

# 11. The Construction of the *Design System* in the Context of Technological Disciplines in Italy: How It All Began with a *Penguin* Who Set Out to Coordinate a Group of *Bats*

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If I think back to those years between the close of the last century and the start of the new one, the figure of Alberto Seassaro stands out sharply and, I would say, absolutely, in his dimension as *homo faber* of the fate of the university discipline of Industrial Design.

Guided by firm determination and by a vision that might have seemed impracticable, with the gifts of a fine strategist, concealed by irony and by a *dégage* manner that neither intimidated the world of architects nor alerted them to his real intentions, he succeeded in creating a reality first Milanese and then national, forging cohesion among groups that by their nature were wary and devoted to the fine art of obstructionism or inertia.

Today, I find myself explaining not how this could have happened but what it started from, and thus clarifying why the *Technological Area* within the Faculties of Architecture came to champion a movement of confidence in the discipline of design as a subject to be valorized within an educational project, bringing it to the forefront of the Academy in late years – very late – relative to the success it had already attained on the stage of the profession, of enterprise, of the market, and of con-

sumption. The question requires – not only by virtue of my being a historian – going back to a moment – the 1950s – in which neither Industrial Design nor *Tecnologia dell'architettura* [Architectural Technology] existed as university disciplines, yet the university landscape already had today's features, albeit simplified by a limited number of faculties of architecture in the country – Venice, Milan, Turin, Florence, Rome, Naples, Palermo – and by an equally limited number of full professors, able therefore to craft their policies and agreements with greater ease.

I will try to sketch this history, so as not to bore you, in the most concise way, though it is made up of circumstances, actors, and situations that would deserve continual in-depth inquiry to restore its full cultural climate. It will be in part conditioned by my own background, since I came to the study of *design history* in the mid-1970s.

At the time I was repeatedly told of the uselessness of studying that subject, with the obvious exception of my academic mentors: my university *mother*, Paola Barocchi, when I was a fellow at the Scuola Normale di Pisa, and my university *father*, Giovanni Klaus Koenig, when, from Pisa, already a young researcher, I moved to the Facoltà di Architettura di Firenze (1981-1982).

The *others*, all the *others*, the university professors with whom I was in contact, after Koenig's sudden death in 1989, accepted my scientific research – because, thank heavens, freedom of choice was contemplated – provided I fulfilled the teaching requirements, which clearly did not include the topics to which I was devoting myself (necessary aside: in the meantime I studied other subjects – and in depth – in order to carry out honestly the educational task assigned to me). Yet whether good-naturedly, with condescension, or even with good intentions, all of them pointed out to me the absence of an academic future if I continued along that path, until, suddenly, in the mid-1990s, I and my papers became timely and even useful! Let us see how and why.

## 11.1 Early Attempts to Promote *Industrial Design* within the University

In the early 1950s there was a growing awareness of the importance of industrial design. It was a new discipline that American *soft power*

sought to promote, for example already at the *IX Triennale* (1951), as a tool capable of defining mass-produced objects, low-cost, useful, and of quality, testifying to the achievements of a democratic civilization, a liberal way of life, and both economic and social development.

That Italy lacked industries capable of sustaining this emerged as the knot that would lead, in its stead, to presenting as industrial objects items made by artisanal methods, with qualitatively and creatively

ly artistic contents, in a mystification between decorative and industrial art that only Alberto Rosselli, at the time from the pages of *Domus*, sought to stem, and would do so with greater authority, from 1954 onward, in the pages of *Stile Industria* (Rosselli, 2022).

As is well known, 1954 would be an important year for industrial design: in June a journal entirely devoted to the subject was founded, *Stile Industria*, entrusted to Rosselli; *la Rinascente* created an award, the *Compasso d'oro*, for those industrialists who, in their products, expressed technical and aesthetic values of industrial culture; while the *X Triennale*, centered on presenting national and international milestones of the discipline, would host in October an international congress that broadly addressed its themes, in the hope of providing reassuring certainties from which to proceed. Giulio Carlo Argan, who had held important roles as an official for Antiquities and Fine Arts, while also engaging with issues of art education, the practice of university teaching, and the contemporary realities of industrial design, took part with a paper that would remain a point of departure for scholars of the discipline, in which he launched the proposal to create «a great School of Design [...] with an international character» <sup>14</sup>.

