotive subjectivity. "We have no certainties," Scarpa said. "Everything is a matter of opinion as the great confusion around architecture today proves." The masters of modernity were dead; Louis Kahn was the last one, Scarpa lamented. When asked if architecture could be poetry, Scarpa responded that Wright thought so, yes, but poetry is not an everyday thing. Like music, it can be difficult to understand. "I have tried to put some poetic imagination into it, though not in order to create poetic architecture, but to make a certain kind of architecture that can emanate a sense of formal poetry." Elsewhere he remarked, "I'm not sure if the young feel these things but it doesn't matter; if the architecture is good, whoever listens to it and looks at it feels its benefits without realizing it. The environment educates in a critical way."

Venice, the greatest challenge to modern architects, is the locus of Scarpa's world. Like many of his period, Scarpa was fiercely provincial and he takes the issue of the dialog with his native environment further than his colleagues did. Scarpa was the living descendant of an unmistakable Venetian genealogy in his choice of materials and in his suggestion of the atemporal, nonindustrial, delicate, and intimate. Mario Ridolfi said: "It is surprising how this refined colleague succeeded in attuning himself to his city and understanding the 'measure' of Venetian architecture, so rich in delicate passages and subtleties where material presence fuses with the pictorial without precise boundaries." Scarpa's Venice is a place where things of different ages, scales, materials, and styles work together in an assemblage of poetic language of memory and metaphor. "I think that Venice, more than any other Italian city could accommodate the modern expression," Scarpa said boldly, "because of certain of its asymmetries—its very varied skyline with high and low buildings, its broad and narrow streets. And it has very beautiful interior spaces. So if it would be possible to preserve things of this type in the historic fabric, there would be no fear of spoiling the city, so long as designs were carried out in a manner . . . worthy of it."

"I want to confess," he wrote, "that I would really like it if a critic might discover in my work the intentions that I have always had: an enormous desire to be inside tradition." Scarpa faced the existential crisis of modern architecture with a reconciliation with tradition and

all the psychic forces of context, material, and memory. Louis Kahn's admiration of Scarpa inspired him to write a poem:

> In the work of Carlo Scarpa
> "Beauty"
> the first sense
> Art
> the first word
> Then Wonder
> Then the inner realization of "Form"
> the sense of the wholeness of inseparable elements
> Design consults Nature
> to give presence to the elements.
> A work of art makes manifest the wholeness of "Form"
> the symphony of the selected shapes of the elements
> In the elements
> the joint inspires ornament, its celebration.
> The detail is the adoration of Nature.

8.1 Student occupation of the University of Rome, March 1968

Chapter 8

ITALIAN ARCHITECTURE FOR THE NEXT MILLENNIUM, 1968–2000

The architectural situation by the end of the 1960s in Italy was on the whole rather calamitous. Architecture's relation to vital social issues, to economic progress, and to political power had gradually eroded and a grave crisis came over the profession. Student revolts were only the most obvious signs. Architecture faculties around the country were hotbeds of academic sedition, and the 14th Milan Triennale of 1968 was a riotous event. Archizoom and Superstudio, for example, experimental student groups formed in 1966, produced their absurd objects and vacuous vistas of "negative utopias" in cynical intellectual provocation against a society that no longer cared for architects. The separation of architects from their former roles in governing policies, high-level patronage, even popular credibility left them in an increasingly sterile world. A trenchant pursuit of an intellectual autonomy of architectural thought did not, by most accounts, help to mitigate a bleak reality in the practice of building in the 1970s and 1980s.

Architecture schools did not help to foster research and renewal. Many of the architects working today in Italy were trained by professors appointed during the Fascist regime. Furthermore, it is the norm that aging professors construct baronial fiefdoms of intellectual property; this has contributed to a highly fragmented sense of architectural culture as their students are drafted in long-entrenched ideological battles. The successful architect in contemporary Italy is more often than not one who has forged a highly distinctive and individual path. The individuals treated in this chapter on contemporary architecture in Italy are by nature very different from each other and can only loosely be understood as representing a direction of Italian architecture today. The postwar period had produced individual masterpieces and many lone geniuses, and yet these accomplishments

passed on to the next generation a disconcerting sense of incoherence. The contemporary scene is often summarized as one of "pluralism," but this may merely reflect our inability to codify recent events.

AFTER MODERNISM: ALDO ROSSI, GINO VALLE, PAOLO PORTOGHESI, AND MARIO BOTTA

The rational language of modernism lost its authority in Italy in the 1960s when less rational reference points for the design process, like historical memory, offered alternatives. Examples of four "postmodern" architects—Aldo Rossi, Gino Valle, Paolo Portoghesi, and Mario Botta—demonstrate how the Italian historicist challenge to modernism was carried forward.

Aldo Rossi graduated from the Milan Politecnico in 1959 among a group called *i giovani delle colonne* (the column kids) by their mentors Ernesto Rogers and Ignazio Gardella. During the years of building boom and urban sprawl, Rossi navigated between Rationalism and historicism in pursuit of a continuity with the historical urban context. He investigated a variety of subjects in architectural history: Enlightenment architecture, Milanese neoclassicism, Alessandro Antonelli, Adolf Loos, Soviet architecture. In each he tried to find the relationship between theoretical reflection and architectural practice, and his earliest projects, monuments for partisan resistance fighters, for example, reflect the rediscovery of the fundamental values of geometry. Rossi's publication *Architettura della città,* of 1966, was the culmination of his initial research and the foundation of his semiotic interpretation of buildings as urban artifacts. He desired an architecture that came from the old city, an architecture *of* the city. He investigated the city's finite parts, its individual buildings, each invested with a distinct character. By architecture, he said, "I mean not only the visible image of the city and the sum of its different architectures, but architecture as construction, the construction of the city over time."

Rossi was invited to contribute his ideas in a private housing development in Milan. Carlo Aymonino, who had been on the Tiburtino team, was now designing megastructures, and he asked

8.2 Aldo Rossi, Gallaratese 2 housing complex, Milan, 1967–72
8.3 Aldo Rossi, Teatro del Mondo, Venice, 1980

Rossi to contribute to the hinged geometries of his complex at Gallaratese. In contrast to Aymonino's eclectic, rust-colored contraption and to the other abstract blocks going up in the area, Rossi proposed a building with a continuous external corridor, or *ballatoio*—a building form as recognizable to Italians as town houses are to the English. "I think that this choice of typology at the beginning of the design process is very important," he wrote. "A lot of architecture is ugly because it cannot be traced to a clear choice; without one, it is left deprived of meaning." Rossi makes his allusions without any stylistic ornament such as balusters, moldings, or pediments. His association is made with basic parts—windows, wall, pier support—distilled to elemental geometries. All these elements were already present in Aymonino's eclectic work; Rossi isolated them, purified them, and made them legible. His apparently simple architecture elicits recollections of archetypes, be they vernacular, classical, or even industrial in origin. Rossi's building actually looks like something people live in. The success of Rossi's first major project lay in his ability to hone recognizable archetypes that describe the building's precise character. Today's proud owners keep Rossi's wing in pristine condition while the rest of Gallaratese rusts.

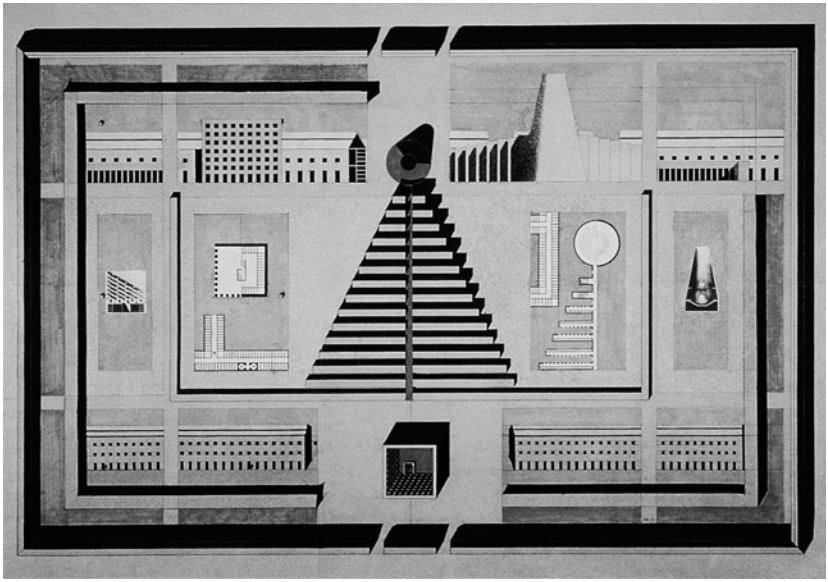
Rossi's catalog of primary forms includes cubes, cylinders, and triangles, square-cut openings and cone-shaped tops. Two elementary schools he designed for the small towns Fagnano Olona and Broni, near Padua, employ these simple forms and suggest a nostalgic innocence. Rossi aligns or stacks these forms, but he never fuses or distorts them. They appear like a surrealist collage of found objects in which ordinary forms, divested of meaning and reconnected in new ways, take on sharp clarity. Vincent Scully identified this as Rossi's greatest gift: "It enables his eyes to focus upon the non-rational life of objects that may be said to go on inside the brain of man but is not identical with his reason." Critics relate Rossi's work to the melancholic spaces of Giorgio de Chirico, but Rossi never endorsed the connection; he seems to have preferred the film fantasies of Fellini. The architect's prolific graphic production—in drawings, engravings, collages, oil paintings, and Polaroid snapshots—enriched his research as effectively as his earlier writings. What at first appears unusually clear, even schematic, in his work turns out to be a

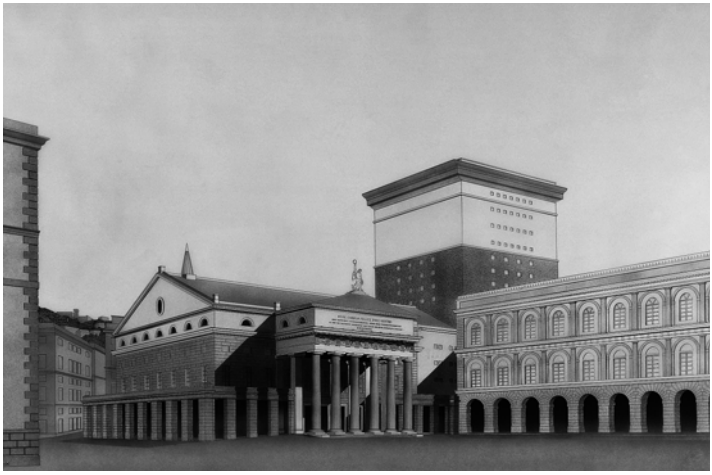
complex play between rigor and fantasy. Rossi's architectural forms derive from his manner of looking at everyday objects. "Perhaps the most important formal education I had was the observation of things; then, observation was transformed into a memory of those things. Now I seem to see them all arranged like tools in a neat row. . . . But this catalog, lying somewhere between imagination and memory, is not neutral; it always reappears in several objects and constitutes their deformation and, in some way, their evolution."

