The Bureaucratisation of Architecture in Post-War Italy: SGI under Aldo Samaritani, 1945–73

by DAVIDE SPINA

ABSTRACT

In Italy following the second world war, the Vatican-controlled real-estate developer and contractor Società Generale Immobiliare (SGI) emerged as a major force in the country's reconstruction process. From its Rome headquarters, the 'Leviathan' (as the journalist Antonio Cederna called it) devised, delivered and managed dozens of schemes across the peninsula — from residential and commercial developments to industrial, road transport and water infrastructure. None of this would have been possible without the establishment, immediately after the end of the war, of a centralised administrative system coordinating the work of the company's 10,000 employees. Making use of the company's unpublished documents, this article examines the bureaucratisation of SGI's design and construction processes in the period 1945-73. It looks at the development of the company's in-house information management system; the criteria it adopted in appointing its architectural staff; the modernisation of the company's office space in Rome; the predicament of the architects on its payroll; its use of high-profile 'signature' architects for prestige projects; and the firm's later adoption of project management techniques developed in the United States. It also looks at the way that the company exploited national and municipal planning regulations (and the gaps within them) to produce building types and urban configurations not previously seen in Italy. Overall, the article situates SGI's 'bureaucratic drift' in the context of the increasingly corporate and specialised professional world of post-war western architecture.

To many, the words 'post-war Italian architecture' conjure up images of progressive-minded architects working in cosy studio spaces and concocting designs down to the tiniest detail for the state or independent clients. Gio Ponti, Franco Albini or Mario Ridolfi, for example, all worked in a craftsman-like fashion and pursued more than mere profit, be it some form of public good (the INA-Casa housing programme) or private distinction (the Pirelli building in Milan). Architectural historians have examined these figures and their production from many different angles, but so far have paid little attention to the opposite side of the coin: the conditions of work and production in larger, profit-driven outfits and, beyond this, speculative building in general, which accounts for the majority of the housing stock constructed in Italy from 1945 onwards. There is something of a bias in this area of the discipline, which has edited out of the

picture a huge proportion of building production in post-war Italy — a kind that is so conspicuous to anyone visiting the country today. One possible reason for this is the dominant position occupied by architects aligned with the left within the discourse on Italian architecture, which focuses on the bespoke products of the left rather than the ordinary (and more extensive) production of the right. As a consequence, works designed by architects for commercial or conservative interests have been at best analysed from a formalist angle, whereas the vast majority of buildings put up by profit-seeking firms have been systematically dismissed as real-estate speculation.¹

Perhaps the principal 'victim' of this bias has been the Rome-based real-estate developer and contractor Società Generale Immobiliare (General Construction Company), or SGI. Despite its size, political mission, manifold production and influence on architecture and planning realms in the country, SGI is absent from virtually all accounts of post-war Italian architecture. The company was created in Turin in 1862, immediately after national unification, with the mandate to contribute to, and capitalise from, the modernisation of Italy's building and infrastructural stock. It relocated to Rome following the latter's annexation to the Kingdom of Italy in 1870, and expanded rapidly as a developer in the newly appointed capital during the post-annexation building boom.² By the 1920s, SGI was firmly established in Rome, where it traded land and championed a new building type that was to dominate the cityscape for half a century: the palazzina (small palazzo). A turning-point for the company came in 1933 when the Vatican purchased a majority stake, using funds that it had received from the Italian state as part of the Lateran treaty four years earlier. Given that the money was intended as compensation for the loss of property suffered by the Vatican after national unification in 1870, it is telling that the latter used it to buy out the largest national company whose core business was, precisely, property. As a result of the buyout, SGI activity continued to grow in the 1930s and only came to a halt during the second world war.

The conflict severely affected the company's trade, but also offered it the chance to draw breath, restructure its organisation and set out ambitious plans for its involvement in the post-war reconstruction boom. During this period (1948–65), SGI rapidly developed into a corporation owning over a hundred subsidiaries, employing around 10,000 people (including many signature architects) and building in every major city of the peninsula. In total, around 700 schemes were undertaken in the years 1945–65, many of them in Rome, the company's home, where its sway on the local administrations was the greatest because of its Vatican connections. Invested in large-scale speculative building and aspiring to a 'state within the state' status, SGI relied on a large bureaucratic apparatus for its day-to-day operations and long-term strategies. Focusing on the bureaucratic aspects of the company, this article offers the first analysis of this apparatus and its impact on SGI's built production.

BOTTOM-TO-TOP

Immediately after the second world war, SGI restructured its organisation to play a major role in the reconstruction and expansion of Italy's building stock and infrastructure. Before the war, SGI was a rather small entity that did little contracting, preferring to outsource the process to local firms whenever possible. After the war, SGI was a large

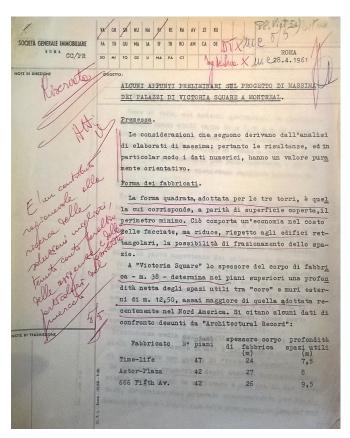


Fig. 1. An SGI report with Aldo Samaritani's handwritten comments, 28 April 1961 (Central State Archive, Rome)

operation that built most of its projects itself. In 1945, the company created Sogene (an acronym for Società Generale, or General Firm), a subsidiary devoted to the delivery of schemes, complete with its own board members, premises, technical staff, workforce and machinery. Shortly afterwards, SGI strengthened its hierarchical structure by concentrating all the executive power in the company's new managing director, Aldo Samaritani (1904–1996), colloquially known to staff as *Il Dottore* (The Doctor). A son of Trastevere, a working-class district just south of the Vatican, and graduate of Augusto Righi (Rome's best liceo scientifico, a high school with a focus on science), Samaritani decided at the age of nineteen to bypass college and instead to start working as an accountant at Banca Commerciale Italiana (BCI), a major Italian bank with strong ties to the Vatican.³ His mathematical virtuosity and impeccable manners were soon noticed by the management. And so, when SGI was looking for new blood following the Vatican buyout in 1933, the BCI vice-president Bernardino Nogara, who was also the head financial adviser to the Vatican at that time, recommended the 29-year-old accountant for a job in the company's new management team. Samaritani was appointed chief administrative officer later that year and, in 1945, managing director. In 1960, he was appointed chief executive, a post he held until 1973.

Managing directors are generally hands-on figures, but Samaritani was exceptional as he involved himself in an unusually large range of decisions, from which banks to approach for loans to which architects to work with. Central to this concentration of power were his changes to SGI's in-house information management system. Previously, information within the company flowed mostly top-to-bottom through the system of 'service orders' (orders given to the staff through paper sheets). Samaritani introduced a bottom-to-top information system that allowed him to keep track of everything happening within the company and to give pointed instructions to the employees: the so-called report system (sistema dei verbali).4 In this system, personal reports and transcripts of every meeting were regularly sent over to Samaritani, who reviewed and returned them with his comments and orders written in red pen, 'usually within 24 hours' (Fig. 1).5 Heaps of papers thus passed through Samaritani's office every single day, a prodigious feat that consistently left both staff and relatives in awe — 'he was like a human computer', his daughter recently commented. In accordance with this strict record-keeping regime, copies of every report and meeting transcript were immediately stored in the company's archive, likewise established by Samaritani in 1945.

QUANTIFICATION TAKES COMMAND

Despite his desire to maintain all power in his hands, Samaritani had to outsource a lot, particularly design decisions, of which as an accountant he had little knowledge. To that end, as soon as SGI emerged from the ruins of the war, he brought in two peculiarly quantitative-minded and bureaucratic figures: the architect Emilio Pifferi (1906–1996) and the civil engineer Alberto Ressa (1902–?). Respectively head of the SGI research division and design office, Pifferi and Ressa were both from Turin, Italy's main industrial hub and the centre of Anglo-Saxon positivism in the country.