The idea was not new. In Italy, the issue of art education began to be discussed as early as the end of the First World War, faced with the unfavorable comparison between our products and foreign ones that became apparent with the reopening of markets (Tonelli & Michail, 1987). The debate led nowhere and resumed in the postwar period: *mutatis mutandis*, whereas previously it had concerned the education of the artisan-craftsman, it now concerned the training of a techni-

**Note 1.**

The papers presented at the Congress did not at the time have the honor of publication. This has been remedied recently with the publication of *La memoria e il futuro* [Memory and the Future]. For the moment, only Argan's paper was published by Argan himself in the journal *Aut aut*. I underline a passage that I consider equally important, when Argan proposes modifying the curricula of schools with a humanistic orientation in order to «harmonize the culture of *professionals* with the type of culture that is defined through the various species of design». I think Argan was alluding to the *licei classici* [classical high schools], which, according to the Gentile reform, granted access to every university Faculty, so that the young student, once graduated and become a professional in any capacity, would be able to assess the non-negligible importance of design in defining a product, should they find themselves in a professional situation requiring such an evaluation. I also recall that a commented selection of the papers was published around 1960 by Pierluigi Spadolini in his coursebook on industrial design, in Part III entitled *Commenti alla critica dell'Industrial Design* [Comments on the Critique of Industrial Design]. On this point, see in the recent book I edited on the figure of Giovanni Klaus Koenig my essay *Koenig e l'Industrial design* [Koenig and Industrial Design].

cian in the service of industry. It was not only a question of subjects and content – matters that might have been resolved by mediating the experience of foreign schools, well documented by Rosselli in *Stile Industria* – but also of placement (within the university system or within the Institutes of Art?) and of terminology: *industrial design* (with its unwelcome reference to another culture); *disegno industriale* [industrial design] (with its awkward opacity evoking the tasks of the technical draftsman); *progettazione artistica per l'industria* [artistic design for industry], suggested by Carlo Scarpa 23, with its embarrassing translation of creativity into an artistic corollary? It was also a matter of will and agreements. Hence an organic, multi-year public school did not come into being, although it was deemed useful.

It is therefore striking that the Faculty of Architecture in Florence, Dean Attilio Arcangeli, professor of *Scienza delle costruzioni* [Structural Mechanics], decided in 1955, on an experimental basis, to establish a free course in *Industrial Design* and to entrust it to Leonardo Ricci, an architect and artist, a restless intellectual concerned with the synthesis of the arts, with a not insignificant relationship to the United States. The course was organized with pragmatic adherence to the design problems of the object – historical framing of the evolution of taste, technical and expressive research on the materials used, the student's design exercise with working drawings and a small model 34 –

thanks above all to the presence as assistant of Pierluigi Spadolini, an architect who was already operationally embedded in industrial design practice, having opened a Milan studio for this purpose to pursue collaborations with several Lombard firms. As early as 1956 the course would replace *Decorazione* [Decoration] and continue over time, with only a change of instructor and of title: from 1959 Spadolini would be appointed to lead it, after Ricci had obtained a *libera docenza* [university teaching qualification] in *Disegno* [Drawing], while the name would change – so as to assuage ministerial indignation at the use of foreign terms – to *Progettazione artistica per l'industria* [Artistic design for industry].

One might hypothesize that this was the product of a refined exercise in academic barony by Raffaello Fagnoni, Spadolini's father-in-law and, from 1956, Dean of the Faculty, to pave the way for his son-in-law's academic career, were it not for the fact that Spadolini truly possessed

**Note 2.**

According to Paolo Felli, whom I thank for the information, it was Carlo Scarpa who suggested it.

**Note 3.**

The organization of the course is documented by Leonardo Ricci himself in the pages of *Stile Industria*.

**Note 4.**

The profile of Spadolini as a designer has been outlined in many texts devoted to his work: I recall a brief yet illuminating essay by Giovanni Klaus Koenig from 1985, on the occasion of an exhibition held in Agliana; the subsequent text by Giuseppe Chigiotti; and the entries that delve into some of his products in the MuDeTo – Museo del Design Toscano database, authored by myself and by Maria Camilla Pagnini, Umberto Rovelli, and Pier Carlo Santini.