Rossi's objects are often autobiographical (seaside bathing cabins, the Florence baptistry) and recollected as emotional nuclei, akin to the neo-realist films he admired in which simple objects—a lamp, a bowl of soup, a coffeepot—are depicted as elements in a voluptuous landscape. On the occasion of the 1980 Venice Biennale, Rossi fabricated a little theater on a barge with touchingly simple forms that reference a baptistry, a lighthouse, a temple, and a circus tent. It seemed at home wherever it floated, but the clarity of its architectonic values and the richness of its appropriations described the gulf between the desires of contemporary architects and the intolerance of closed historical cities, like Venice, where it intruded.

A cemetery designed by Rossi speaks eloquently of this exile of new architectural ideas from the contemporary Italian city. Rossi won a 1971 competition held by the city of Modena to enlarge its communal cemetery, San Cataldo. The original, designed by a local architect in 1858, has the rectilinear geometry, surrounding porticoes, and Pantheonic chapel typical of nineteenth-century cemeteries. Rossi enclosed a rectangular area alongside and identical in area to the original and then surrounded it with three-storied structures with pitched roofs, simple doors, and square windows. Within this area, a series of lower porticoed constructions with coffin-size cubicles would be arranged in a diminishing series with a conical structure at the top and a cube at the bottom. Only a third of the total design has been completed.

Curiously, the building types Rossi selected were derived from his residential architecture: the continuous low block of Gallaratese, porticoes, and narrow "streets" from other examples of his public housing. Smaller mausoleums with central door and triangular pediments take on the form of an archetypal single-family house.





8.4 Aldo Rossi, Cemetery of San Cataldo extension, Modena, 1971–1980s (unfinished). Rendering by Aldo Rossi, "*Il Gioco dell'Oca*," 1972/1976
8.5 Aldo Rossi, Teatro Carlo Felice, rebuilding, Genoa, 1981–97, after engraving by Luigi Garibbo, c. 1828

Indeed, Rossi's city of the dead is made of building types (in admittedly abstracted form) from the city of the living, but devoid of the teeming life that invigorates them.

While designing the project, Rossi suffered a terrible car accident. He conceived the overall plan while lying in a hospital bed as "a skeletal configuration," with bones, a rib cage, a skull, pelvis, and arms and legs. "I saw the structure of the body as a series of fractures to be reassembled," he recorded in his autobiography. If Rossi appropriated a corporal metaphor, there is nothing inappropriately morbid or overly intellectual about his representation of death. The images of Rossi's San Cataldo—like the work of Carlo Scarpa, who found Rossi's work here "rather interesting"—that could be mundane are instead rendered profound. Rossi has eliminated from classicism all of its mythic ideology, leaving stark, haunting forms in its place. "At times, I reflect upon the past like an archeologist: as one who lives in a world whose appearances and perhaps whose mechanisms are familiar, but who has lost the meaning of what surrounds him," he wrote. His pure forms are still, empty shells, like speech without the consonants, an echoing of hollow vowels. There is little connection here to Fascist rhetoric, although it is clear that Rossi admired, for example, Angiolo Mazzoni's Stazione Termini, which supplies much of the entire Rossian formal repertory. Rossi regained tradition through the application of an idiosyncratic formalism. Though he never used the term *postmodern* to describe his work, he produced some of the style's most enduring icons, most famously the Alessi company's La Conica coffeemaker of 1984.

In Genoa, Rossi recomposed the new Teatro Carlo Felice. The original, by Carlo Barabino, had been bombed in the war, but the city council decided to resurrect the theater at the heart of their city. Although Barabino's auditorium interior could have been rebuilt, it was decided that all of the interiors would be replaced. A competition was held in 1949 for a new design, but when the local government turned over, the project was dropped. In 1963 Scarpa was hired, but his designs were debated at such length that Scarpa died before a decision was reached on their application. The city started over once again in 1981 with another competition, which Rossi won. Rossi's elemental forms and colors—a yellow block, a blue cone—join Barabino's white columns and blocky pediment for a convincing dialogue of

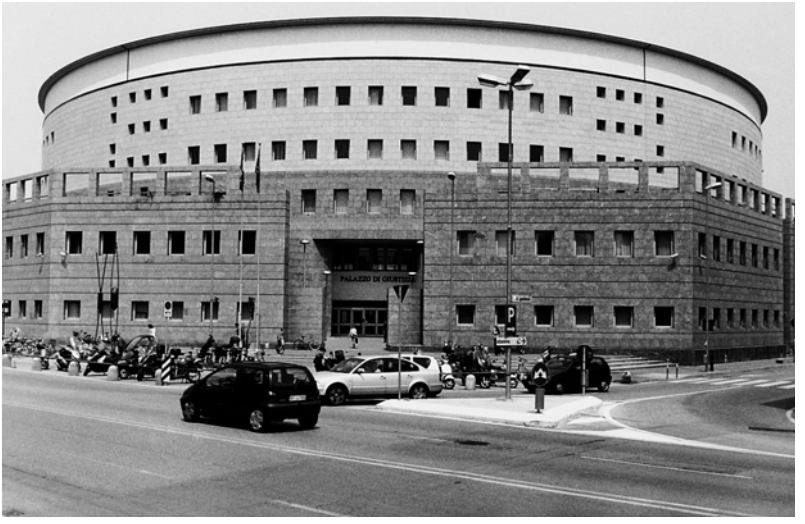
neoclassicisms. Now ornamented, the cornices and moldings are large and emblematic and closer to Giovanni Muzio than Rossi had ever been. In the auditorium interior, Rossi's genius loosens up. Its side walls are designed as exterior facades of city palaces with doors and windows with shutters, and balconies with balustrades. An open pergola runs along the top, and the ceiling is painted sky blue. The effect brings to mind Palladio's Teatro Olimpico. In effect, Rossi turned the auditorium into a city piazza, returning the form nostalgically to a preindustrial era of street theater and village fairs. The facades are not particularly Genovese; they are playful archetypes. "The interior separates the real world from the fictional," Rossi wrote.

Unfortunately, the problems with the theater, and with his other built works, are many. Rossi's fanciful ideas were often difficult to capture in the physical world, and the architect seemed to take little interest in the outcomes of his projects. Ephemeral on paper, his constructions lack finesse in their finished forms, an effect that can only partly be excused by a decline in Italian craftsmanship. Rossi's interior volumes are inevitably inert. At Carlo Felice, the delightful auditorium facade features are all disappointingly nonfunctional. The second-tier balusters were so large that two rows of balcony seats had to be removed before the audience could see over them. There are simple mistakes everywhere in Rossi constructions that make them a perpetual disappointment for the end user. Nonetheless, critical acclaim brought in a flurry of international commissions and he was working simultaneously on four continents when another car crash cost him his life in 1997. Rossi's delightful images live on. "There can be no doubt that quite a private life runs through places and gives a sense to architecture," Rossi wrote in 1976, "and perhaps it is precisely in this alone that the humanity of architecture lies." In a period of existential crisis among architects, Rossi, with innocent joy arrived at a simple ability to see objects clearly again.

Gino Valle took his degree in Venice in 1948 under Samonà, Scarpa, and Gardella, and went off to America to meet Wright, Mies, and Gropius. Back in Udine, Valle made inroads to architectural commissions by designing small objects for local industrial concerns. With the Zanussi Company Valle evolved from a product designer to

the firm's image consultant to the architect of its offices and plants. For its offices in Pordenone of 1959–61, Valle exposed concrete engineering to express a powerful—but not brutal—structure. For other industrial sites, he built anonymous handsome boxes, transferring meaning from the architectural object to that object's role in larger compositions. In designing school buildings in the 1970s, Valle also developed models for prefabrication. "I have never fallen in love with objects," Valle said, perhaps in deliberate contrast to Rossi; nor is drawing for Valle ever a fetish. A concern for his work's relation to the environment courses through his many built works. "I start by going and scratching around on the site," he has explained, and ideas in the form of metaphors come to him. The Zanussi offices on the edge of Pordenone are a dike, his spa at Arta of 1962 a castle commanding a mountain pass. Sometimes it is color that strikes a dialogue with the place, as in the ruddy medieval tone of his "Casa Rossa" in Udine of 1965.

The ultimate test for any modern architect is building in Venice, as Rossi's ephemeral theater attests. After designing public housing for Udine, Valle was commissioned in 1980 to design a subsidized housing complex on the outlying island of Giudecca. Valle conceived a densely packed fabric of residential units in a limited range of two-story row houses and four-story towers, each with independent access from typically narrow pedestrian streets. He employed a modular system with elemental forms laid out across a grid, but with enough variation to shake any feeling of schematism from the concrete frame structures. Varied building heights and the narrow spaces create changing light levels within and recall the traditional Venetian cityscape. Pierre-Alain Croset found in Henry James's description of Venice the perfect elucidation of Valle's new city: "without roads, without vehicles . . . with its tortuous lanes where knots of people form, where voices echo like in corridors of a house, where men walk as if they were avoiding the corners of furniture and shoes never wear out, the city has the character of an immense collective apartment." Valle, like Gardella, has attempted a respectful interpretation of the characteristic city, turning primarily to the lagoon's vernacular and to the industrial brick buildings in the immediate vicinity. Valle evokes Venice in scale, space, materials, and light. "My first reaction . . . is to build a real piece of city, recognizable to anyone walking through this place," an aspiration he achieved in Venice,

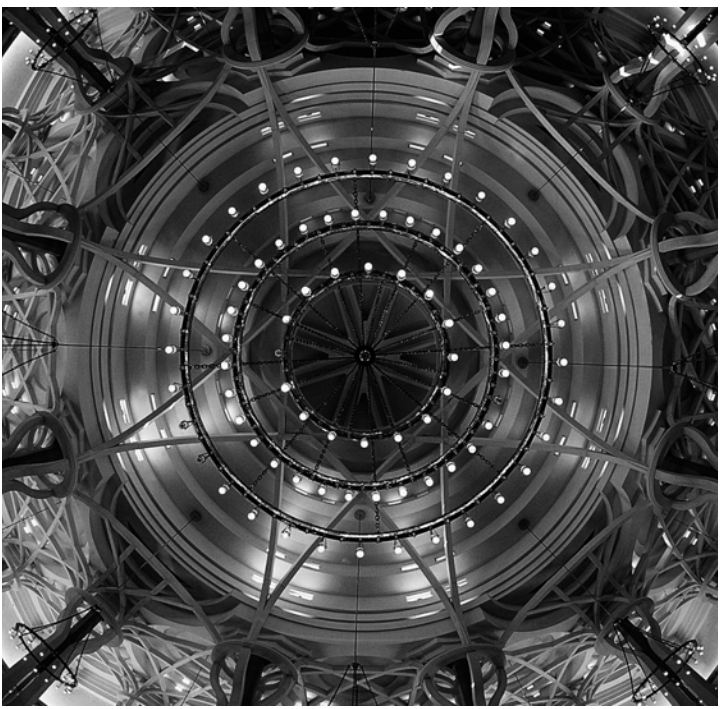


8.6 Gino Valle, Giudecca public housing complex, Venice, 1980–86
8.7 Gino Valle, Palazzo di Giustizia, Padua, 1984–86

at Ivrea in an office building for Olivetti, and in Paris in an office complex at La Défense. In Padua, a new courthouse on the ragged edge of town draws to itself the forms of the city, the lines of traffic, even references in its elemental geometry to the buildings nearby. This architecture, Valle claims, is "already present in the site."