During the war, as editor of *Architettura Italiana*, the journal of the Italian union of fascist architects, Pifferi had campaigned for the industrialisation of architectural practice and construction, studying the organisation of work in large French architecture firms, speculating on the possibilities of vertical integration in building, and even pitching to the engineer and entrepreneur Adriano Olivetti the idea of a think-tank dedicated to modular design.⁸ After the war, he joined the editorial board of *Cantieri* (*Construction Sites*), a Milanese magazine promoting reconstruction along industrialised lines.⁹ Pifferi was an empirical mind and SGI surely appreciated his philosophy: 'architecture [...] is a trade [with] its rules and procedures originating from customs and the laws of the market [...] in trade objectivity prevails.'¹⁰

Alberto Ressa, a similarly quantitative-minded character, was next to Pifferi at the top of the design hierarchy. Before joining SGI in 1949, he was a partner at Decker e Ressa, an unremarkable firm serving the Turin corporate community (for example, with the headquarters of Toro Assicurazioni, 1940); he was also, like Pifferi, a member of the Gruppo Pagano — the forerunner of the Turin chapter of Bruno Zevi's APAO (Association for Organic Architecture) — and a full professor of civil engineering at the Turin Polytechnic. While negotiating his move to Rome, Ressa was also in the process of publishing *L'economia nella tecnica edilizia (Economics of Construction Technology)*, a hefty tome that framed building as largely a quantitative and legal problem — music to Samaritani's ears. 12



Fig. 2. Rome, 45 Via De Pretis, the headquarters of SGI from 1926 to 1966, photograph of 1964 (Central State Archive, Rome)

BEEFING UP THE RANKS

Between 1945 and 1949, SGI hired an army of architects, engineers, surveyors, draughtsmen and typists. By 1955, the company's headquarters in Rome employed 550 individuals, organised into twelve ranks. The staff comprised 32 *dirigenti* ('managers', ranks 1 to 4), 129 high-rank employees (ranks 5 and 6), 156 mid-rank employees (ranks 8 and 9), 200 low-rank employees (ranks 10 to 12), plus around 40 *giornalieri* ('day labourers').¹³ The managerial class comprised six ranks, in ascending order: special manager (*procuratore speciale*), regional manager (*procuratore regionale*), branch manager (*procuratore di sede*), vice-director (*vice-direttore*), co-director (*condirettore*) and technical director (*direttore tecnico*).

The company's archive reveals that certain bureaucratic traits were sought in employees, including 'a well-developed economic sense coupled with technical competence', a 'disinterest in politics' and 'exemplary morals'. Characteristics inconsistent with this ideal were not tolerated, hence the firing, in 1967, of the head of the company's marketing division for 'manifestations of exhibitionism [...] incompatible with the prestige of his office'. Decorous and anonymous: this was the perfect SGI employee. But the same cannot be said of the process by which these people were hired, which was far from impersonal. Throughout the 1940s and 1950s, SGI was not immune to the peculiarly Italian system of *raccomandazioni* (backings). The company's records contain numerous letters from industry executives, Christian Democratic politicians and even Vatican officials, interceding for this or that person based not on merit, but on ties with the person writing; a former employee joked that in order to get hired by SGI, 'you had to be the son of a cardinal'. Later on, however, the company embraced hiring and performance evaluation methods based on more objective criteria. In 1953, the management introduced evaluation forms for staff; in 1955, it appointed a figure to oversee personnel (the *ispettore* — the inspector); in

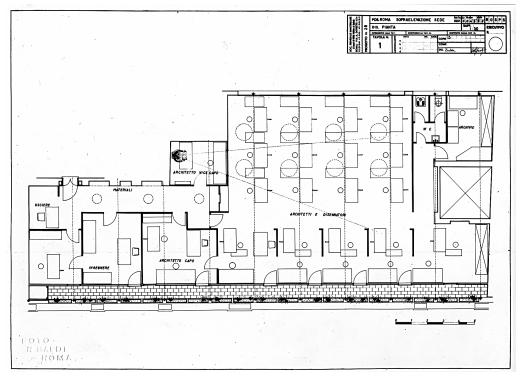


Fig. 3. Plan of the SGI Design Office, Luigi Vagnetti, 1949 (Luigi Vagnetti Archive, Florence)

1961, following a tortured soul-searching process which included a five-day meeting at Samaritani's home, the top brass of SGI created the human resources office.¹⁷ But even then, the new system had not fully replaced the old one: the head of HR from 1963 onwards was not a human-resources professional but a former bank manager. Only in the late 1960s did SGI take decisive steps towards rational management of its human capital: the Office for the Organisation of Work Methods opened in 1966, and in 1969 the company underwent an audit by the British consultants Peat, Marwick, Mitchell (today's KPMG).¹⁸ Cronyism nonetheless remained endemic at SGI, as did nepotism, which was institutionalised within the company. Regardless of how they got in, however, once on the SGI payroll, all employees were expected to keep their Faustian pact by working in the company's headquarters, the heart of SGI's bureaucratic machine.

MODERNISING THE WORKPLACE

SGI started out in a small office above the San Marcello arcade, next to Carlo Fontana's church of the same name on the Via del Corso. However, in 1926, in response to an increase in staff and business volume, the company relocated to 45 Via De Pretis, an undistinguished mixed-use structure dating from the 1890s, located at the intersection



Fig. 4. The main room of the SGI Design Office, photograph of 1949 (Luigi Vagnetti Archive, Florence)

with Via Nazionale (Fig. 2).¹⁹ The building — a standard *umbertino*-style block with a rusticated basement, a façade peppered with aediculae and a heavy cornice — is still standing today, occupied by the Ministry of the Interior. Nothing betrayed its function from the outside, which demonstrates how little Italian architecture had to offer, at least aesthetically, to the managerial and clerical professions until the fascist period, when the first generation of distinctly bureaucratic-looking office buildings appeared all over the peninsula.²⁰

Information on the arrangement of SGI's activities within the Via De Pretis building is sparse, but we can make out its essential features. The rental office (*ufficio affitti*) and a public hall with counters (*sala del pubblico*) were on the mezzanine floor, surrounded on two sides by fifteen staff rooms (for lawyers, accountants, notaries, secretaries, archivists, maintenance clerks and even a small team of draughtsmen). The rental office, and especially its main hall, must have been a busy place given the number of tenants that came here for routine matters on a more-or-less daily basis. 'SGI owns half of the buildings in Rome [...] it's good to remind Romans who their landlord is,' observed a communist journalist in 1952, perhaps stretching the truth a little.²¹

On the *piano nobile* was *la direzione*, or top management office, a restricted area dominated by Samaritani's own sanctuary, a large corner office, in line with conventional practice.²² Above that, the bulk of the administrative machine was housed in two of

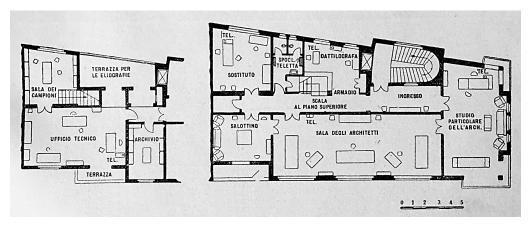


Fig. 5. Plan of Marcello Piacentini's office in the late 1940s, from Armando Melis, Edifici per gli uffici, 1953, p. 67

the three storeys beneath the cornice: the legal office, accounting office, land office, tax office, staff office, press office, Rome office, and a few minor offices that opened and closed as needed.²³ The head office of Sogene, the in-house contractor which in 1955 had a clerical staff of about 250 spread across the peninsula, took up an entire floor. Finally, on the top floor was the Ufficio Progetti (Design Office), Samaritani's personal creation and the heart of the company's operations in the post-war period.