**Note 5.**

The committee was composed of Franco Albini, Carlo Mollino, Carlo Scarpa, and two other members whose names have been lost. The candidates had to deliver a lecture, drawing its topic by lot from several proposals devised by the committee members and presented in a sealed envelope. Once the title was drawn, they had twenty-four hours to prepare it and then present it. How broadly the committee understood the themes the subject could address is attested by the lecture given by Spadolini, which focused on the concept of the module. Giovanni Klaus Koenig, in a text devoted to Spadolini as a designer on the occasion of an exhibition held in 1985 in Agliana, recalls the episode.

**Note 6.**

I do not address the birth of the Corsi superiori di *Disegno industriale* [Advanced Courses in Industrial Design] in the 1960s, nor the continuation of their story, because their establishment is closely tied to the reality of the *Istituti d'arte* [Institutes of Art]. Their history is discussed in various texts and in detail by Anty Pansera (Pansera, 2015).

the talent, experience, and preparation to manage the course successfully [4v](#).

The Florentine episode had no replicas on the national academic scene, not even in Milan. Caution prevailed as they awaited, in a sense, the explicit regulation of the discipline within the university system, which came in 1961 with the organization of the first *concorso di libera docenza* [private lectureship qualification competition] in the subject, a competition that saw five winners: Carlo De Carli, Roberto Mango, Alberto Rosselli, Pierluigi Spadolini, and Marco Zanuso [5v](#). Consequently, a course was activated in Naples in 1962, entrusted to Mango, and in Milan in 1963, entrusted to Rosselli. At the end of the decade, Turin would follow with Achille Castiglioni and Palermo with Anna Maria Fundarò.

Thus, so limitedly represented, *Industrial Design* would remain a dormant university presence in the subsequent decades, certainly cherished and followed by students, yet without an organic, systematized role and without a close relationship with local production realities [6v](#).

## 11.2 Giuseppe Ciribini Shapes the Field of *Architectural Technology*

Meanwhile, let us look to the other front, that of *Architectural Technology*, which – as I mentioned – did not exist in the university regulations. The course that represented it at the time was *Elementi costruttivi* [Construction Elements], whose task was to describe the prevailing construction system, to inform about materials and their modes of assembly, to document the feasibility of the project, and to present design activity as a natural extension of artisanal modes of production [7v](#).

It recorded the traditional building landscape, consolidated in techniques and construction practice, the one borne witness to in those years largely by the works of the *INA-Casa* plan (1949-1963), which addressed the problem of reconstruction, with ideological and political motivations, rejecting prefabrication

methods so as to guarantee both respect for local building customs and the character of place, and the employment of a substantial surplus of unskilled labor. In other words, the course content did not register the possibilities of construction techniques based on industrial logics that, in France, Great Britain, or the United States, had already been successfully tested in the years preceding the conflict, nor did it reflect on the experiments presented in the first postwar editions of the *Triennale*; suffice it to cite the exemplary case of QT8, well documented by the exhibitions organized within the *VIII Triennale* (1947), which framed that effort, or the testimonies of building industrialization presented at the *IX* (1951) and *X Triennale* (1954). Nor was there reflection on the effort to update construction aspects implicit in the studies of the *Centro studi sull'abitazione del CNR* [CNR Housing Studies Center], strongly supported in 1948 by Alberto Colonnetti, the enlightened President of that body, in the hope of promoting the adoption of systems to be realized in series (AA.VV., 2022).

Referring to this Study Center gives me the opportunity to introduce a pivotal figure in delineating the boundaries and contents of what would become *Architectural Technology*: Giuseppe Ciribini, an engineer since 1936, assistant in *Architettura tecnica* [Technical Architecture] at the Faculty of Engineering at Politecnico di Milano from 1940, and from 1949 a member of international governmental commissions on standardization, as well as director of the Milan section of that aforementioned Study Center.

In taking stock of the achievements of the first three years of his research group's work, with a view to its closure two years hence, Ciribini set out the need to reorganize the Center, making it a central body for inquiry into the industrialization of construction, with a program that introduced key concepts for technological research, inspired also by his experience of foreign contexts [82](#). Although his proposal was not accepted, it served as the premise for the founding in 1955 of the *Craper - Centro per la ricerca applicata ai problemi dell'edilizia residenziale* [Center for Applied Research on Residential Building Issues], with the aim of promoting the study of theoretical problems and applied developments relating to residential construction, of which he would be director.