Valle has always remained open to the numerous directions that any single project might suggest, and has similarly avoided reductive critical discourse and formal repetition. He is uninterested in constructing a recognizable stylistic image for himself, since, he admits, "I wander eclectically. . . . I never know where I'll end up when I begin a project. I find the form in the end through a relationship. I know nothing, absolutely nothing of what happens when I start a project. I never prefigure anything. I find it and this is what interests me the most." His architecture, he believes, is never finished or perfected in an existential sense, but is a clear communication that helps a community recognize itself.

Paolo Portoghesi earned an architecture degree in Rome in 1957 with a specialization in the architectural history of the baroque period, although the intellectual climate at that time was not congenial to such interests. Enrico del Debbio, Portoghesi's thesis advisor, thought his focus on Borromini was in "bad taste" and a bit "neo-Liberty." Portoghesi's affinity for the baroque emerges in his first work, the Casa Baldi, a small house in the countryside north of Rome. The commission was modest in budget but boundless in the liberties granted to the twenty-eight-year-old designer. The material he chose was the inexpensive local volcanic stone called *tufa*, a sort of rough Etruscan cinder block, with lots of mortar. The vaulted spaces inside are clad in terracotta tile. A course of red brick emphasizes the concavities of walls similar to Albini's treatment of the folded surfaces of the Rinascente department store, which was built at the same time. The curious curvature of the walls allows for surprising fluidities in the design; light slips into the building where the walls would otherwise join. The curved gesture carried through the roof terrace seems to embrace the bend in the Tiber, seen in the valley below. Portoghesi tells of another intriguing local source for his imagery: "A few steps from the house in the midst of some old oaks, on a tufa



8.8 Paolo Portoghesi, Casa Baldi, Rome, 1959–61
8.9 Paolo Portoghesi, Islamic Cultural Center and Mosque, Rome, 1975–95

outcropping that rises up like a terrace above the Tiber valley, there are the ruins of an ancient Roman tomb. Time has corroded the architectonic form to the point of making its semantic roots unrecognizable. Time has transformed the curved walls of tufa and mortar into smooth rocks on which the wind has played the role that waves have on sea cliffs."

Given his penchant for history, the Casa Baldi's spatial organization can be understood as a cross-pollination of Borromini, Gerrit Rietveld, and Frank Lloyd Wright, as Christian Norberg Schultz, a pioneering baroque scholar and early champion of Portoghesi, has proposed. There is also a bit of Michelangelo and late Le Corbusier. Portoghesi sees it as "this craze of mine to contaminate, to put vastly removed and sometimes highly contradictory things together, convincing them to love each other." The Casa Baldi "postulates the marriage between Rietveld's Schröder House and [Borromini's] S. Ivo dome; witness at the wedding: the little temple of Venus at Baalbek and a Mies project of 1929. From then on the game has become a ritual."

His projects of the 1960s and 1970s draw from Borromini, Bruno Taut, Erich Mendelsohn, Michelangelo, and the Colosseum. In a series of houses in the vicinity of Rome from the 1960s, he developed geometric systems for spatial generation by thinking about how interference patterns overlap. In the Church of the Sacra Famiglia in Salerno, of 1969, concentric rings of concrete step outward from their various points of support to collide and merge overhead. Despite these many inspirations, his designs cannot be classified as eclectic. If anything, the finished buildings are successfully ambiguous and open to many interpretations.

After having worked for the king of Jordan, Portoghesi won a competition to build a mosque and Islamic cultural center for the Arab community in Rome. A rather isolated although ample and lovely site, 8 kilometers out on the Via Salaria, was designated. Here, in 1974, Portoghesi began by thinking about "magnetic fields," as he called them, one being the local environment, another the more distant Mecca. The elements of the plan explore the interaction of dualities, each relevant to the spiritual building: the circle and the square, heaven and earth, garden enclosure versus desert, clarity of order versus the labyrinth, the Piazza del Campidoglio and the Dehli old-city plan. Indeed, Portoghesi cited a

dizzying array of sources for this work, from the structural innovations of Nervi to the seven hills of the Koran, Dante's *Divine Comedy*, a forest, the iris of the eye, Michelucci's Church of the Autostrada, the temples at Paestum, Virgilio Marchi, and Frank Lloyd Wright.

In fact, Portoghesi won the competition on the merit of having joined the space of a typical prayer hall with advanced means of construction, keeping costs low without compromising the elements required of a mosque. The building was constructed with as much prefabrication as possible. Molds lined with Formica were used to create perfectly smooth piers of concrete mixed with Carrara marble dust. Natural light penetrates his mosque from many different sources and creates a dematerializing, suspended effect of its filigreed intertwined arches. The secret of Portoghesi's mosque and Islamic cultural center is the merging of his Roman baroque and his client's Islamic architectural traditions. Two civilizations have been brought into a dialogue on their comparable experiences of space and light.

Portoghesi's ideas were never codified as dogma despite his prominence in the academy and in publications. He was the head of the Politecnico faculty during the 1968 revolts, directed the publication of an architectural encyclopedia, and founded the periodical *Controspazio*. Portoghesi was also the organizer of the Venice Biennale of 1980 that brought twenty postmodern architects together in a critical reinterpretation of the role of history. Nevertheless, he is best known not for his role as an intellectual leader but as a builder of idiosyncratic works of architecture.

Mario Botta lives in a small town just a few kilometers west of Como. Although he is a Swiss citizen, like other architects from Switzerland's Italian-speaking Ticino region, from Francesco Borromini to Mario Chiattone, he is intimately connected to Italian architectural culture. He studied in Milan and then under Carlo Scarpa in Venice, where he earned the privilege of assisting Louis Kahn and Le Corbusier on their (unrealized) projects for that city. He worked for six months in Le Corbusier's office in Paris, unfortunately right after the master's death, but the influence is strong in Botta's first houses. Kahn is also evident in other built projects for Swiss clients. Botta led Ticino's

distinct brand of neo-Rationalism in the 1970s, which consisted mainly of megastructures of clear typologies, but the mainstay of his early career was the house, a focused laboratory of simple motifs. Kenneth Frampton, Botta's early champion, finds in these houses an equilibrium between Rationalism with its formal order, on the one hand, and cultural references to a vernacular on the other. Botta evolved from his early purism toward a mature sense of history, as he and Ernesto Rogers called it.

It is characteristic of Botta to focus on a theme, a specific building type, and in the late 1980s that theme was the church. Like Nervi and Michelucci before him, Botta noted the profound degradation of architecture in the service of the Church. Botta built five churches in ten years, and like his many houses, each church contributes an element to his developing thought on the sacred aspects of architecture. His first church commission came in 1986 as a restoration of a small chapel that had been destroyed by an avalanche in the town of Mogno in Ticino. What struck Botta about this apparently simple job was the tenacity of this small mountain village to keep struggling against both nature and time. The earlier rectangular chapel was beyond any possibility of recuperation, so Botta engulfed the building's ruins in a new elliptical cylinder, 14 meters in diameter, 17 meters high, and sliced on the diagonal at the top so that the elliptical plan finishes in a perfect circle.

The little church stands like the villagers against the mountain, its primary profiles working in contrast with the landscape. The design interlocks clear geometric forms, as Louis Kahn's and Borromini's do, fused with a subtle, ineffable feeling. "Here, the forms that we've always known are present," wrote the historian Christian Norberg Schultz, alluding to wall and opening, arch and vault, light and detail. "In other words, a fundamentally classical architecture however without imitation. . . . In the words of Botta, everything is fundamentally modern." Light from the glazed roof above activates the space within the cylinder in a continual variation of the sun's path across the sky. The light's course accentuates the solidity of the construction across the exterior and interior curves. Bands of white and gray stone recall both the work of Camillo Boito and the Romanesque of Botta's native region.

8.10 and 8.11 Mario Botta, Church of San Giovanni Battista, Mongo (Switzerland), 1986–96

When Botta's five churches were presented at the 1996 Venice Biennale, he explained his approach: "The church is the 'house of God,' but for the architect it is perhaps more importantly the sign of the 'house of man.' The sign evokes his hopes for an ideal habitation." Botta's other churches—one in Padua, one in Pordenone, both begun in 1987, and one at the top of Monte Tamaro over the San Gottard highway, Santa Maria degli Angeli, finished in 1996—explore a rich range of archetypes and aspirations. Botta now writes a great deal and has founded his own school of architecture. His star status is confirmed by the commissions he now receives for art museums and serial industrial products. His Museum of Modern Art for San Francisco, like the cathedral he built in Evry outside Paris, both of which return to Mongo's sliced cylinder, suffer however from a tendency toward self-referential mannerism. Nonetheless, like Gino Valle, Mario Botta manages even in his shopping malls, bank headquarters, and office blocks to satisfy perennial human needs.

BETWEEN THEORY AND PRACTICE: FRANCO PURINI, VITTORIO GREGOTTI, AND MANFREDI NICOLETTI

There is another brand of architect in Italy today that contrasts sharply with the historicists above. Many architects frustrated with the demise of the built environment have retreated to theoretical musings. The next group of professionals—Franco Purini, Vittorio Gregotti, and Manfredi Nicoletti—demonstrate the tension between intellectual theorizing and the reality of practice in a hotly contested and difficult field.