Until 1945, SGI routinely outsourced architectural design to select local firms, so blueprints appeared in the Via De Pretis only for review by the company's in-house engineering and contractor teams.²⁴ But as the company took on design duties in the post-war years, a design office was required. In a clear attempt to enforce a division of labour, SGI in 1949 resolved to create two design offices: one for architectural drawings (scale 1:100 — the Ufficio Progetti, led by the civil engineer Alberto Ressa), and one for working drawings (scale 1:50 — the Ufficio Progettazione Esecutiva, led by the architect Renzo Canepari, a local professional, unlike Ressa). We know nothing about Canepari for lack of archival information. We do know, however, principal features of the Ufficio Progetti, the largest space in the firm.

The Ufficio Progetti was housed in a purpose-built structure designed by the architect Luigi Vagnetti: a lightweight metal structure about 30 m long and 12 m wide which, set back from the edge of the building on the top floor, and with low ceilings, was barely visible from the streets below. Inside, approximately thirty draughtsmen worked in a large open-plan office under the strict supervision of the *architetto vice capo* (deputy head architect), whose own workspace was positioned and oriented to exercise the greatest degree of visual control on his subordinates — 'we were under observation all the time', recalled a former employee (Fig. 3).²⁵ Eight cone-shaped skylights and two high ribbon windows in this main room provided adequate illumination so as not to sacrifice valuable floor space, while the furniture and layout complied with state-of-the-art recommendations for maximum occupancy (Fig. 4).²⁶ An archive and the offices of the chief architect and the engineering consultant were located in a few smaller

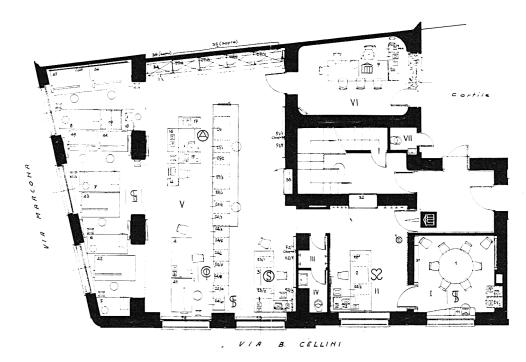


Fig. 6. Plan of Luigi Mattioni's office in the mid-1950s, from Giovanna Alfonsi and Guido Zucconi, Luigi Mattioni: Architetto della ricostruzione, 1985, p. 72

rooms on the sides. A doorman was stationed next to the office entrance to monitor the incoming and outgoing traffic of people.

In 1954, the SGI Design Office employed thirty-four people on a constant basis and produced 117 different designs, roughly one every three days. In the Italian context of the time, where a 'big firm' rarely employed more than twenty people or worked on more than a few projects at a time, this was a large operation. In comparison, the offices of Marcello Piacentini (Fig. 5) and Luigi Mattioni (Fig. 6), which were among the largest and best organised in the country in the post-war years, were very modest — and the SGI office was more efficiently structured, with its quasi-panoptical layout.

Like any respectable company with a large business volume and thousands of employees, SGI also had several offices located far from its headquarters. In 1949–50, the company established regional branches in a number of major cities, including Milan, Genoa, Turin and Livorno in the north, and Palermo, Naples, Bari and Cagliari in the south (Fig. 7). In the early to mid-1960s, it established international branches in Paris, Washington DC, Montreal and Mexico City, each organised similarly to the main office. 'It was like visiting the outposts of the British empire in the nineteenth century,' recalled a former executive; 'in every office you would see the same habits and working culture of the motherland.' This culture was essentially that of a technically minded managerial and design class of professionals, the so-called *tecnici* (technicians).

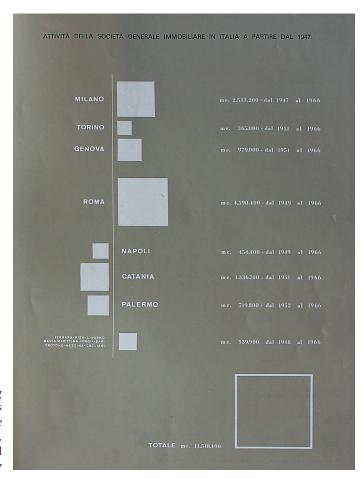


Fig. 7. Graphic showing the SGI regional offices by volume of work in the mid-1960s, from SGI, Realizzazioni e studi nel settore edilizio, 1966, p. 7

ITALY'S TECHNOCRATIC DRIFT

In post-war Italy, a country emerging from a long agrarian slumber and the rhetorical excesses of fascism, *tecnico* was a catch-all term for anyone whose trade relied on the mastery of technical knowledge for the production of goods, including buildings. This position held currency in the booming economy of the time as a guarantee of social respectability and mobility. A sociologist visiting Italy from the US in the late 1950s was struck by how little the *non-tecnici* had a voice in public matters: 'the intellectual generalist, the person who is not an expert in any particular aspect of the socio-economic system, is simply not listened to by the ruling (Christian Democratic) political group in Italian society'. An advertisement in the popular Catholic magazine *Famiglia Cristiana* (*Christian Family*) promoted *tecnici* as 'enjoying enviable job prospects at home and abroad [...] making more money than other workers today' and 'the most sought-after class of workers in the world' (Fig. 8). Engineers, architects and construction surveyors were all considered *tecnici*, as were managers. Following the war, John Burnham's 1941 book *The Managerial*

Revolution was mistranslated into Italian as La Rivoluzione dei Tecnici (The Revolution of the Technicians), demonstrating how little Italians knew about Anglo-American corporate culture at the time.³⁰ At SGI, pretty much everybody except the administrative, legal and upper strata of the managerial staff regarded themselves as tecnici.

Engineers were arguably the most complete incarnation of this 'technical' spirit within the company. SGI employed many of them, often hiring them straight out of La Sapienza school of civil engineering in Rome, which was considered 'less agitated' (that is, less politicised) than its competitor, the Valle Giulia school of architecture, where simmering unrest in the 1950s led to an outright revolt in 1963.31 Within SGI, a civil engineer normally began with a design or construction management role, before moving, after ten to fifteen years of service, up to the managerial sphere (procuratore speciale, and so on). Nearly all of SGI's dirigenti were thus engineers by training and only a minority came from the fields of law and business, mainly through service in the company's legal and accountancy offices (like Samaritani himself). The trajectory from a technical to a managerial position was the norm for the private sector. In the public sector, however, the dominance of the legal professions still held sway to the dismay of the tecnici: as one complained in 1963, 'in all public institutions, engineers rarely have leading roles and are therefore subordinated to technically incompetent individuals [...] The upshot of this absurd situation is lots of huge mistakes.'32 In short, there was a feeling within Italy's growing class of technocrats that 'the masses and the political leaders [were] failing to understand the basic laws of economic science' — that is to say, that the public and the government did not put enough 'trust in numbers', in the phrase coined by the historian Theodore Porter.³³ The feeling was largely justified, given how consistently the Christian Democratic leadership prioritised politics over economics, with damaging effects on the country's building sector (such as the prevalence of low-tech solutions and absence of planning). SGI, despite being a creature of and instrument of the Christian Democratic order, was at odds with it in this regard, given the pervasive influence in its ranks of the mentalità tecnica.

In the Italian capital, where most civil engineers were either working on public contracts or freelancing for small developers, SGI offered a third, rare option offering the best of both worlds: working on large-scale projects within a private firm.³⁴ To be an engineer within SGI was a mark of privilege ('we considered ourselves a notch above the others', said a former member of staff) within a profession that was already in the top echelons of the construction industry.³⁵ In Italy, engineers considered themselves superior to a *geometra* (building surveyor), who was looked down on as 'practical-minded, always with a ruler in his jacket pocket', but also to an architect, 'a capricious type, all taken with his artistic and philosophic ideas [...] sketching abstract shapes with a charcoal pencil'.³⁶ This, at least, was the journalistic stereotype of industry differences, but it appears to have been shared by the industry. Here is what the former SGI architect Federico Malusardi had to say about it sixty years later:

Construction workers called me 'engineer' because, to them, 'architect' was a bad word [...] it was a synonym of 'viveur' or 'artist'. They did not respect architects because they *doubted* [...] on the other hand, they respected engineers because they looked self-confident.³⁷

Ma indubbiamente! Nel nostro secolo gli argomenti tecnici sono i più appassionanti ed interessanti. I TECNICI hanno le maggiori prospettive per crearsi delle posizioni invidiabili in Patria e all'Estero.