**Note 7.**

See how Fabrizio Schiaffonati outlines the discipline in the preface to Luciano Crespi's book on the articulation of *Architectural Technology* (Crespi, 1987).

**Note 8.**

For this and other information on Giuseppe Ciribini, see Daniela Bosia's writings (Bosia, 2013).

The body supporting it featured as principal actor the *Istituto autonomo per le case popolari della Provincia di Milano* [Independent Institute for Public Housing of the Province of Milan], alongside Politecnico di Milano, the *Ente nazionale di unificazione* [Italian Standards Body], the *Collegio costruttori* [Builders' Association], and *INCIS – Istituto per le case degli impiegati statali* [Institute for State Employees' Housing] – an intelligent assemblage of scientific excellence and local operational realities, guarantors of the quality of the study and of possible applied outcomes. Moreover, *Craper* also envisaged a collaborative relationship with analogous foreign research centers under the aegis of the *AEP – Agenzia europea di produttività* [European Productivity Agency].

The program foresaw four themes articulated into subpoints: research on population issues; applied research to achieve *Minimi Livelli* [Minimum Standards]; research on economic-financial problems; and research on labor and materials, on industrial products, on building units, and on equipment; meanwhile, the activity proceeded from the definition of a theoretical line of action to applications in the field of experimental research. In other words, Ciribini shows himself to be moving with a pioneering research practice: local yet embedded in the international circuit; theoretical yet with validating applied-practice implications; linked to bodies – public, private, and para-state – that, while providing financial support, left it autonomous in management; carefully communicated in the specialist literature; and transmitted in foundational education thanks to the transfer of those studies' findings into the academic structure – namely, the course *Organizzazione industriale dei cantieri* [Industrial Organization of Construction Sites], created expressly in the Faculty of Engineering at Politecnico di Milano and taught by Ciribini himself.

In short, *Craper* did not present itself as a simple place of study and intellectual education for young architects and engineers, whose commitment would later also be rewarded with privileged access to an academic career, but as an articulated node of relations, useful for creating synergies among commissioning bodies – public, para-state, private – construction industries, and universities, and for indicating the theoretical and practical importance of the technical-productive aspects of construction, underscoring a change of pace in that disciplinary field.

In this sense, given its outcomes, in 1964 *Craper* transferred its experience to a new body, *Aire – Associazione italiana per la promozione degli studi e delle ricerche per l'edilizia* [Italian Association for the Promotion of Studies and Research in Building], without changing its objectives and methods, only expanding the participating organizations and consequently increasing its client base, which would see the CNR alongside the *CER – Comitato per l'edilizia residenziale* [Committee for Residential Building], the *Consiglio superiore dei lavori pubblici* [Higher Council of Public Works], the *Regione Lombardia* [Lombardy Region], and the *Consiglio regionale lombardo degli IACP* [Lombardy Regional Council of Public Housing Institutes].

Surely *legge 60 del 14 febbraio 1963* [Law 60 of February 14, 1963] which, in closing the *piano INA-Casa* [INA-Casa program], reopened with other actors support for a ten-year plan to aid *Edilizia Residenziale e Pubblica* [residential and public building], as well as the ten-year plan for schools developed by the Fanfani government and taken up again in 1959 by the Segni government, with their implicit funding schemes, also in view of the *Riforma della scuola media unica e obbligatoria* [1962 reform establishing a single, compulsory lower secondary school], will have carried weight. Be that as it may, *Craper* first and *Aire* thereafter would serve as models for other, similar structures created between the 1960s and 1970s, useful, among other things, for bringing the researchers involved closer to the dynamics and problems of the industrial world (I recall *Tecnocasa*, to name but one). One should also recall the not insignificant role played by *Ciribini* in shaping *SAIE* [the Bologna Building Exhibition], whose first edition dates to 1965, not as a mere trade fair but as an occasion to address current themes of building industrialization, with exhibitions and related publications – the *Cuore Mostra* [Exhibition Heart] – through which to involve young scholars from the university world and from the aforementioned study centers.