Franco Purini studied under Ludovico Quaroni in Rome and went on to teach in the early 1970s at the architecture school in Palermo and later back in Rome. Dissatisfied with the climate in which architecture might be produced, he became the leader of a generation of Italian architects that restricted their ideas to paper. In exile from the building site, Purini developed a presence through polemical writing. "The architect withdraws, troubled, from his first contact with the world, which he has just touched fearfully and then retreats to defend his threatened introversion. A formless universe of scattered fragments

menaces him and conceals the unity of a world that is different in each of its parts and yet in everything like himself."

Always at the theoretical vanguard of the profession, Purini eventually moved on to become a leader of the deconstructivist movement in Italy. As Purini wrote, deconstructivism is "a conscious sequence of artificial compositions that are constitutionally grounded on a slipping of meaning . . . an endemic form of 'destabilization' of a convention of communication . . . an interposition between object and observer of a plane of interpretation of its structure that emphasizes how it is never firm." Once he decided to actually build, his work was characterized by disquiet and interrogation, "as if it had been placed before a faceted mirror, the object reproduced in innumerable reflections while from an outside 'matrix' it is sliced in a multitude of configurations." Purini's theoretical propositions were explored to explosive effect in his first built works in and around the Sicilian city of Trapani. His "House of the Pharmacist" in Gibellina Nuova, with its tormented incompleteness, declares the impossibility of returning to the formal sureties of, say, Moretti's Casa del Girasole.

Deconstructivism as it flourished in intellectual and architectural circles in northern Europe and North America referred to Russian constructivism and Dutch neoplasticism. If Purini also revisited early modern masters, he primarily stuck to his Italian inheritance: Muzio, Ponti, Libera, Terragni—even Piacentini, Moretti, Rogers, and Scarpa. His celebrated drawings trace an exploratory processes through metaphor, evocation, and poetry. He describes them as "reveries" to feed the imagination in the spirit of Piranesi's *Carceri*; they are systematic displays that test the limits of scientific plausibility and reflect the indecipherability of reality itself.

Purini's design strategies are evident in an angst-ridden housing project built in Naples for relocated victims of a recent earthquake. Here, unlike Valle at Giudecca, Purini pushed the boundaries of place and space in a postmodern revisitation of the Neapolitan grand projects of the eighteenth and nineteenth centuries. "In order to comprehend places," he wrote, "it is necessary to leave them in the imagination, because only distance creates that strength capable of fostering the desire to comprehend them."

Purini remains an indefatigable force in the production of projects for unlikely competitions and fantastical revery. A project for the Tiber bank at Testaccio, around the archeological remains of the ancient Roman warehouses, dramatizes many features of Purini's exploration. A rhythmic spatial grid of concrete piers encloses the crumbling ruins, which emerge on the facade in orthogonal projections, retracing the conceptual fiction of the *genius loci*. On the roof of Purini's structure, mysterious and evocative volumes are scattered. Each component is a single geometric entity without scale, joined in a collage and read like the elements of poetry on the page.

Purini's goal has always been to orient and structure our incoherent landscapes. From his student work in 1968 on a new linguistic foundation for architecture, through a 1977 essay on techniques of invention, and on to the 1989 publication of his acclaimed *Seven Landscapes*, his life's work adds up to reconciliation of the fragmentation of the contemporary city with the legacy of monumentality. Purini's position describes one end of the professional spectrum of contemporary Italian architecture engaged in theoretical musings, while others try to manage the intellectual legacy with a more fruitful career of building.

Vittorio Gregotti grew up among the shifting ideals of Rationalism. He was trained in the B.B.P.R. studio and edited *Casabella* with Ernesto Nathan Rogers, but he was an outspoken apologist for the "neo-Liberty" movement in the 1950s. He too pursued alternative directions for modernism through the re-evaluation of historical contexts and local vernacular. Gregotti's position vis-á-vis modernity and history was open to experiment, and he explored the interrelationship in numerous critical essays, industrial products, furniture, and interior designs. Looking to broader horizons, his early houses reflect Frank Lloyd Wright's horizontality and Louis Kahn's geometries. The variety of Gregotti's sources and openness to challenging discourse earned him an inaccurate reputation as an exponent of eclecticism, a common epithet at this time for the unorthodox. Gregotti heads his own wide-ranging design firm, taking on exhibition installation, furniture design, urban planning, and graphic design projects. He fosters among his

heterogeneous associates the spirit of a Renaissance workshop, an homage to his origins in the B.B.P.R. office.

Gregotti and his generation seek a way out of the disillusionment of the promised Rationalist solutions. In his 1967 publication on new directions in Italian architecture, Gregotti maintained that a fluctuating dialectic between innovation and tradition is indeed a vital aspect of the health of contemporary architecture. Any resultant ambiguity forms the basis for an expressive and always up-to-date language in architecture. Theoretical postulations on the part of the architect may lend the work a particular weight, although Gregotti remains undogmatic. He claims that architectural theory is often derivative of prevailing philosophical positions or a simplification of historical theory. Sometimes these are applied to works already accomplished as a sort of posterior justification, often as a kind of metaphoric harmony of diverse languages, or simply as a means to acquire a recognizable status for the architect. Conscious of the uses and abuses of theoretical posturing, Gregotti proceeds pragmatically.

Since the mid-1960s, Gregotti's interest has gravitated to the megastructures, large-scale constructions in dialog with landscape. These ideas have guided his firm's largest projects, like the new Palermo university campus developed with Gino Pollini, and a public housing complex also in Palermo developed with a team that included Franco Purini. By far his most vast and most successful work is the campus for the new University of Calabria. This large project was begun in 1972. It is a megastructure consisting of a level 3-kilometer bridge that floats across the undulating landscape south of the city of Cosenza. Along the route, the twenty-one discrete faculty department buildings rise as pylons to various heights from the valley floor. The bridge carries all access routes and service links to the square modular buildings. The bridge system ties the campus into the larger regional infrastructure of highway and railway at either end. Gregotti successfully merges a theoretical approach with highly prolific practice. He has tempered the purity of theoretical propositions with practical concerns for building.

Manfredi Nicoletti, after finishing architecture school in 1955, traveled to the United States on a Fulbright grant and worked for Walter

Gropius in Boston and Minoru Yamasaki in Detroit. Having returned to Italy, his first big break came in 1958 with the design for a new courts complex, won in competition with Giuseppe Perugini and others. La Città Giudiziaria is, in effect, a new *centro direzionale* near the Foro Italico, and was commissioned to house the parts of the bloated Roman judicial administration that could no longer fit in Calderini's Palazzo di Giustizia. It is a megastructure, like those designed by Paul Rudolph, that creates an organizational logic for this edge of the city. (The raked concrete surfaces that Rudolph produced by machine in the U.S., however, were here created by manual labor.) The overall effect is brutal—not, it seems, an unintentional suggestion in an era of growing threats of domestic terrorism. Moretti's fencing academy next door was at the same time transformed into a bunker for high-security trials of Mafia lords. The transformation of the image of the justice system from Calderini's righteous palace to Nicoletti's impenetrable fortress says much about the state of late-twentieth-century Italian civil society.

Not all Nicoletti's megastructures are so sinister, like an automobile garage planned for Venice that would have routed traffic along swirls of the lagoon's waters, or a super-tall skyscraper developed for the U.S. Steel company to be placed at Manhattan's tip. His built work includes the university campus of Udine and a hospital in Agrigento that pursue principles of total flexibility and phased growth.

These latest issues have culminated in two big projects: a library for Alexandria, Egypt, and a museum for the Acropolis in Athens. In 1990, an international design competition was held by the Greek government for an ambitious new museum to house the sculptures of the Parthenon, a project predicated on the restitution of the marbles from London. Nicoletti won the competition on the merits of a remarkable design that reflects all the significant strides Italian architecture has contributed to the field of museum design. The site is off the north slope of the Acropolis hill amid a jumble of early-twentieth-century buildings. Nicoletti's museum slides quietly underground. Inside, the corroded fragments of columns, pediments, and relief decoration are recomposed in exact spatial relationship and orientation to the original setting. A large, tilted, circular window

8.12 Manfredi Nicoletti, Giuseppe Perugini, and others, Città giudiziaria, Rome, 1958

would allow the visitor to look back up to the sunny height of the Acropolis from anywhere in the exhibition. Ramps and walkways on many levels within allow for close and multiple viewing points. Nicoletti describes his design as an artificial geology for the site that re-creates the archeological context of the Parthenon in the spatial experience of the museum itself. Nicoletti's project had from the outset been jeopardized by a legal effort undertaken by disgruntled Greek architects, a state of affairs that recalls the xenophobic reactions exhibited by Italian designers in the first competition for the Vittoriano in Rome a century ago. Indeed, after a decade of legal wrangling, Nicoletti's project has been overturned. Despite Nicoletti's prolific theoretical elucidations, his professional profile is one of a keen pragmatist, garnering commissions on the strength of realizable ideas.

Purini, Gregotti, and Nicoletti demonstrate the widely varying degrees of potential resolution between a tendency toward abstract theorization and getting a project built. Around the fringe, many less successful architects are producing an architecture tinged with the semblance of philosophical ideology and the results are often rhetorical and confusing. Whereas the 1960s littered the landscape with mediocrity, the 1980s added pretension.

ARCHEOLOGY AND *ABUSIVISMO*

Growth in most Italian cities from the 1960s to the 1980s was so myopic as to have obliterated any trace of good collective space. Even in historic city centers the decline was palpable. Rome set the (negative) standard: Piazza del Popolo doubled as a parking lot and parts of Villa Borghese were fenced off for private exploitation. The Italian landscape, particularly its forests and coastlines, fell prey to sprawl. Luxury hotels, seaside villas, even whole towns sprang up without building permits. Italians call this *abusivismo*, and it became ubiquitous: principally jerry-built additions on the rooftops of older buildings, and all the little indignities that spoil the landscape. In the Sicilian city of Agrigento, luxury homes built without license

8.13 Demolition of buildings erected without licenses in the Valle dei Templi, Agrigento, March 2000

encroached even within an archeological site of ancient Greek temples until the army was sent in to demolish them.

Supervision of Italy's art and archeological treasures is a mammoth enterprise, but it has been unduly complicated by a public administration so vast and clumsy that even the dozen or so agencies themselves confuse their prerogatives and competencies. Building projects can be halted if archeological remains are discovered even after financing, contracting, and construction have begun. High-profile projects, such as large-scale public housing works, are inevitably subject to costly delays and reworking of plans, while private developers build by bribing public officials.