I TECNICI guadagneranno ovunque e sempre più di tutti gli altri lavoratori.

1 TECNICI guatagneramo ovanque e sempre piu di duti gir anni ravotatori.
1 TECNICI sono i collaboratori più apprezzati in tutti i rami dell'industria, perchè sono sicuri del fatto loro e conoscono a fondo il loro mestiere dal lato teorico e da quello pratico.

I TECNICI sono i lavoratori più ricercati in tutto il mondo e saranno sempre più ricercati, più la produzione sarà automatizzata.

I TECNICI posseggono tutti i requisiti per poter svolgere con successo una attività in proprio.

OLARI - VARES

Può diventare un Tecnico anche Lei?



Le rispondo subito: Molte migliaia di semplici operai, manovali ed apprendisti che negli anni passati si sono affolati alla mia guida, sono diventati degli ottimi tecnici ed hanno fatto delle carriere veramente sorprendenti. Oggi mi scrivono delle lettere piene di entusiastica riconoscenza. Come quelle migliaia di Suoi colleghi « arrivati », così diventerà un tecnico anche Lei, se lo vuole fermamente ed ha fiducia in se stesso ed in me.

per diventare un Tecnico?

Semplicemente:

buona volontà

la licenza della scuola elementare almeno 16 anni di età qualche ora di tempo libero al giorno 30 lire giornaliere da spendere

Questo è tutto! Ne dispone anche Lei!

Come deve fare per diventare un Tecnico?

Deve apprendere maggiori cognizioni nel Suo mestiere, diventare più capace e rendere di più.

Le occorre quindi studiare.

Io ho trovato un sistema d'insegnamento tecnico-professionale che Le permette di studiare comodamente a casa propria — nei ritagli del Suo tempo libero — ad un orario da Lei scelto — percependo sempre il Suo salario intero — incominciando il Suo studio in qualsiasi periodo dell'anno — praticamente a qualsiasi età, dopo i 16 anni — di godere di un insegnamento riconosciuto universalmente come ottimo ed efficace con la massima probabilità di ottima riuscita.

Anche Lei può fare carriera, se lo vuole seriamente e prende una decisione. Ha tutto da guadagnare e nulla da perdere.

Le interessa il mio metodo d'insegnamento?

Desidera conoscere il giudizio dei Suoi colleghi e dei loro datori di lavoro? Allora riempia e ritagli il tagliando qui al lato e lo spedisca oggi stesso allo:

ISTITUTO SVIZZERO DI TECNICA - LUINO (Varese)

Esso Le invierà la guida interessantissima « La via verso il successo » che le darà tutte le spiegazioni che desidera avere.

Faccia subito questo primo passo che non l'obbliga a nulla.

Desidero ricevere gratis e senza impegno il volu-
metto «La via verso il successo». Mi interessa il
corso di:
Costruzione di macchine - Elettrotecnica
Tecnica Edilizia - Radiotecnica

Tecnica delle Telecomunicazioni (Radio)

(sottolineare II corso che interessa)

Nome	
Cognome	
Via	
Comune	Prov.
Professione	1450

Fig. 8. 'Would you like to become a Tecnico?', advertisement of 1959 from Famiglia Cristiana, 25 January 1959, p. 38

Another characterisation of this split was given by the journalist Franco Nasi in his book *L'architetto* (1960):

The difference between engineers and architects? [To the former] the train station is the place where *trains* leave from and arrive at, [to the latter] it is the place where *people* get on and off trains.³⁸

Nasi's description suggests two types of *tecnici*: the engineer, who is concerned with the functional aspect of buildings, and the architect, who is concerned with the experiential. Engineers dominated at SGI, but because the company's main clients were among the urban elites (social groups historically concerned with issues of self-representation), many architects also worked at Via De Pretis, albeit in conditions that hardly reflected the ideal of the architect as a creative genius.

PROFESSIONALISM AND ITS DISCONTENTS

The average SGI architect matched both Henry-Russell Hitchcock's definition of the 'bureaucratic architect' and the Italian concept of *professionista* (professional): the designer completely immersed in free-market economics.³⁹ The *professionista* was a human type almost universally reviled by Italian historians from the late 1950s onwards. In 1962, the historian Manfredo Tafuri spoke of this group as 'a lousy and empty-headed bunch, a sort of architectural underworld catering to [...] private speculators, and, like them, unequalled in terms of stupidity and vulgarity'.⁴⁰ *Professionisti* existed before the second world war (architects have always worked for private clients), but the postwar building boom greatly increased their number and presented them with the dual problem of a new architectural idiom and an increasingly profit-driven class of patrons, as explained by the historian Mario Sanfilippo:

[In the 1950s] architects had to negotiate the breakdown of traditional architectural culture in Rome and the impact of the International Style [...] most of them were intellectually not ready for the challenge and so became mere *tecnici* (little more than *geometri*) in the pay of builders.⁴¹

This was certainly the case at SGI, where even a top architect such as Pifferi sometimes felt irrelevant in the machine of the company: 'at times [...] I wondered what I was doing there, if I was actually of use to something or someone, or if, by chance, I had got it all wrong'. ⁴² Despite this, SGI was never short of potential recruits. Whether they came from a smaller developer or from independent practice, on their hiring they would all enter what an SGI manager characterised as 'our "stable" of [...] draught horses, modest but efficient workers, essential for large-scale commercial operations'. ⁴³ Landing one of these 'equine' jobs was a highly sought-after prospect in the Rome job market.

For even during the post-war building boom, being an architect in Rome was not synonymous with professional fulfilment and financial ease. When SGI first advertised open positions in the daily *Il Messaggero* in 1947, the company was inundated with applications. 'That publication instilled too much hope in far too many people,' said

the company's then president, Bernardino Nogara.⁴⁴ Pifferi could not have found a better simile for the profession when, in his later years, he described it as 'like a large shrub of roses in the spring [...] on the outside, visible to the eye, are those beautiful, sweet-smelling flowers; on the inside is a bundle of thorns'.⁴⁵ In post-war Rome, as Nasi explained, one could 'find plenty of jobs, but the salaries are low. Clients do not think it is necessary to pay standard fees as architects always get a cut from the building material suppliers anyway.'⁴⁶ Haggling and 'lowballing' (that is, putting in an unrealistically low fee proposal on the basis of what would subsequently be earned from suppliers) were endemic in the industry and set it apart from other, more respected, professions: as Nasi put it, 'when people go to the doctor, they just do what he says, on the nod [...] but when people come to us, they always argue'.⁴⁷ For the progressive-minded, all these issues only aggravated pre-existing doubts about the possibility of walking the path of moral rectitude within the profession. 'The architect,' Giancarlo De Carlo later said in this regard, 'is forced to choose: at the service of the [...] boss [...] or else at the service of the user. He can no longer escape.'⁴⁸

Before applying for a job at SGI, most architects would have been familiar with some, if not all, of these existential quandaries (which in the case of SGI were exacerbated by the company's poor reputation), but decided that a steady income more than compensated for that. 'At a psychological level,' Bruno Zevi observed in 1962, 'the paradox is that, publicly, all architects are horrified upon hearing the name "SGI", but nearly all architects are on its payroll.'⁴⁹ In a recent interview, Federico Malusardi, a young recruit to SGI in the 1950s, put it even more clearly: 'SGI offered a nice paypacket [...] one might say that they literally bought people.'⁵⁰ But financial security came at a cost. In 1959, in a letter to Zevi, Malusardi described the issue while employed at the company: 'I suffer anguish from my aroused conscience [...] it is impossible for me to work as a designer here, for my love for architecture is too strong.'⁵¹

At SGI, architecture was practised not as a craft but as a business, with all the drawbacks that entailed, such as the inability of designers to claim full authorship of the company's schemes regardless of their involvement in them. As a general rule, any development designed in-house at SGI was marketed as being by the SGI Design Office (Ufficio Progetti della Società Generale Immobiliare) — an uncommon practice in 1950s Italy, where the market was comprised of many boutique firms named after individuals (Ponti, Gardella, and so on).⁵² For example, at the 1957 opening of the Cinema Vigna Clara in Rome, a daring saddle-roof structure almost entirely designed by Malusardi (Fig. 9), Samaritani credited solely the SGI in-house team, leaving the young architect, who was present, in despair.⁵³ Another source of alienation for SGI architects was their peripheral role in the design process, or, as Pifferi put it many years later, their 'manifest marginalisation from the conceptual phase of the process, when you establish the goals and means of the project', a phenomenon that to him was 'the more egregious'.⁵⁴ In the balance of power between architects and managers within SGI, the latter always had the upper hand.