I have dwelt on *Ciribini* to underscore his dimension as a theorist who introduces and substantiates themes relating to the industrialization of construction, such as integral design, the practice of collegial study, the codification of norms, criteria of typification and unification, the determination of minimum levels, as well as the design of *prototypes (industrial design edilizio* [building industrial design]) for the coordinated fabrication of quality series, a specific scheduling of

the construction site, and a new approach to the construction firm. Subsequently he sharpened a rigorous methodological approach to design founded both on the correspondence between requirements and performances, the so-called *teoria esigenziale* [requirements theory], which places the user at the center of design reflection, and on procedures that harmonize the preliminary phase of data gathering and analysis with that of formalization in the design response through

**Note 9.** a codifiable process called meta-design 94.

**Alberto Magnaghi, after graduating in 1965 from Politecnico di Torino, received a CNR scholarship, with Giuseppe Ciribini as his supervisor, through which he undertook the codification of meta-design.**

Attention to the relationship among technology, human beings, and the environment then led him to further proposals on retrofit, on maintenance, on the need for a design practice that participates in the environmental system, and to foresee, well in advance, the possibilities of informatics and telematics in renewing design methods and tools.

In other words, Ciribini, as an intellectual and a technician, indicates the contents of the technological discipline of architecture and all its possible research outlets and academic training paths, defining an area and infusing it with cultural content that would be taken up, followed, and deepened by the many colleagues with whom he was in contact, and examined together with other young researchers whom they would train. In this, a general change of pace occurs because, unlike Ciribini, who did not directly engage in design practice, all of them, besides being involved in the Academy, were practicing designers, interfacing the project at the scale of the building and at times also of the object, and establishing the practice of a lively exchange among speculative research, factual application, and the transmission of knowledge.

Although it is difficult to reconstruct these ties in their singularity, one may hypothesize, for example, a relationship with Spadolini already prior to 1962, when Ciribini was involved by the Ministry of Public Education in establishing those Industrial Design courses within the art institutes, in which Spadolini figured among their supporters and advocates. Spadolini was both a professor and a practitioner in the fields of product and architecture, attentive to the values of composition – albeit to be understood with the proper distinctions in the two domains – by that date engaged with the problems of industrialization in both sectors, alert in bringing his design experience into the-

oretical reflection and, concomitantly, the latter back into the former, while both became lifeblood for his teaching activity. A 1963 text of his – *Pierluigi Spadolini esperienze e studi 1952-1963* [Pierluigi Spadolini: experiences and studies 1952-1963] – attests this clearly and indicates how, in the decade under consideration, the experience conducted as a designer – from group work to composability – influenced the architect's choices – modular coordination, mechanization of the construction site, production by components – as well as those of the teacher. In 1963 he published new course booklets for *Artistic design for industry*, integrating those from a few years earlier, entirely dedicated to the design and production of the serial object, where he addressed the theme of prefabrication. About two years later he refined them with a new version, in which he brought the two fields together, indicating similarities of approach and method [10](#).

And in both, references to Ciribini's positions are frequent. In other words, one infers that, at least from 1963, the course presented the problem of industrial design in the round, leaving it to the students' exercises to determine which field to address individually. It is also interesting to note, in terms of teaching, a two-year experiment launched in 1963 pairing Spadolini's chair with Domenico Cardini's *Composizione* [Architectural Composition]. The aim was to complete the knowledge of the architecture student, prior to graduation, in the broad field of new construction techniques linked to industrialization and prefabrication, with an exercise applied to a real case envisaged by the Florence Master Plan [11](#). And this marked the beginning of practices, theoretical reflections, research, and para-state assignments [12](#) that Spadolini would coordinate, infusing the discipline, with a group of scholars: young Florentine graduates such as Mario Zaffagnini, Paolo Felli, and Romano Del Nord [13](#), and equally young scholars, temporarily in residence, such as Nicola Sinopoli and Giuseppe Turchini.

The latter can be taken as an example of the *mobility* of the most brilliant figures: a voluntary assistant to Rosselli, a collaborator with Aire alongside Ciribini, he would come into contact with Spadolini through one of his graduating students and would then follow him in the research of his lively

**Note 10.**

Both sets of course booklets are undated, though their date can be inferred from the bibliographic references.

**Note 11.**

The information is reported by Anna Maria Talanti.

**Note 12.**

I refer to Spadolini's long-standing collaboration with Italstat.

**Note 13.**

Romano Del Nord acknowledges a formative debt to Ciribini. This emerges both in his testimony reported in Daniela Bosia's text on Ciribini (Bosia, 2013) and in the book dedicated to him, edited by Roberto Bologna and M. Chiara Torricelli (2021).