As the landscape has gradually disappeared under a blanket of concrete, city centers have become inundated with automobiles. The national superintendent of antiquities for Rome, Adriano La Regina, began his campaign in 1978 to protect Rome's antiquities from the destructive effects of air pollution. At the time, black crust was spreading like leprosy across the Column of Trajan. In La Regina's words, "it is a problem no less dramatic than the case of the Acropolis of Athens, but on an enormously larger scale, because the entire city is involved here. The fundamental problem isn't funding the restoration of the monuments, it's the enormous costs to intervene in the reorganization of the city." He considered the Greeks' idea of gradually replacing everything with concrete models and preserving originals in special museums, but substituting everything with simulacra seemed absurd at the scale of Rome's treasures.

Soon after La Regina's campaign began, a bomb exploded on the steps of city hall at the Piazza del Campidoglio, threatening the statue of Marcus Aurelius, the very symbol of civil well-being. War was declared: the archeologists versus the automobiles. In fact, the idea of a continuous archeological park through the southwest region of the city dates back to the nineteenth century: from the Via Appia Antica and the Baths of Caracalla, clear into the city center at the Forum, a green wedge of historical culture integrated between two radiating spokes of traffic from Piazza Venezia. La Regina had already been successful in reclaiming a few small streets that allowed cars to cross these areas, but now he aimed to eliminate one of the major arteries to

the city center, the Via dei Fori Imperiali. The plan quickly became a political football. Carlo Aymonino, who was leading a research group on the historical center, wrote that the necessities of the city must be carefully weighed against issues of historical memory. Paolo Portoghesi, however, was adamant: "You can't take away the space of the city of the living to give it back to the city of the dead." Andrea Carandini, this generation's most prominent archeologist and Bianchi Bandinelli's intellectual heir, would be thrilled to dig in the heart of Rome, but, he wisely cautioned, the Fascist street was one of many significant historical layers to preserve.

After twenty years of struggle, La Regina has secured a partial victory. Excavation has begun in the areas on either side of the street, where the Fascists had merely cleared the area, not dug. Selected features of the stratification, such as a Carolingian-era house plopped down on the marble paving of the defunct Forum of Nerva, have been preserved along with the foundations of medieval fireplaces, Renaissance wine cellars, and nineteenth-century majolica kitchen floors. The effect is a little baffling. No Scarpa has been called in to clarify the relationships with, say, an identifying contemporary presence. In fact, unlike the first Napoleonic incisions around the Column of Trajan that evoked ancient space, or even the Mussolinian intervention with its clear if disputable logic, this excavation with its sloppy, lacerated edges belies no thought. It looks like a botched autopsy. The Via dei Fori Imperiali is closed to cars each Sunday so that pedestrians and triumphant archeologists can celebrate what is perhaps a Pyrrhic victory.

REBUILDING LA FENICE

Italy has difficulty maintaining its historical monuments. In the late 1990s, the campanile of Pavia fell, the theater in Bari burned, Mafia bombs hit the Uffizi, and an earthquake shook Assisi, all of which contributed to a sense of helplessness, even guilt, at not being able to keep up with an increasingly fragile cultural heritage. During the night of 29 January 1996, the Teatro La Fenice in Venice burned. Massimo Cacciari, the mayor and chairman of the board of La Fenice, addressed the city council the next morning and affirmed the immediate need to rebuild the theater *com'era, dov'era* (as it was, where it was). Cacciari, who is also a well-known philosopher, spoke of the catastrophe as an unacceptable void in the collective consciousness that had to be redressed. Mario Botta, in town installing an exhibit of his church architecture, could understand the reaction, but warned, "It would mean designing a fake." A reconstruction would not only be difficult, it would raise ethical questions. Nonetheless, many prominent Italians, especially those from the theater world, such as Luciano Pavarotti and Franco Zeffirelli, endorsed building a clone. Giuseppe Sinopoli, who was conducting in Dresden's rebuilt theater, thought the tragic loss had to be in some way recognized. Architects focused on finding equilibrium between conservation and innovation, between the extremes of the falsity of an exact replacement and the danger of annulling real values with something entirely new. Many intellectuals agreed that La Fenice could never be exactly as it was; a reconstruction would be a phantom, not a phoenix.

Mayor Cacciari opened a competition for the reconstruction job. The published program included a detailed history of the theater's many transformations. The exterior masonry shell was to be retained, and inside "the design of reconstruction must be kept within the logic of a strictly conservative approach, aimed at the reconstruction of the theater as it was, with particular reference to its appearance and acoustics, to the extent permitted by current safety regulations." Entrants were asked to specify "to what extent it will be possible to proceed by 'imitating' the appearance and substance of the destroyed parts of the theater, and which of the parts that have been preserved it

will be permitted to eliminate." But the program also left room for interpretation of the dilemma when it asked for the preservation of the past, confirmation of historical values, and a vision of the future. The reactionary nature of the venture discouraged many architects from participating. By the March 1997 deadline, Cacciari had received only six entries, from Gino Valle, Aldo Rossi, Carlo Aymonino, Ignazio Gardella, Salvatore Pérez Arroyo, and Gae Aulenti. All the participating Italians had experience dealing with Venice (the Spanish entry, from Pérez Arroyo, boldly deconstructed La Fenice and was thrown out by the jury on a technicality).

Aulenti, a Rogers acolyte at *Casabella-continuità*, one of the few female Italian architects with an international reputation, made her name in 1982 by renovating Paris's Beaux-Arts train station, the Gare d'Orsay, into the new museum of nineteenth-century art. Her other work has included interiors, graphic and industrial products, theatrical sets, showrooms, exhibition installations, and houses. In 1985 Aulenti had revamped the interiors of Palazzo Grassi as Venice's blockbuster exhibition space, but a general fear lingered that Aulenti would operate in the same "systematic opposition," as she explains her work. But her entry in the Fenice competition was the most faithful to Cacciari's wishes: a restoration of all the previously visible elements, a rebuilding of the hall exactly as it was, and the insertion of new support and safety components backstage. It is "a 'copy' with the unique property of being located at the original site," she said, "a true copy." Aulenti's past projects displayed a blustery courage to be different, to mark the place, which made her a hotly contested designer, but the Fenice project seemed a strategic move to cede to Venice's context. "The work of art has always been reproducible," was her reply to critics who assailed her simulacrum.

Most of the competition projects displayed a high level of caution, paying heed to Cacciari's reverence for the charred relic. Only Gino Valle pretended that a new La Fenice might be better than the old. Valle did not treat the theater building like a sacred space: "What is important is to preserve the aura of the setting, the audience's sensation of well-being. . . . Reconstructing this theater 'as it was' signifies . . . reproducing its evocative image." Valle limited his reconstruction to select pieces—the proscenium, the royal box, the

8.14 Gino Valle, Teatro La Fenice, reconstruction project, Venice, 1997
8.15 Francesco Stefanori and architects of the Ufficio Progetti della Città Storica and the Sovrintendenza Comunale, Galleria Comunale d'Arte Moderna e Contemporanea, renovation of Peroni brewery, Rome, 1999. Publicity produced by the city administration

ceiling—worn like pieces of jewelry on the new body of the auditorium. Here, the reconstructed fragments would be set against the flat, simplified forms of the rest of the new auditorium, and the box divisions pulled back to improve sightlines and everything covered with a dark red brocade. The red brocade is significant. The style of the fabric is typical of eighteenth-century Venice, but the color would be new for La Fenice. A rich, luxurious color, it would disappear in the dark to allow the reconstructed jewels to stand out. But red is also the color of fire, and would poetically conjure the disaster.

The jury selected Aulenti's proposal in May 1997, placing Aldo Rossi second, and Valle third. Rossi's German contractors legally contested the jury's tabulations and wrenched the commission from Aulenti a year later. Rossi's approach was similar to Aulenti's, "consolidating every part that has survived and re-creating the decorations, something which will be done using traditional techniques." Rossi also introduced a considerable number of new elements elsewhere in the complex. The Sala Nuova, a new hall for chamber concerts and rehearsals on an extension of the property to the south, includes a wooden reconstruction of Palladio's Vicenza basilica facade. Rossi said his space was "reminiscent of Sansovino's idea of constructing in relation to other buildings, so that the new becomes an integral part of the past and of the city." Rossi plays with collective memory in "an attempt to recompose inside the building a Venetian world of history and invention."

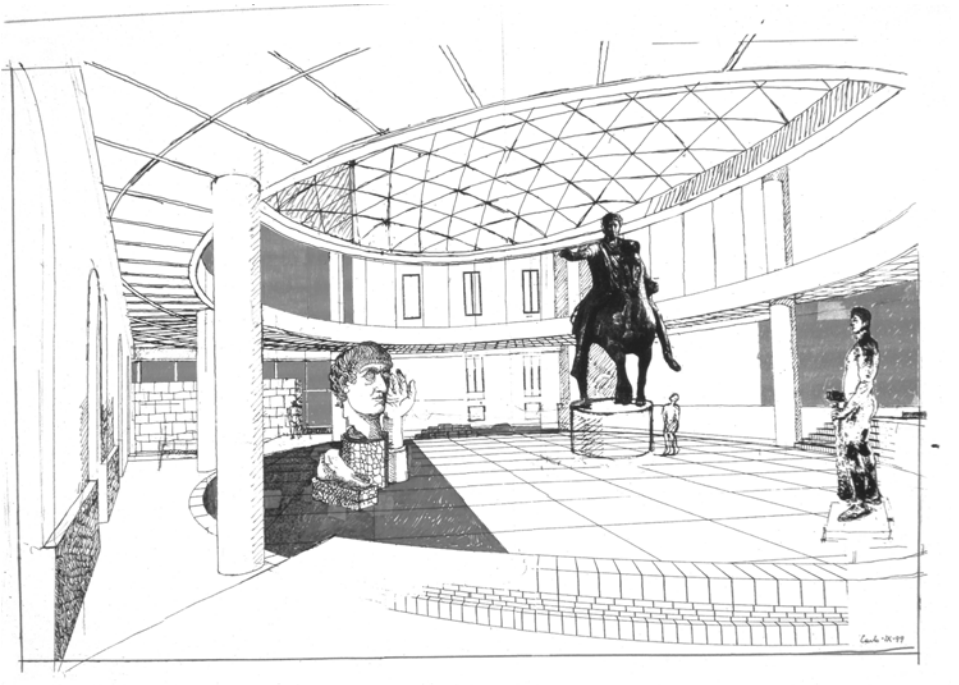
Rossi's contractors began building while the debate rattled on. "With La Fenice we are in the realm of the necrophiliac and the macabre," Zevi has written. "The danger consists of the wasting of considerable funds for the sole aim of satisfying the demands of ten imbecilic pseudo-Romantics who speak 'in the name of the entire citizenry.' " Stefano Zecchi considers La Fenice "testimony of a civilization that no longer knows how to think of its future, that has lost the intelligence and the faith in creativity." In the end, Mario Botta may have summed up the situation best with this observation: "We need Carlo Scarpa, the grandfather of this Italian specialty of making the modern and the old talk to one another. Because we should not forget that having the old can enrich the new, and vice versa."