Notwithstanding these constraints, SGI attracted a lot of talent from the Valle Giulia school, at least during the building boom, including some who became respected names in practice and academia, such as Luigi Vagnetti (1915–1980) and Leonardo Benevolo (1923–2017). Whatever these elite recruits set out to do at SGI had to be compatible with



Fig. 9. The SGI architect Federico Malusardi surveying the saddle-roof of the Cinema Vigna Clara, Rome, photograph of 1957 (Rome, Federico Malusardi Archive)

the company's interests, which meant that any radicalism they displayed in their work had to be moderated. A compromise-prone, cautious attitude was highly rewarded in the company, as evidenced by the dossier that Pifferi compiled for Samaritani on Vagnetti, who was then about to be hired in the Ufficio Studi: 'he is possessed with a strong modernist sensibility, but he is not an intransigent person'. ⁵⁵ This mild censorship is probably why most of these brilliant young architects stayed at SGI for only a short time. As soon as a better opportunity arose, whether it was a university position (as in Benevolo's case) or a private commission (as in Vagnetti's), they left.

Those who did not have the courage to go it alone simply increased their activities outside SGI. Opportunities for remunerative side jobs abounded at Via De Pretis, and many design professionals took advantage of them on a regular basis because, while company policies formally prohibited employees from taking on additional work, management frequently turned a blind eye. Helping with planning applications, designing *palazzine* for small developers and even competing in small competitions were common side jobs. In addition to the security that came with their primary job, the possibility of landing other jobs during and after office hours made an SGI position very appealing. Vittorio Gassman's character in the 1963 film *Il Successo* (*The Success*), a bumptious engineer working in an SGI-like company but dreaming of starting his own construction business, perfectly exemplifies the type. This attitude of gaining economic

and social status at any cost, known as *rampantismo* (careerism), was foreign to Roman culture at the time. In his memoir, Pifferi refers to it as a 'pure American gift [...] that took root really well in Italy', a remark that demonstrates how open SGI employees were to new moral codes from overseas.⁵⁶

The 'yes-man' attitude was another common trait among SGI employees that was, to some extent, an import from the US. This attitude, which was absolutely necessary to function successfully within SGI, manifested primarily as avoidance of any form of criticism of the company. Indeed, among the staff, a certain obliviousness to the impact of the company's work (that is, the ability to do harmful things without arousing any concern) was sought after and rewarded. A former engineer's recollections of a development in north-west Rome (Fig. 10) provide a glimpse of the consequences if this requirement was ignored:

Years after its completion, Samaritani and I returned to the Balduina district. We were standing on a rooftop, looking down on the surrounding area, and at one point I told him: 'Well ... we surely did not build a pretty city.' He immediately turned to me, and gave me a stare that sent shivers down my spine.⁵⁷

MANHANDLING TALENT

The rule-abiding, Samaritani-fearing 'technicians' were not, however, the sole authors of the company's designs. Despite the company's ability to design everything in-house, it turned to outside help in special circumstances, to the so-called *collaboratori esterni* (external collaborators). And in general, the more ambitious the scheme, the more SGI would seek the services of a reputable professional. For example, it chose BBPR (Banfi, Belgiojoso, Peressutti & Rogers) for the Torre Velasca, a skyscraper in the heart of Milan; Luigi Moretti for Watergate, a mixed-use complex near the National Mall in Washington DC; and Ugo Luccichenti for the Cavalieri Hilton, a massive slab on top of Rome's highest hill.

Design services were outsourced for two reasons. The first is that the typological and technological challenges posed by this class of schemes were greater than the company's in-house expertise. The second is that, as the US architect Peter Hendee Brown put it, 'real-estate development is a private enterprise played out on a very public stage', a circumstance with far-reaching implications for the delivery of non-standard developments. Obtaining planning permissions for the latter was notoriously difficult, so SGI routinely hired 'respected, local professionals in order to get schemes through the town hall, using their soft skills and network', according to a former *geometra*. These were not mere expectations on the part of SGI, but conditions spelled out in the company's contracts with the *collaboratori esterni*, as in the agreement with Piacentini for the design of the new Fiat building in Rome (1947–50):

Among the duties [of the architect are ...] to sign, in the <u>capacity</u> of designer, all the drawings and annexes necessary to obtain planning permission and start construction work [... and], should the authorities require it, to present the scheme to them, providing all the appropriate explanations and clarifications.⁶⁰



Fig. 10. The Aurelio district in Rome, near Balduina, photograph of c. 1970 by Italo Insolera, from Alessandra Valentinelli, Italo Insolera fotografo, 2017, p. 97

In this case, the 'external consultant' acted as an intermediary, or even a solicitor, on behalf of the developer. SGI did not require a public figure for this type of task, but rather someone who was familiar with the mechanics of planning in the said location. In other words, they needed a solid *professionista* — a type of person who did not advertise their work in magazines, preferring word-of-mouth over printed forms of publicity. This situation is perfectly illustrated by the planning of the Belsito development in north Rome, which was aided by Ugo Luccichenti, a prolific but little-known architect (at least outside of Rome). In the case of potentially contentious schemes, SGI tended to look for charisma instead. It did so with the Watergate complex, for which Moretti repeatedly perorated the company's cause to the US Commission of Fine Arts (an archive drawing shows him in full oratorial garb, wearing a Roman toga). It did not do so, with disastrous results, in the case of the Rome Hilton, a scheme that, given its size and location, would undoubtedly have benefited from an architect of eloquence and charm (such as Moretti), but was instead entrusted to Luccichenti, a deadpan, untalkative individual more than willing to avoid the spotlight. These examples illustrate the characteristics sought in an external collaborator: the ability to speak (or to defend the company's interests in a public forum) and the ability not to speak (or not to reveal anything about the company under any circumstances). The way a former geometra framed these two options was that 'SGI hired the *collaboratori esterni* to have their support, but also to have their silence'. 61

Consider the (admittedly unusual) circumstances that first drew the architect Moretti into the orbit of SGI. When he returned to Rome from an extended stay in Milan (c. 1945– 55), Moretti was in need of commissions. He approached the company through his old friend and confidant, the critic Agnoldomenico Pica, who introduced him to Pifferi in a letter: 'attached is Moretti's resumé [...] He told me that he is ashamed of his CV and aware that only certain conditions can bring a man to such a degree of degradation.'62 Needless to say, SGI accepted his request and immediately put him to use. The above letter was written in June 1957 and Moretti wrote three newspaper articles in the weeks that followed, attacking the ideas of Rome's progressive planners for a new city plan (ideas that would have surely damaged the interests of the company).⁶³ Moretti was without doubt the most trusted external collaborator employed by SGI, appointed in 1960 to the design of the Watergate — arguably the most daring in the company's postwar history — and in 1961 to the new SGI headquarters building in the EUR district. Yet, to use the critic Francesco Garofalo's words, if Moretti became 'The First Italian Corporate Architect', it was not because he wanted to, but because he had to.⁶⁴ When describing to Pica the new SGI headquarters, his own contrarian take on the US office box, Moretti could not hide his aristocratic disdain for the world of international big business, a world that SGI was only recently joining: 'American "managerings" [sic] are so happy about their giant prisms, so clear-cut and glowingly uniform, full of abstract light from the inside.'65 Moretti appears to have been less enthusiastic about his new masters in private than we might have expected.