**Note 14.**

Giuseppe Turchini's relationship with Ciribini is recalled by Turchini himself in Daniela Bosia's text (2013); his relationship with Spadolini is documented in the conference in memory of Spadolini ten years after his passing, the proceedings of which were edited by Eleonora Trivellin (2013).

Florentine School <sup>14</sup>. In these same 1960s years, Edoardo Vittoria and Marco Zanuso engaged with the design dimension at both scales and

**Note 15.** brought their research into university education <sup>15</sup>. So too Alberto Rosselli, a measured practitioner in the fields of product design and architecture, but above all an intellectual of considerable stature, who had already tackled with vigor in *Stile Industria* the problems of building industrialization. From 1963

See, for example, an essay by Zanuso in *Prefabbricare* [Prefabricate] (Zanuso, 1967), where he addresses the problem of the relationship with industry at both scales.

his course *Artistic design for industry* addressed, in line with Ciribini's thought, the question of method as a systematic design approach, one that considers the building process in relation to the design process, without neglecting the social context. In the new scenario of industrialized building, for Rosselli the architect's intervention «could no longer be the single, final gesture of an artistic operator, but had to stand alongside that of other technicians in a succession of phases

**Note 16.** that transcended the limited moment of design» <sup>16</sup>. A decisive lesson for students, enriched by the concept of system, by the system of requirements and that of functions, grounded in a confidence in the industrial solution as a response to collective problems. Equally decisive for young researchers, to whom he indicated a path that would be taken up by the Aire and CNR research groups.

Adriana Baglioni, his assistant in the 1960s, remembered him thus on the occasion of his passing.

## 11.3 The Affirmation of *Architectural Technology* within the University Context

An equally dynamic and forward-looking scenario takes shape, one that ramifies its potential for enhancing the discipline thanks to Decree 995 of October 31, 1969, known as *Riordinamento degli studi delle Facoltà di Architettura* [Reorganization of Studies of the Faculties of Architecture], which updates the teaching ordinance of the Degree Programme in *Architecture* and assigns to the Technological Area thirteen new subjects that can be activated, including *Architectural Technology*, *Cultura tecnologica della progettazione* [Technological Culture of Design], *Progettazione ambientale* [Environmental Design], *Sperimentazione di sistemi e componenti* [Experimentation on Systems and Components], *Unificazione edilizia e prefabbricazione* [Building Standardization and Prefabrication], as well as *Industrial*

*design*, to replace the earlier *Artistic design for industry*, rightly allocated to that area because of its close relation to both the technical and productive aspects of design definition. As can readily be inferred, the new subjects respond to all those recommendations that Ciri-bini's reflection had already theorized. Until that moment the course *Construction Elements* had provided information on the principal, traditional construction techniques in support of the course *Architectural Composition*; from this point onward the ancillary position of the technical aspect with respect to the compositional one falls away, and *Technology* acquires a role that underscores both the importance of a methodological approach to design and the need to respond to requirements expressed in terms of requisites and performances, asserting, thanks to the new possibilities of industrialization, the management of design in a perspective of integration among conception, design, and realization. In substance, owing to the potential change in the building's modes of production, the architect's technological preparation becomes essential in relation to the increasingly complex reality of the profession, leading the technological subjects to acquire weight in training, in research, and in the compositional response.

The situation was then strengthened by the promulgation of Law 910 of December 11, 1969, titled *Provvedimenti urgenti per l'Università* [Urgent measures for the University] and known to history as the *legge Codignola* [Codignola law], which – issued to quell the severe student unrest that had paralyzed the country's universities in the preceding two years and to address some of the demands it had articulated – liberalized university admissions and provided for the right to submit individual study plans; moreover, for Architecture it abolished the two-year/three-year barrier and reduced the number of exams. This allowed students to choose a study plan different from that envisaged by the teaching ordinance, thereby giving value, for thesis work, to disciplinary areas that had hitherto remained marginal.

Clearly, from our perspective, one can readily foresee that the Technological Area would become the object of in-depth study across the many strands it proposed.

## 11.4 The Milanese Technological Area and the Figure of Alberto Seassaro

It is essential to recall this scenario in order to introduce, among the scholars who gravitated around the aforementioned professors, the figure of Alberto Seassaro.