ARCHITECTURE IN THE SERVICE OF CULTURE

The commercial exploitation that opened with the 1960 Olympics continued and culminated with the World Cup soccer tournament of 1990. Sports facilities were once again renewed, this time at the expense of Rome's ailing art museums, which had been untouched by architectural progress since the 1950s. However, with the fall of the Christian Democrat party, a new center-left national government refocused spending on cultural issues. Many Roman institutions left moribund since the eighteenth century were updated for the sophisticated tourist industry, and new architectural spaces were built to house them.

The city administration began to outfit the Palazzo delle Esposizioni with modern services and technologies—climate control and lighting, a multimedia cultural research center, a film forum—in 1982, under the design direction of Costantino Dardi. A student of Samonà in Venice, Dardi was, in his own words, instilled with "an attention to context, recognition of the complex, multilayered reality" of a site. At the Palazzo delle Esposizioni, he established a clear relationship with Pio Piacentini's original structure. Dardi's grid module was derived from Piacentini's plaster ceiling coffers but set on the diagonal. Photo-sensitive panels swivelled during the course of the day to regulate light levels. His luminous rectilinearity seems to purge any memory of the Fascist memorial by Libera that once occupied the space. Dardi went on to redesign interiors at the Galleria Nazionale d'Arte Moderna and at the Palazzo Massimo at Termini. Restoration and renovation were also begun at the Galleria Borghese and the Galleria Comunale d'Arte Moderna, in the former Peroni brewery.

In 1992 the equestrian statue of Marcus Aurelius was about to return to the Capitoline after almost a decade under restoration. Adriano La Regina was loath to see the original set back on its outdoor pedestal, where atmospheric conditions would only attack it again. His solution was to commission a special indoor installation and place a bronze copy of the statue back in the piazza. Carlo Aymonino, a descendant of the Busiri-Vici clan and grandnephew to Marcello Piacentini who was best known for his megastructures, was chosen to design the new installation space. For the Musei Capitolini, Aymonino



8.16 Carlo Aymonino, Musei Capitolini, redevelopment project, Rome, 1992
8.17 Richard Meier, Museo dell'Ara Pacis Augustae, Rome, 1998–

reworked a rear courtyard of the Palazzo delle Conservatori around the large imperial-era sculpture. The continuous glass ceiling creates a new environment, similar to Rogers's work at the Castello Sforzesco. The statues and architectural elements are arranged in calibrated measure, as Albini taught, to evoke the original spatial configurations of the piazza. The space was also designed to house the recently excavated podium of the ancient Temple to Jupiter. More than ten years after the original commission, however, the fate of this project is still uncertain.

The Ara Pacis, the Augustan altar dug up during Fascist rule and relocated to the site beside the imperial mausoleum, had been covered by a modest concrete and glass pavilion that also required an upgrade. Mayor Francesco Rutelli, embarking on a Roman version of French president François Mitterrand's *Grands Projets*, flew to New York in 1996 to commission Richard Meier for the project. The work of the American architect, particularly his museum designs, had been featured in a 1993 show at the Palazzo delle Esposizioni. The curators wrote, "His most important museums speak a classical language" in the use of materials, their proportions, division of spaces, and sense of monumentality. Meier had lived in Rome in 1973 as the American Academy fellow in architecture, and he had developed his first art museum project in Italy at that time. Meier had been invited to join Carlo Scarpa, Ignazio Gardella, Giovanni Michelucci, and Hans Hollein on a project to restructure the various parts of a villa designed by Giuseppe Poggi as Florence's center for contemporary arts. Although ultimately not realized, the designs expressed all the qualities that would later make him famous: a stark structure juxtaposed with existing elements, continuity between interior and exterior, lyrical relationships between exhibited works of art and their new environments, complex spaces with ramps and levels for synchronized views, and the importance of light and transparency. Twenty-five years later, Meier's project for the Ara Pacis museum reflects these same issues. An axial approach toward the altar establishes the key experience. Multiple paths around and views out of the building orient the visitor to the site. "Museums in the U.S. and Europe," Meier notes, "are two completely different architectural tasks. In Europe, the interest is mainly in the interior-exterior relationship of the building. In the States, it's not the space which dominates, but the flow of movement through it.

How I move through a room is often more important than the room itself. The system of movement is becoming the system of contemplation in the United States. I try to mediate between these two approaches. The synthesis of the two is something which interests me."

The site is the narrow wedge of landfill between the curve of the Lungotevere road and the lower Via di Ripetta. The altar's relocation here had been the result of a highly artificial propaganda campaign by the Fascist regime. In fact, it is largely a plaster reconstruction, but even still it is hard to explain the decision to keep it in a place within 3 meters of the coursing Lungotevere traffic. Nonetheless, Meier's abstract composition promises a much needed repair of the fractured site. Meier has said, "The essential urban dialog takes place between type and incident, between public and private, between fabric and discontinuity, between history and the present moment. It is a dialog that exists at every scale." Meier closes the piazza and reconstructs the line of the Via di Ripetta with a thin wall extending and shaping the site. Continuous pedestrian areas help to reconnect the lower excavated levels around the mausoleum. Instead of Meier's trademark white porcelain surfaces, Rome imposed the use of travertine, which Meier handles here with a light touch. On the minuscule site, Meier has managed to integrate shops, offices, a storage area, and a small auditorium. The Museo dell'Ara Pacis is the first major new work of architecture in Rome's historic center since the fall of Fascism. Because of the conflict, the construction moves forward only fitfully.

In addition to projects for new museums, Rutelli also planned a new convention center, the Centro Congressi Italia, that would be the nation's largest such facility. The site is set for a large empty parking lot in the middle of EUR. A jury, presided over by British architect Norman Foster, selected a project by Massimiliano Fuksas.

Fuksas designed a public gym facility at Paliano in 1979–85. The building's out-of-kilter facade was, Paolo Portoghesi thought, a pure provocation in a town shattered by earthquake and ruined by *abusivismo*, but this was typical of Fuksas's impetuous character. His work, he says, is "not content with just existing, being in its place, finding an equilibrium in its setting. It uses its existence to express a seemingly explosive message which is an invitation to rethink the world through architecture." Indeed, Fuksas had a hard time finding a

8.18 Massimiliano Fuksas, Centro Congressi Italia, competition entry, EUR, Rome, 2001

place in the conformism of Rome of the 1980s, so he emigrated to France. The EUR project brings Fuksas home.

At the time of the competition, Fuksas was guest curator for the up-coming 2000 Venice Biennale, which he entitled "Less Aesthetics More Ethics" to steer architecture away from self-serving inefficiency toward a rich social "geography." His own exhibit, called "Magma City," captured the vitality and sublimity of the chaotic contemporary urban environment in frenetic video features.

Fuksas's project for the Centro Congressi Italia proposes a large, perfectly rectangular translucent structure inside of which floats an enormous Teflon "cloud." The cloud, which holds the auditoriums, hovers over the ground floor space that runs unobstructed through the block. The convention floors and parking are underground, and the thin glass tower to the side is a hotel. Fuksas says he is interested in the interstices, the freedom of what can happen in between the boundaries of traditional building. His imagery is remarkably free-form. Fuksas has designed a convention center that is "a significant place of a peculiar and communicative event," more dynamic than a church or a train station.

The design also shows an intelligent sensitivity to its site. The location in EUR is not a particularly crucial one—really just a filler lot between Quaroni's Piazza Imperiale and a few International Style towers to the south. Fuksas's exterior forms arbitrate generously between them. The long, pure shape with open ends, along with its materials of glass, stone, and translucent marble panels, recalls Libera's Palazzo dei Congressi. Fuksas has confronted EUR's inherent monumentality and balanced contrasting architectural attitudes, not dissimilar to what Libera in his day strove to accomplish. The jury commended Fuksas's project for its open public space, connections to the outlying environment, and creation of a new vital social landscape. Construction of the Centro Congressi Italia had been planned to begin in 2003, but has been delayed.

Among Rome's recent forward-looking cultural initiatives is a new museum for contemporary arts. An outgrowth of the Galleria Nazionale d'Arte Moderna of 1911, the new Museo delle Arti del XXI Secolo, or "MaXXI," will be a cultural showcase for the twenty-first century: a multimedia, multifunctional space for conceptual and interactive media

arts. The functions of the new museum will include galleries for architecture and experimental installations, a library, auditorium, offices, and services. The L-shaped site, near the Olympic Village on Via Guido Reni, was formerly home to military barracks. A competition was held and in keeping with the cosmopolitan nature of the venture, the jury selected a foreign architect: Zaha Hadid, the Iraqi-born architect known for her dynamic, interpenetrating formal compositions.

Hadid's design for MaXXI brings together the various functions as routes or paths through the site into a "campus" for the arts, "a space for simultaneous events," according to the architect, not a museum to be considered as an object. Her first move was to transform the gallery walls into a versatile "engine" that runs across the site "cursively and gesturally," oscillating into screen, window, floor, and ceiling. "The site is built up by the force fields and trajectories which traverse it," the architect says. The overlapping horizontal configuration creates a new urban terrain, "an urban graft." Despite Hadid's concept that the center relates to the surrounding city, the forms will be largely hidden behind the barracks facade, which will be retained, a timid mask held up to the undemanding context.

The arrival of Hadid and Meier in Rome, along with the return of Fuksas, is characteristic of a renewed cosmopolitan outlook on architecture. Hadid responds with innovative concepts of architectural and urban space. Critic Carlo Olmo sees the aspects of transience, even "distracted perception," of Hadid's complex museum as marks of the contemporary urban experience. Margherita Guccione, the museum's architecture curator, relates it to the evasive and unpredictable nature of contemporary art, never completely defined. Hadid responds: "There can be no progress without an element of uncertainty and without a sensation of embarking on a journey to the unknown."

RENZO PIANO BUILDING WORKSHOP

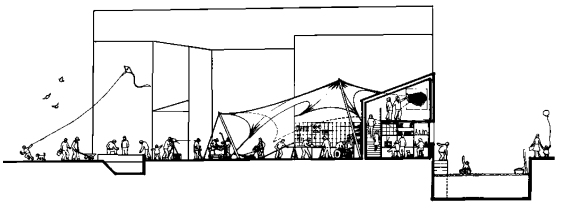
As a child, Renzo Piano experimented in his parents' backyard by putting things together. "I was everything, the designer, the constructor, the engineer and the architect." He apprenticed in his family's construction firm and then, to his father's consternation, pursued a degree in architecture at the Milan Politecnico. His education, however, was self-styled. While he was in school he worked in Franco Albini's Milan office, and he eventually earned his degree in 1964 with Ernesto Nathan Rogers. He continued to select his masters carefully: he worked for Louis Kahn in Philadelphia, then the structural engineer Z. S. Makowsky in London, and Jean Prouvé in Paris. Because Italy promised so little work in the late 1960s he pursued opportunities abroad.