To be sure, conflicts between signature architects such as Moretti and SGI were caused by the nature of working for a corporate firm. Like the 'draughtsmen', they had to deal with the company's heavy authorial hand, but in the opposite way: their authorship was celebrated publicly but stifled privately. This could occur in two ways. In a few cases, SGI required the architect to collaborate with the firm's in-house office from the concept phase onwards, which meant that the former could be censored from the start. In most cases, the company simply established all of the scheme's main features ('the general dimensions and massing') ahead of time, leaving the external consultant to sort out the façade, interior layout and fit-out. The main buildings of the Balduina development, for example, were designed in large part by 'draught horses', despite being officially designed by Cesare Pascoletti (a pupil of Piacentini). According to a company memo, Pascoletti's design 'replicated the masterplan for our Ufficio Progetti, changing only the external features'.66

This method of mistreating independent designers was probably well known in the Italian scene, because even an outsider such as Reyner Banham, commenting on Vittoriano Vigano's Istituto Marchiondi near Milan, noted that 'the architect was able to contribute to the programme of the building, before design began (a situation that appears to be less and less common in Italy)'.⁶⁷ In Rome, it was certainly no secret to the local community of architects, planners and conservationists — 'direct experience tells us that in 90 per cent of developments the masterplan is already complete when the architect steps in to design the buildings', commented a Roman architect publicly in 1956 — a fact that did not prevent some among them from condemning the entire profession.⁶⁸ During a heated debate on Rome's ills between the architect Paolo Portoghesi and historian Leonardo Benevolo, broadcast on state television in 1978,

Antonio Cederna, a long-time critic of SGI, thundered that 'very few architects refused to obey this despicable clientele' — a comment that, while cantankerous in tone, was close to the truth.⁶⁹ Architects, particularly in the case of SGI, only marginally opposed their employers, and generally on issues of minor importance in the scheme's overall economy. As Pifferi recalled:

Not infrequently, I encountered individuals whose main concern [...] was the pure architectural artefact [...] On those occasions tension was high [...] many of them harboured the sole desire to create formally interesting work that could confer prestige — if not celebrity status — to its author by placing him within one of the popular trends. Or, at least [they wanted] to author designs that, once built, would make for adequate features in the specialised press [...] features radiating with photographic splendour.⁷⁰

Frictions with large companies were common, and another reason for them was a specific task that signature architects (particularly of the Moretti, or 'speaking', variety) were forced to accept if they were to stay in the business of catering to corporations: absorbing whatever criticism might be levelled against their built work while protecting the name of their employer. If Moretti was the most stigmatised architect in Italy at this time (at least in leftist circles), it was in part because of his association with SGI, or, in other words, because of his renown as a developer architect.⁷¹ In this he was similar to his contemporary and analogue in the US, I. M. Pei, who until recently was maligned by critics, as Robert Stern pointed out, due to his association in the 1950s with the New York real-estate firm Webb & Knapp (not by chance the company that SGI relied on for facilities support when it expanded its operations in North America in 1960).⁷²

NEW LEGAL TOOLS AND MANAGEMENT TECHNIQUES

The new SGI headquarters in Rome, designed by Moretti for the EUR district, stood a short walk from the political, industrial and bureaucratic hubs such as the headquarters of the Christian Democratic Party, the head office of the General Confederation of the Italian Industry and (most importantly) the Special Office for the New City Plan and the Planning Permission Office. The choice of this location is particularly telling within the context of long-lasting interest of the SGI in extending its control over city and regional planning, processes largely disregarded by the laissez-faire governments of the postwar period in order to favour private development. SGI cunningly and systematically exploited the state's weakness in this grey area by pioneering and making extensive use of the convenzione urbanistica (planning agreement), a legal tool allowing a developer to build an entire district in exchange for the provision of primary infrastructure. On specific occasions, this tool handed to SGI near-full planning powers, which the company put to use by building in ways and at a scale never seen before in the country — for example, the Casal Palocco district, the first suburb ever in Italy (1960), and perhaps the most successful convenzione in the history of SGI (today this suburb is home to around 30,000 people). None of these planning feats would have been possible without the advice and support of a select group of specialists close to the company, namely the real-estate lawyer Marcello Furitano, planners Ignazio Guidi and Pietro Samperi, and of course Moretti.



Fig. 11. The IBM main-frame computer at the EUR headquarters of SGI, photograph of c. 1966, from SGI, Sogene, Poligrafica Laziale, 1967

The latter, in addition to institution lobbying, served the company's planning ambitions in another significant way. In 1957, SGI created IRMOU (*Istituto per la Ricerca Matematica e Operativa applicata all'Urbanistica* — Institute for Mathematical and Operative Research Applied to Planning), an institution dedicated to the application of mathematical knowledge to architecture and planning, and put Moretti at its helm. Today IRMOU is best known for publishing Moretti's own studies of parametric architecture (a complete novelty at that time), but most of its resources were devoted to less flamboyant, though more strategic, undertakings: the creation of mathematical models of traffic and migration flows; the analysis of the immense SGI building stock; and the design of ideal urban layouts plans for the city of Rome. While the motive for this was purely commercial, to give the company an edge over its competitors, similar research was being undertaken in the US, mainly for purposes of national security and defence, a reason for the continued contact between IRMOU and MIT systems-theory experts travelling to Europe for various workshops and consultancies.⁷³

This transatlantic connection leads to the last, and least known, SGI effort towards a more bureaucratic organisation of its work: the company's embrace of the US preconstruction technique PERT (program evaluation and review technique). Developed by

the US navy in the late 1950s, PERT was a visual tool that allowed for an unprecedented level of control in project planning. Central to this was a reticular representational technique made of nodes and arrows, which accounted for relationships between tasks and enabled managers to take informed decisions for a smoother project flow. PERT represented a substantial advance on the then industry standard, the Gantt system (also developed in the US). Gantt was a tool from the 1910s that was designed to keep track of the time required to complete tasks through linear representations, and was useful for this but not much else. The reticular representations of PERT, on the other hand, enabled project managers to assess the time and resources required to manage a project and to change these parameters while doing so.

Furthermore, PERT could be run on computers. In 1960, the company installed in its Rome headquarters two IBM main-frame computers, the 1411 and 1301 models, for accountancy, payroll and supply-chain management purposes, and in 1963 the in-house contractor Sogene began to use these machines to run the PERT system (Fig. 11).⁷⁴ It was not long before SGI realised that PERT was a better tool to manage large, complex projects: within a year the system was being used on all Sogene sites, and in 1966 it was already helping the company win large tenders abroad such as the CERN Intersecting Storage Rings in Geneva, completed in 1969.⁷⁵

CONCLUSION

Between 1945 and 1969, the Italian real-estate developer and contractor SGI took a number of measures to bureaucratise its ways of working and achieve economies of scale. This effort was never seamless, as it often involved overhauling old habits and encroaching on the professional ambitions of staff. For all its idiosyncrasies, however, the bureaucratisation of SGI was a success, helping to transform a small company into a market leader. Virtually all aspects of the company's operations, and all levels of its staff, were affected. The changes included appointing an autocratic managing director, changing the patterns of information flow within the company, hiring output-oriented design professionals as heads of the company's two design offices, significantly expanding the staff, subjecting the company to an audit, building a new design office with an open-plan layout, embracing the technocratic drift of post-war Italian culture, curbing individual authorship among the architects on its payroll, devising new legal tools to replace the state as a town planner and, finally, revolutionising the scheduling and delivery of the company's schemes. And with regard to certain tasks, this bureaucratisation of SGI involved the adoption of US technologies of computation and management unprecedented in architectural practice in 1950s and 1960s Italy.