Seassaro graduated in *Architecture* at Politecnico di Milano in 1964 with a thesis, produced in collaboration with Ugo La Pietra at the *Istituto di Composizione* [Institute of Architectural Composition], titled *La ricerca morfologica. Proposta di lavoro per gli Istituti della Facoltà di Architettura* [Morphological research. A work proposal for the Institutes of the Faculty of Architecture]. The thesis addressed the modes of research proper to a university institute, distinguishing between its objective and its direction so as to leave ample room, by privileging the latter, both for the researcher's autonomy and for an understanding of the issues within the Institute's field of inquiry. An erudite thesis, then, which already identifies in the young student positions that are both critical and ideally constructive.

The years immediately following tell of a Seassaro who alternated artistic and aesthetic experimentations with work as a draftsman – as was customary at the time – in prominent Milanese architecture firms, without neglecting university activity, to which he devoted himself as a voluntary assistant. In short, he pursued – as his thesis indicated – a direction that did not foresee immediate outcomes but opened him to a horizon of possibilities.

The possibility he seized, with enthusiasm and almost at once, in 1963, was to follow Giuseppe Ciribini to Turin, where from that year he was full professor of *Construction Elements* at the Faculty of Architecture of Politecnico di Torino. The fascination of Ciribini's thought won him over, absorbed him; he deepened its suggestions, embracing, with the frenetic and restless vitality that would be his moral hallmark, the theme of building industrialization in his work of didactic support,

**Note 17.**

This is what Seassaro asserts in the *Introduction* to the text on the Italian building sector, which he edited in 1979.

in professional practice, and in research assignments for the CNR [17](#) and for the construction industry. He established a research relationship with Montecatini Edison that lasted several years, from 1965 to 1969, preceded and accompanied by the

design testing of a prefabrication system based on Silicalcite panels for single-family houses [18](#). The research focused on developing a catalogue of prefabricated Silicalcite elements [19](#), and, if read closely, it reveals a Seassaro fully aware of Ciribini's lesson, perfectly aligned with the latter's theoretical positions and well informed about the broader landscape of building industrialization issues. In a balanced manner, he proposed successive phases leading to the definition of a prototype, its engineering, production, and commercialization.

The intermediate objective was the fine-tuning of an *object module* with infinite combinatory possibilities for every possible building typology, distinguishing among *structural object modules*, *superstructural object modules*, and *accessory object modules* that would guarantee a design solution obtained by decomposing functional typologies into sums of standard elementary typologies, that is, into *object modules*. The final aim was to refine a catalogue of architectural elements that would satisfy the needs of all actors involved – from the consumer to the entrepreneur-client to the designer – and resolve as many construction problems as possible, so as to enable the Company to pursue a policy of anticipating demand, to overturn the traditional relationships between client and entrepreneur that impeded the effective industrialization of building, and to place the architect in a position to carry out an *integral design for industry*. The method adopted, partly theoretical and partly characterized by design verifications, is rigorous; it aligns with that typical of engagement with the industrial world, insofar as it had already been articulated by Rosselli, to name but one.

The work was rewarded with the continuation of the relationship with the Company: in 1971 Seassaro joined the Montedil Research Center of the Montecatini Edison Group as the person responsible for the development, coordination, and integration of building products and for supervising the implementation of projects for the various building complexes carried out by the Montecatini Edison Technical Office and by external designers. In these years, then, Seassaro proved homologous to the other young researchers we have seen engaged in various research centers; like them he would also take part in CNR programs on building industrialization, although – unlike them – he

#### Note 18.

See, regarding Montecatini Edison's experience in the construction field, what Seassaro writes in *La ricerca e la sperimentazione tecnologica in edilizia dal dopoguerra fino al P.R.I.E./C.N.R. del '70* [Technological research and experimentation in building from the postwar period to the P.R.I.E./C.N.R.], in the volume he edited and already cited in note 20, where he also explains what Silicalcite is and the unexpected problems Montecatini Edison faced in obtaining a suitable material.



1. Alberto Seassaro. *The demiurge*. [Narrative →](#)

also measured himself against the furniture industry. For Acerbis he developed several successful products based on the concept of composability, as well as a distinctive prototype that would be presented at the 1972 New York exhibition *Italy: The New Domestic Landscape*: a nonconformist, articulated cubic volume to be placed freely within the domestic space and used at the user's discretion for either the night or the day zone, since it included a pull-out bed, wardrobes, a table that could likewise be pulled out, a bar cart, illuminated shelves, and drawer

Note 19. units [19](#) [2](#) [3](#).