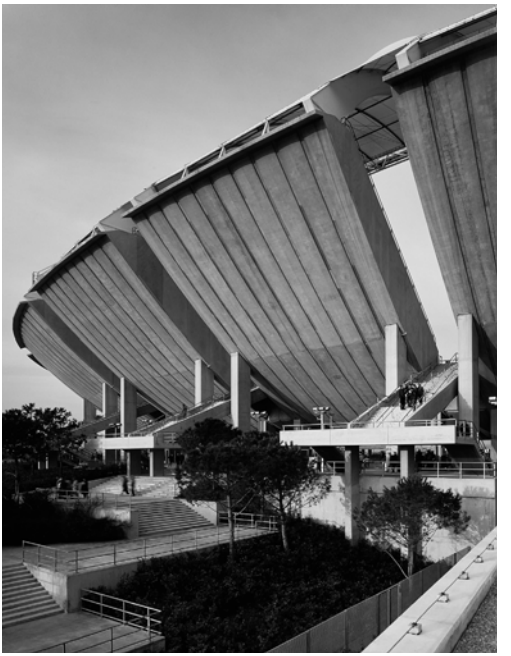
The Beaubourg was Piano's international debut. After the summer of 1968, French President Georges Pompidou proposed a reconception of the traditional public art museum that would break down its outmoded elitist aspects for a more active and widely accessible approach to culture. Piano teamed up with a friend from London, the Italian-born Englishman Richard Rogers, to submit an entry in the competition, which attracted almost seven hundred entrants. The jury, led by Prouvé, chose Piano and Rogers's provocative design. It was "a bit like an ocean liner passing through the Giudecca Canal in Venice," a timely act of "civil disobedience," as Piano remembers it. Like Albini's first, Futuristic Rinascente designs, Piano developed a building with its skeletal frame on its exterior to keep interior floor areas unencumbered. The ducts and escalators, in addition to the structural components, were placed on the outside. The Pompidou Center is made out of elements, Piano describes, dismantled from regular construction and reassembled in disarmingly new ways, an engineering version of what Aldo Rossi was doing with the semantics of architectural form. "The building is like a diagram," Piano explains, "you read it in an instant, its guts are on the outside, you see them and you understand that you move through it in a certain way." The Pompidou Center, which opened in 1977, is often taken as a masterpiece of "high-tech" design, but Piano warns that the colorful elements are not standardized industrial parts; almost everything was in

a way made individually, a one-of-a-kind prototype. Indeed, Piano sees the Pompidou Center as a joyful, antimonumental vision of society, a medieval village at heart, with its places of encounter, contact, and cultural exchange. "I believe buildings, like cities, are factories of the infinite and the unfinished. We must be careful not to fall into the absurd trap of perfection; a work of architecture is a living creature that changes over time and with use."

Piano's second major international success was a design for the art collection of Dominique de Menil, widow of a French oil magnate living in Houston, Texas. Finished ten years after the Beaubourg, it was designed with a louvered roof of ferrocement that serves as "a solar machine" refracting natural light. The versatility of Piano's response to the specifics of client, climate, technology, and building type has made him the preeminent Italian after Albini and Scarpa in museum design. For Piano, technology is not imagery but method, a constant experiment in the handling of materials applicable to any situation. Contrary to what many suppose of him, Piano warns against technological formations that become gratuitous exhibitionism. "If you already know at the beginning where you're going, it's only because you're applying a model, yours if you've been good at making one, or somebody else's if you haven't." Piano, who neither holds a professorial post nor writes in a didactic fashion, comments on the architectural profession through the example of his built works, and he appears a rather disquieting, antitheoretical figure. His buildings are real and well-built things, not conceptualizing objects. Piano is exploring new ways out of a era of crisis and confusion because, in his opinion, the architect risks extinction in self-indulgence, arrogance, irresponsibility, and lack of love of craft. "Architecture is a service in the most liberal sense of the term, a responsibility to society."

All Piano's projects are created by teams of designers. They are from the very beginning collaborative, interdisciplinary projects that emulate, Piano says, the "elasticity of reasoning" he admires in other fields of research, like physics and music. In 1980 he established his firm as Renzo Piano Building Workshop, its unconventional name suggesting early Renaissance guilds and an emphasis on the exploratory process. This interdisciplinary ideal guided Piano's earliest project back in Italy. After the Pompidou, Piano was awarded a UNESCO grant to





8.19 Renzo Piano Building Workshop, UNESCO "Active Rehabilitation Program" mobile unit, Burano (Venice), 1980
8.20 Renzo Piano Building Workshop, Renzo Piano Building Workshop office, Vesima (near Genoa), 1989–91
8.21 Renzo Piano Building Workshop, Stadium of San Nicola, Bari, 1987–90

implement his "Active Rehabilitation Program." This was a mobile laboratory of cleverly designed fold-out components that the team brought into decaying city centers for week-long presentations, planning meetings, and interventions. Building Workshop team members met with local inhabitants to analyze local urban conditions, to catalog available materials and crafts, to educate the participants in the possibilities of intervention, including financial planning, and to design and execute projects involving the inhabitants. The traveling event not only helped to directly ameliorate ailing urban fabrics, but contributed to a reinvigoration of indigenous architectural talent and sparked the local pride of place.

Piano also brought his expansive way of making architecture to a wider public on educational television. Like the neo-realist architects before him, Piano recognized the vitality of craftsmanship and wanted to see it applied in cities so that they might remain places to inhabit rather than museums pieces. Piano also returned to Matera after the failures of the neo-realists, drawing up feasibility studies for reinhabiting the Sassi. Piano's work in his native Italy in the 1980s is not as well known as his work abroad, principally because each of the projects dealt in subtle manners with issues that never called for grand architectural gestures that might have forged a recognizable personal style. To Italian architects, Piano's work—like the Genoa metro stops, the Light Metals Experimental Institute in Novara, or modular low-income housing units for Corciano near Perugia—did not appear to be architecture at all, but some form of social engineering. Piano sees this very much as a virtue of his work, and the design of his own working environment, the Building Workshop offices, is a demonstration of this.

In 1989 Piano designed the Building Workshop offices on a parcel of family property on the Ligurian coast west of Genoa, a promontory called Punta Nave, near Vesima. Long beams of pine laminate support a sophisticated version of a traditional greenhouse structure that stretches over six interior levels of open spaces that carry through the existing vineyard terraces. Punta Nave is a truly ecological, noninvasive architecture. Piano has directed his multifaceted research group toward the use of natural resources, especially plant fibers, in construction systems. Consequently, concern for reducing energy consumption and extending material permanence

has come to the fore. When Piano speaks of "high tech," he means the greatest sophistication of technological know-how, regardless of materials, to solve even the most basic problems of architecture: shelter and stability. The Workshop at Punta Nave is where the natural meets the technological in Piano's world, "a meeting place for craftsmanship and high technology," says Piano, "daring and patience, persistence and reflection, teamwork and privacy," an ideal place to work, isolated in Arcadian stillness yet connected to the expanding world of the firm's many projects through instantaneous telecommunications. "Punta Nave is the architectonic manifestation of my method of work: participation and reflection, technique and thought, love of tradition and continual research for the new."

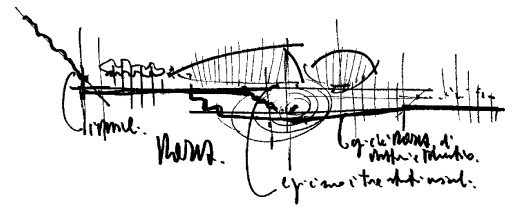
A dialectical quality between tradition and modernity characterizes all Piano's built work in his native country. For the 1990 soccer World Cup hosted by Italy, stadiums all across the nation were enlarged and a few new ones built. In Bari, the regional capital of Puglia, Piano was commissioned to replace the 1930s stadium. Because he is no fan of soccer, he could approach the building type without preconceptions. The collaborative team of the Building Workshop thought through again functional and structural issues with special concerns for spectators' safety. The Bari stadium consists of a crown of twenty-six crescent-shaped concrete forms that spread outward from an elliptical crater. Each sector hangs independently with 8-meter gaps from which the access stairs fall outward like gangplanks from a ship. The tension between containment and access is a visual manifestation of the balance of functional concerns. As the center of an exciting public event, visibility is crucial, but so is security against unruliness. The stadium, with its brilliantly colored PVC seats and translucent Teflon sunscreen, blossoms like a flower while the gaps between the petals let in light, air, and views to the surrounding landscape. Its concrete forms capture a surprising effect of lightness. The design relates to the landscape; to the region's famous landmark, the thirteenth-century fortress Castel del Monte built by Frederick II; and to achievements of Pier Luigi Nervi in the material. Piano carries on a dialog with tradition and context in ways perfectly consonant with Rogers's concepts of modernity: a dialog of respectful connections and deliberate differences.

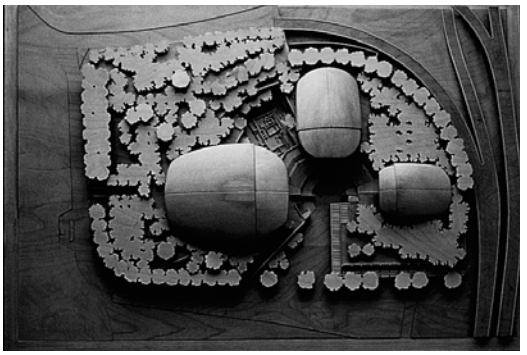
Piano has no distinctive aesthetic, no personal artistic arc to follow. His works are tailor-made for the architectural problem at hand. Each project is meticulously researched by his interdisciplinary team. Piano states that an architect must define his attitude toward the context. He can share, contrast, cite, or manipulate the context, but he should never ignore it for spurious novelty. One must understand oneself in relation to tradition. "Perhaps this is a particularly European trait, perhaps it is really specifically Italian. Certainly it is the heritage of a humanist culture that allows the most wild developments: underneath it all there is always the safety net of our past that protects us." History, as Rogers taught, is a lesson in methodology.