The results of this process bear the marks of its making. The built production of the SGI is large and mostly lacking the finesse that we expect from things labelled as 'postwar Italian architecture'. To the historian, however, these qualities are an opportunity for learning, because the numerous and the unremarkable, and the organisational structures on which they rested, are the building blocks of 'the everyday' — a wider analytical category that, as architectural historians, we should perhaps explore more systematically.

ACKNOWLEDGEMENTS

My thanks to Ricardo Costa Agarez, Fredie Floré and Rika Devos for guest-editing this special collection and organising the excellent conference that led to it. I am also grateful to the anonymous reviewers and the editors of *Architectural History* for their thoughtful comments and edits.

BIOGRAPHY

Davide Spina is a postdoctoral researcher at the Institute for the History and Theory of Architecture, ETH Zurich, where he also completed his doctorate. Previously he studied architectural history at the Bartlett, UCL. Davide was a fellow at the Swiss Institutes in Rome (2018–19) and Milan (2021–22), and is the founder of DocTalks, an international online platform for early-stage researchers in architectural history and theory. He has presented at international conferences, such as that of the Society of Architectural Historians and the European Architectural History Network, and his writing has appeared in AA Files, Log and gta Papers. His forthcoming book with MIT Press examines the post-war activities of the Italian real-estate developer and contractor SGI. Email: davide.spina@gta.arch.ethz.ch

NOTES

- 1 For formalist analysis of 'conservative' architecture in post-war Italy, see the chapter 'Profiles of Text: Luigi Moretti, Casa "Il Girasole", 1947–50', in Peter Eisenman, *Ten Canonical Buildings 1950–2000* (New York: Rizzoli, 2008), pp. 26–48. For 'conservative' architecture as mere real-estate speculation, see Italo Insolera, *Roma moderna: Un secolo di storia urbanistica* (Turin: Einaudi, 1962). For 'conservative' architecture more broadly, see Aaron Cayer, 'Shaping an Urban Practice: AECOM and the Rise of Multinational Architecture Conglomerates', *Journal of Architectural Education*, 73, no. 2 (2019), pp. 178–92.
- 2 On SGI's activities during this period, see Paola Puzzuoli, 'La politica delle aree della Società Generale Immobiliare (1880–1920)', Dimensioni e problemi della ricerca storica, 18, no. 1 (2005), pp. 141–49; Paolo Di Martino, '"Rome Wasn't Built in a Day": Lobbies, Institutions and Speculation in the 1880s Building Fever', Urban History, 39, no. 3 (2012), pp. 471–89.
- 3 Annamaria Samaritani (Aldo Samaritani's daughter), interview by the author, 28 December 2016.
- 4 Rome, Annamaria Samaritani Archive [hereafter ASA], Luca Benini, typewritten memoirs dated 4 March 1991 and 11 May 1992.
- 5 ASA, Benini, memoirs. The example shown in Fig. 1 is held among the company's papers: Rome, Central State Archive [hereafter CSA], SGI Archive, Serie U Divisione iniziative edilizie estero 1959–75, folder 26.
- 6 Annamaria Samaritani, interview by the author, 5 May 2016.
- 7 CSA, SGI Archive, Personale cessato, Prima serie (I/v), folder 124, sub-folder 'Arch. Emilio Pifferi'; and folder 132, sub-folder 'Ing. Alberto Ressa'.
- 8 Emilio Pifferi, 'Aspetti generali del problema dell'edilizia nel dopoguerra' and 'L'organizzazione del lavoro professionale', *Architettura Italiana*, nos 7–9 (1942), pp. 4–6 and 41–49; Rome, Adriano Olivetti Archive, '22.3 Corrispondenza 1912–1964', '22.3.1 Carteggi Ordinati per Corrispondente', 'Dr. Arch. Emilio Pifferi', Emilio Pifferi, 'Scopi di un ente per lo studio dell'architettura e dell'edilizia', typescript dated 21 January 1941.
- 9 On *Cantieri*, see Anna Maria Talanti, *Storia dell'industrializzazione edilizia in Italia 1945–1974* (Milan: Associazione Italiana Prefabbricazione per l'Edilizia Industrializzata, 1980), pp. 21–22.
- 10 Emilio Pifferi, *Fare l'architetto: Quel meraviglioso maledetto mestiere* (Pescara: Libreria dell'Università, 1989), pp. 10–11. All translations by the author.
- 11 On Gruppo Pagano, see 'Fondazione del gruppo di architetti torinesi "Giuseppe Pagano", Agorà: Letteratura, arti figurative, architettura, musica, 3 (December 1945), pp. 16–21; 'Fabrizio Brunetti: Intervista inedita a Bruno Zevi' <archivolarchiviolarchives/5132> [accessed 29 July 2022]. APAO (Associazione per l'Architettura Organica) was the architecture school run by Bruno Zevi in Rome in 1945–47.
- 12 Alberto Ressa, L'economia nella tecnica edilizia (Turin: Lattes, 1949).
- 13 Notiziario interno della Società Generale Immobiliare, no. 1, 12 March 1955, p. 35.