For the first time in his long career, Renzo Piano has now built in Rome. With the clearance of the Mausoleum of Augustus in 1936, Rome lost its only auditorium dedicated to symphonic concert performance. After the war, the Vatican rented its hall designed by Piacentini to the city's orchestra. Mayor Francesco Rutelli, eager to provide Rome with structures of a cosmopolitan culture, sponsored a competition in 1994 for a music performance complex in format similar to New York's Lincoln Center, with three variously sized concert halls, all their required services and offices, a media research center, museum, and shops. A site within the historic city of Rome could not be found for such an ambitious program, so a location was found in a corner of the Olympic Village, a site adjacent to the Parioli Hills and affluent northern suburbs.

The competition jury was impressed with the Building Workshop's considerable experience in designing spaces for music performance: an institute of acoustic research, IRCAM, added to the Pompidou Center; an acclaimed interactive installation in Venice for composer Luigi Nono's *Prometeo*; the resuscitation of FIAT-Lingotto with the insertion of Turin's most sophisticated music space, completed in 1994. "Working in a city like Rome, measuring yourself against the form of the place, is the most difficult thing," Piano said after spending the first day on the site wandering about with sketchbook in hand "listening" to the city. "Rome rings clearly. She speaks to you openly."

His first sketches initiate a dialog with the green hills, Nervi's Palazzetto dello Sport, Moretti's Olympic Village, and the bricks,



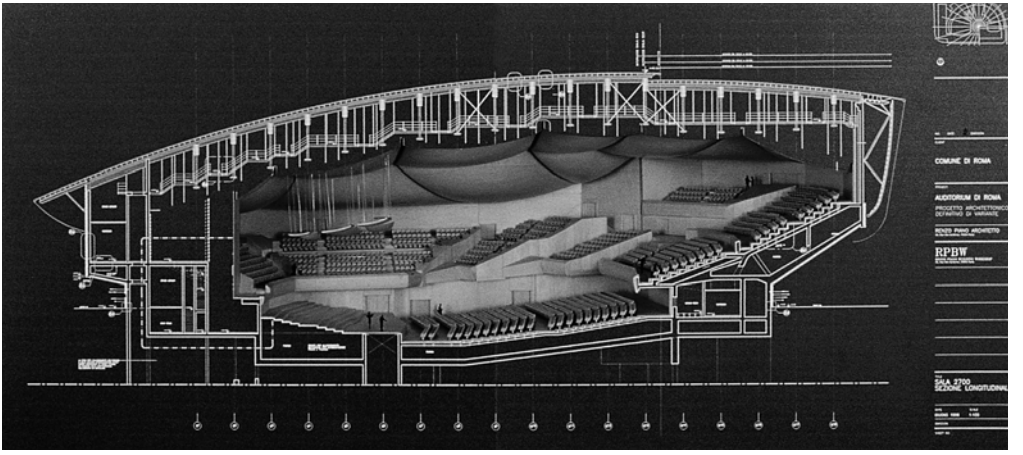


8.22–8.24 Renzo Piano Building Workshop, Auditorium, Rome, 1994–2002

travertine, and domes of Rome. Piano's formal choices correspond to the robust sculptural quality of Roman architecture, something that Libera, for example, in another era would have called *Romanità*. The strange shapes of the three halls derive from the "resonant bodies" of string instruments, according to Piano, but might also be compared to shells or beetles. The hall's exteriors are sheathed in lead pulled taut over curved, articulated plates. Underneath, laminated wooden beams are visible. The surfaces above which these odd forms float are heavy travertine and brick. After ground was broken it was discovered that the site had even more to offer. The remains of an ancient Roman villa came to light, which delayed progress while Andrea Carandini's archeological team excavated and Piano's architectural team rearranged the elements to accommodate the finds. At the center, an open-air theater, a fourth performance space, evokes the *cavea* of an ancient theater and provides a fulcrum for the new urban conglomeration. Piano has integrated greenery, umbrella pines, and cork trees not as gratuitous filler but as integral elements of the design that draw nature through the site.

The three halls—a 700-seat theater, a 1,200-seat fully flexible open space, and a 2,700-seat concert auditorium—are designed to accommodate the widest possible variety of live acoustic events. Europe's finest acoustic engineers were consulted, most of whom had been associated with Piano's interdisciplinary research since the IRCAM project in the 1970s. Claudio Abbado, then the director of the Berlin Philharmonic, enthusiastically endorsed Piano's idea to reuse Hans Scharoun's "vineyard terrace" model for the largest auditorium space. Berlin's celebrated postwar concert hall had effectively redefined the relationship between the art of music and its public, and the reuse of the distinctive organization here in Rome reinforces Piano's guiding interest in an architecture of social harmony. Inaugurated in December 2002, the Auditorium of Rome is the largest and most extensive work of contemporary architecture in the city in over half a century and Renzo Piano's latest contribution to equilibrating tradition and innovation.

In the last ten years Piano and the Building Workshop have realized major projects in Sydney, Osaka, Berlin, and Amsterdam. In Noumea, New Caledonia, the Tjbaou Cultural Center unites



8.25 and 8.26 Renzo Piano Building Workshop, Auditorium, Rome, 1994–2002: 1,200-seat concert hall, "Sala Sinopoli"; 2,800-seat hall, "Santa Cecilia"

aboriginal material, modern technologies, and remarkably strong sculptural imagery. In New York City, Piano's designs for the new headquarters of the *New York Times* promises to place even the established American skyscraper tradition in a fresh light. His tower of glass and white ceramic tile will give a kaleidoscopic effect, "a certain vibration" of transparency and luminosity. "I'd like to make it seem the building is breathing." The floor areas inside are open like Italian piazzas, he says, without hierarchical order but freely reconfigurable for infinite connections. "Symbols are dangerous but this building has to interpret the virtual nature of new information technology." Piano's ultimate goals seem to be such a masterful command of technique as to achieve even in the largest structures a sense of lightness and transparency. "What I am trying to do," he says, "is to use intelligence lightly. It is not a program; it is not an ideology or a manifesto. It's simply what works for me."

ROME 2000

Francesco Rutelli's Grands Projets for Rome are coordinated in what he has called "a new master plan for growth for a city that does not need to grow." The master plan of 2000 is based not on the idea of expansion but on the vitalization of latent urban resources. The mayor explained, "Rome hopes to offer to visitors from all over the world an avant-garde metropolis with the ability to combine the patrimony of its glorious past with an improved quality of life, a modern and compatible infrastructure, efficient services and cultural stimuli." Many of these cultural stimuli are in a humiliating state of decrepitude due to lack of simple maintenance. For a nation that has developed the most sophisticated restoration techniques, the number of graffiti- and garbage-covered, fenced-off, and abused sites is a perpetual affront. The new master plan is designed to restore public spaces and the images of the city's well-being. Piazza del Popolo has been cleaned up and returned to the pedestrians. The closed slaughterhouse in Testaccio has been revamped as the neighborhood's center of social and cultural events, and all of Angiolo Mazzoni's Stazione Termini wings have been

8.27 Massimo D'Alessandri, telephone booths, Rome, 1998
8.28 Richard Meier, Church of Dio Padre Misericordia, Tor Tre Teste, Rome, 1996–2002

opened and put to use. The Roman Forum too has been opened to the public, free of charge. Pockets of green space have been reconnected to the city fabric. Hundreds of underutilized lots across the city are being rebuilt with markets, hotels, and much-needed parking lots. Newspaper kiosks, pilgrim and tourist information offices, and telephone booths contribute to the functional and aesthetic health of public spaces across the city.

The master plan is designed to govern the entire metropolitan area, not just the historic center. As Paolo Portoghesi puts it, it is a plan to help correct "an overcongested heart and an invertebrate body." The problem lies in dealing with the far-flung periphery, forgotten places like Tor Bella Monaca, Torre Spaccata, Tor Marancia. Their evocative names derive from the medieval towers of the Agro Romano, but they do not conceal the lives of desolation of these former Fascist settlements. With most of the city's activities and traffic routes concentrated on the historic center, the 2000 master plan seeks to redistribute resources, government offices, and public services throughout the city and its edges. A careful study guided by Maurizio Marcelloni identified the areas of greatest activity for residents, neighborhoods of durable social identities that the study called "microcities." The plan lays out steps to strengthen these microcities by encouraging commercial development, transferring public offices and services such as the new university at Tor Vergata, founding cultural and sports facilities and churches, designating tourist destinations such as the new aqueduct park, and most importantly, realizing lateral transportation links. The historic center is to be one of a variety of dignified places in a constellation of metropolitan identities. Unlike its predecessors, which suggested massive interventions, the 2000 plan clarifies general policies regarding urban management and bureaucratic procedures to encourage private initiative in realizing the city's collective goals.

One such initiative that has produced a top-rate work of contemporary architecture is the construction of a parish church in Tor Tre Teste for the Vicariate of Rome. In 1993 an international competition was held for the design of two parish churches, a seed project for a larger mission to eventually generate fifty such churches for Rome's deprived periphery. Projects were received from, among

many, Portoghesi, Purini, Frank Gehry, Peter Eisenman, Tadao Ando, and Richard Meier, and the last was commissioned to build his. Meier has gathered the rude bastion-like forms of the neighborhood's 1970s housing development and transformed them into an elegant gesture that defines a gentle place among the detritus. The structure consists of three nestled curves of poured concrete sailing over a smaller lower block to the north. Light flows across the surfaces as fine as white marble and filters down into the congregational space. The Italian context of this subtle work encourages reference to baroque handling of light. Meier's church seems a calm resolution to Giovanni Michelucci's definition of sacred architecture as "a temple capable of pacifying the anxieties and anguish of the people." Tor Tre Teste gains a dignified communal space, a real monument to gather and meditate in, and the Roman Church regains its prominence as a patron of fine architecture.

In celebration of the Holy Year of 2000, the Vatican commissioned an engraved plan of the city of Rome, 250 years after Nolli's. It is not a true "map" but a view plan with the buildings described in three dimensions. It is not without its humor—one of the Fames in the margin trumpets its patron's vindication with a blast that knocks Garibaldi off his haughty podium. The map covers the historic city within the walls with Prati and the Villa Borghese. A comparison to Nolli's map shows the extent of building and reconfiguration the city of Rome has undergone over the last two and half centuries. Corner vignettes represent the expanded twentieth-century metropolis beyond, with scenes that join the Colosseum and Saint Peter's, and panoramas that include Nervi's Palazzetto dello Sport, the Pantheon, and the Trevi Fountain. Like Nolli's map, the jubilee plan captures the image of a vibrant city upon which the traces of a future evolution are inevitable.

8.29 Patrizio Di Sciullo, Giuseppe Greco, Riccardo Tommasi Ferroni, Forma Urbis Romae, monumental plan of Rome for the Jubilee year 2000

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