- 14 CSA, SGI Archive, Serie H/34, Società Generale per Lavori e Pubbliche Utilità Sogene, folder 3(2), sub-folder 'Consiglio di amministrazione del 9 Aprile 1952 ore 10.30', 'Esercizio 1951: Relazione del consiglio di amministrazione', p. 2; Personale cessato, Seconda serie, folder 56, sub-folder 'Ing. Mirri Giorgio', 'Appunto', 30 March 1952, typed report; Serie H/34, Società Generale per Lavori e Pubbliche Utilità Sogene, folder 4(2), sub-folder 'Consiglio del 15/2.54 ore 10.30', 'Verbale sulla attività della Sogene nell'Esercizio 1953', p. 17.
- 15 CSA, SGI Archive, Personale cessato, Prima serie (I/v), folder 116, sub-folder 'Siro Padolecchia', letter dated 10 May 1967, p. 1.
- 16 Corrado Burchi, interview by the author, 8 July 2019.
- 17 CSA, SGI Archive, Personale cessato I, folder 113, sub-folder 'Giuseppe Nusiner', 'Nota per il Sig Ing Giuseppe Nusiner', 9 December 1958, p. 1.
- 18 CSA, SGI Archive, Ordini di Servizio, folder 2, no. 160, 27 December 1968.
- 19 The photograph in Fig. 2 is from the company's papers: CSA, SGI Archive, Ufficio pubblicità ed edizioni, folder 22.
- 20 See, for instance, the post office buildings in Rome designed by Angiolo Mazzoni, Adalberto Libera and Mario Ridolfi (all built in 1933–35).
- 21 Riccardo Longone, 'Ecco gli uomini che regolano la giornata di un cittadino romano', L'Unità, 16 April 1952, p. 3.
- 22 Claudio Midulla, interview by the author, 23 November 2018.
- 23 The organisation of the SGI Archive more or less matches the internal organisation of the company.
- 24 Franco Paolucci, interview by the author, 12 December 2018.
- 25 Alberto Musmeci, interview by the author, 9 February 2018. For the plan in Fig. 3: Florence, Luigi Vagnetti Archive, folder 12.2.8.1.
- 26 Gianni Gegnacorsi, 'Criteri informativi di progettazione di sale per disegnatori', *Produttività*, 9 (September 1961), p. 13. For the photograph in Fig. 4: Florence, Luigi Vagnetti Archive, folder 12.2.8.2a.
- 27 ASA, Benini, memoirs.
- 28 Joseph La Palombara, Interest Groups in Italian Politics (Princeton, NJ: Princeton University Press, 1964), p. 191.
- 29 Famiglia Cristiana, 25 January 1959, p. 38.
- 30 James Burnham, *La rivoluzione dei tecnici* (Milan: Mondadori, 1947). The book, it seems, was a popular topic in Rome: Mario Tedeschi, *Roma democristiana* (Milan: Longanesi, 1956), p. 165. Italy's first MBA programme, at Bocconi University in Milan, started only in 1971: see <sdabocconi.it/it/chi-siamo> [accessed 18 August 2020].
- 31 Giorgio Piccinato, interview by the author, 12 January 2017; Reyner Banham, review of *New Directions in Italian Architecture* by Vittorio Gregotti (1968), *Art Bulletin*, 52, no. 3 (September 1970), p. 344.
- 32 Francesco Ciacci, 'Gli ingegneri d'Italia e l'attuale momento storico', Ingegneri architetti: Rassegna mensile della URIA / Unione Romana Ingegneri ed Architetti, 6 (June 1963), p. 14.
- 33 Riccardo Vallauri, 'La professione dell'ingegnere', L'ingegnere, 7 (July 1948), p. 600; Theodore Porter, Trust in Numbers: The Pursuit of Objectivity in Science and Public Life (Princeton, NJ: Princeton University Press, 1996).
- 34 Alberto Mondini, L'ingegnere (Florence: Vallecchi, 1962), pp. 121, 124.
- 35 Claudio Midulla, interview by the author, 23 November 2018.
- 36 Mondini, L'ingegnere, pp. 126–27.
- 37 Federico Malusardi, interview by the author, 16 February 2017.
- 38 Franco Nasi, L'architetto (Florence: Vallecchi, 1960), p. 56.
- 39 Henry-Russell Hitchcock, 'The Architecture of Bureaucracy and the Architecture of Genius', *Architectural Review*, 101, no. 601 (January 1947), pp. 3–6.
- 40 Manfredo Tafuri, 'La vicenda architettonica romana 1945–1961', Superfici: Problemi di architettura e tecnologie edili. Rivista dei pavimenti, rivestimenti e coperture, 5 (April 1962), p. 32.
- 41 Mario Sanfilippo, La costruzione di una capitale: Roma 1945-1991 (Cinisello Balsamo: Silvana, 1994), p. 40.
- 42 Emilio Pifferi, Fare l'architetto: quel meraviglioso maledetto mestiere (Pescara: Libreria dell'Università, 1989), p. 9.
- 43 CSA, SGI Archive, Divisione iniziative edilizie all'estero Serie U, folder 64, memo 'gennaio-giugno 1968', Bruno Foa, letter to Claudio Cellini, 6 June 1968.
- 44 CSA, SGI Archive, Copialettere e velinari, Corrispondenza Gualdi-Samaritani, folder 9 bis, letter from Bernardino Nogara to Eugenio Gualdi, 24 February 1947.

- 45 Pifferi, Fare l'architetto, p. 24.
- 46 Nasi, L'architetto, p. 75.
- 47 Nasi, L'architetto, p. 88.
- 48 Giancarlo De Carlo, 'Legitimising Architecture', Forum, 23, no. 1 (1972), p. 8.
- 49 Bruno Zevi, 'INARCH: Alcuni passi del discorso di Bruno Zevi all'atto della costituzione', Superfici: Problemi di architettura e tecnologie edili, 5 (April 1962), p. 43.
- 50 Federico Malusardi, interview by the author, 3 February 2017.
- 51 Rome, Federico Malusardi Archive, letter from Federico Malusardi to Bruno Zevi, 3 November 1959, p. 2.
- 52 See the in-house SGI publications Bilancio and Realizzazioni e studi nel settore edilizio.
- 53 Federico Malusardi, interview by the author, 3 February 2017.
- 54 Pifferi, Fare l'architetto, p. 12.
- 55 CSA, SGI Archive, Personale cessato, Prima serie (I/v), folder 134, sub-folder 'Vagnetti Arch. Luigi', Emilio Pifferi, memorandum dated 21 April 1947.
- 56 Rome, Ezio Pifferi Archive, Emilio Pifferi, '10. Le mie Americhe, La conoscenza degli USA, Parte 6, Le conclusioni', p. 8, memorandum dated 5 October 1995.
- 57 Claudio Midulla, interview by the author, 7 December 2018.
- 58 Peter Hendee Brown, *How Real Estate Developers Think: Design, Profits, and Community* (Philadelphia, PA: University of Pennsylvania Press, 2015), p. 14.
- 59 Franco Paolucci, interview by the author, 12 December 2018.
- 60 Florence, Marcello Piacentini Archive, folder 176.4, 'Immobiliare', 'Schema di convenzione tra progettisti e SGI', art. 2, p. 3.
- 61 Franco Paolucci, interview by the author, 12 December 2018.
- 62 CSA, Luigi Moretti Archive, folder 1, sub-folder 2, letter from Agnoldomenico Pica to Emilio Pifferi, 25 June 1957. On Pica, see Maria Vittoria Capitanucci, *Agnoldomenico Pica*, 1907–1990: La critica dell'architettura come mestiere (Benevento: Hevelius, 2002).
- 63 Moretti wrote seven articles relating to the Rome plan in *Il Tempo* in June–July 1957: 'Svuotamento della vita degli affari dal nucleo centrale della città?', 8 June 1957, p. 4; 'Popolazione, trasporti e fonti di lavoro: Elementi indispensabili per il Piano Regolatore', 14 June 1957, p. 4; 'Realtà e fantasia dei piani regolatori', 21 Giugno 1957, p. 4; 'Per dare ampie zone di verde alla Roma di domani è necessaria la collaborazione dei proprietari privati', 27 June 1957, p 4; 'Salverà veramente il verde il nuovo Piano Regolatore?', 3 July 1957, p. 4; 'La struttura urbanistica di Roma determinata dal corso del Tevere', 26 July 1957, p. 5.
- 64 Francesco Garofalo, 'Flying Palazzo: Luigi Moretti, Milano 1948–54', in *What Ever Happened to Italian Architecture*?, ed. by Francesco Garofalo and Mario Lupano (Venice: Marsilio, 2016), p. 146.
- 65 Rome, Tommaso Magnifico Archive, Luigi Moretti, letter to Agnoldomenico Pica, 26 November 1969, p 6. 66 CSA, SGI Archive, Cantieri SGL Serie P / a1, folder 9, Emilio Pifferi, letter to Aldo Samaritani, 21 September
- 66 CSA, SGI Archive, Cantieri SGI, Serie P/a1, folder 9, Emilio Pifferi, letter to Aldo Samaritani, 21 September 1953.
- 67 Reyner Banham, 'The History of the Immediate Future', *Journal of the Royal Institute of British Architects*, 68, no. 7 (May 1961), p. 253.
- 68 David Gazzani, 'La speculazione sulle aree fabbricabili', in *I padroni della città*, ed. by Leone Cattani, Angelo Conigliaro and Eugenio Scalfari (Bari: Laterza, 1957), p. 58. The volume contains the proceedings of the event of the same name, which was held at the Teatro Eliseo on 21–22 April 1956.
- 69 *Match: Domande incrociate*, television show on RAI, 1 February 1978.
- 70 Pifferi, Fare l'architetto, pp. 47–48.
- 71 Piero Barucci, interview by the author, 14 January 2017.
- 72 Robert A. M. Stern, 'Interview', Perspecta, 47 (2014), p. 46.
- 73 Antoine Picon, Digital Culture in Architecture: An Introduction for the Design Professions (Basel: Birkhaüser, 2010), pp. 39–44.
- 74 CSA, SGI Archive, H/34 Sogene, folder 9(1), report of board meeting, 11 March 1964, p. 15.
- 75 CSA, SGI Archive, H/34 Sogene, folder 9(2), 'Bilancio 1963', report of board meeting, 18 April 1964, p. 8. For CERN, see H/34 Sogene, folder 10(1), report of board meeting, 10 June 1966, p. 3.