The prototype was published in *Domus* no. 489 in 1970, and in the catalogue of the New York exhibition.

2. *L'intero mobile corre su rotaie*, Alberto Seassaro, in *Domus* n. 489.  
[Document](#) →



3. Alberto Seassaro, *Addition, Tavolo attrezzato componibile*, Acerbis.  
[Document](#) →



Like the scholars mentioned, he would communicate his reflections – and his experiences – on building industrialization in specialist journals, although in that period there was not the vehement chase after publications by researchers that has characterized the last few decades. For example, in 1968 he published a long article, practically an essay, on the *Component Approach* and the changes it brings about in design methodology and operational practice. His reflection, once again revealing the importance of Ciribini's thought, is guided by concern for the rift between architecture and building and for «the progressive disengagement of a large part of architectural culture from the issues of industrial design and, in particular, from building industrialization [...] perceptible in professional practice [...] in teaching and in critical and theoretical debate». The framework he outlines, well documented across differing positions, with case studies and international references, reassesses open prefabrication provided that the component «to be meaningful insofar as it is a design product aimed at constituting an architectural language», «to be destined for industrialized production», and is compatible with the available repertoires of components. He closes, unsurprisingly, with a caution regarding the aesthetic criteria of judgment that criticism must elaborate in the face of the new *modus operandi* of industrialized architecture, as of industrial design (Seassaro, 1968).

It is worth noting that, at the conclusion of his article, Seassaro reports the teaching experience from Ciribini's *Construction Elements* course in the 1966-1967 academic year, devoted to the *design of building components*, where the exercises assigned to students did not provide «typological prefigurations that might compromise the origi-

nality of design outcomes» (Seassaro, 1968), so as to foreground the possibilities of design by components for the integral reformulation of the building envelope theme. I mention this to introduce the position that Seassaro would assume as appointed professor – first of *Building Standardization and Prefabrication*, then of *Architectural Technology* – at Politecnico di Milano from 1969.

Let us recall that 1969 is the year in which, replacing *Construction Elements*, the discipline *Architectural Technology* entered the *Ordinamento* of the Faculties of Architecture as a subject pertaining «to the morphology and the use of materials in Architecture for the attainment of figurative results, also in relation to new industrialized procedures» (Crespi, 1988) 202. Let us also recall the makeup of the Faculty of Architecture at Politecnico di Milano at that time. From as early as 1963, well in advance of the 1968 student protests, students had begun to press for reforms and to occupy buildings; Deans alternated without being able to resolve the crisis, while the police had become part of the university scene. The *Codignola* law halted the protest for a brief period, opening a season of experimental teaching with group research projects, to which Seassaro adhered by creating in 1969–1970, together with Marco Zanuso, Raffaella Crespi, and Leonardo Fiori, a Technological Research Area that addressed emerging (spatial and aspatial) organizations within the technological structures in place, toward a hypothetical disciplinary configuration of technologies functional to a role for the architect as a *technician organically linked to the class*. In the subsequent academic years the technological sphere proposed to students research on the themes of technocratic illusion, design by components, and then on the building sector and its transformations with reference to housing, while Seassaro established, as their point of reference, the *Laboratorio di Produzione del territorio* [Territorial Production Laboratory] with Giacomo Scarpini, Maria Bottero, and Giorgio Gaetani.

In other words, in Milan too an area of instructors attributable to Architectural Technology took shape, although the persistence of the revisionist crisis, partly resolved in other universities, forced the Milanese faculty to reckon with a slippery reality that did not allow, except only apparently, for calmly organizing study, or for probing and structuring the discipline's possible trajectories in an organic way, capable

**Note 20.**

**That definition appears in a ministerial circular and is reported in Crespi (1988).**

Note 21.

See, in this regard, the clear-sighted analysis Seassaro offers of the research methods carried out within university Institutes, from which one infers, at least in the Milanese setting, the absence of a tenured professor as a catalytic and ordering figure for the Institute's researchers and their studies (Seassaro, 1972).

4. Alberto Seassaro,  
*La politica della  
ricerca in edilizia*,  
Facoltà di architettura,  
A.A. 1972-73.  
[Document](#)→



Note 22.

Thus the full professors of *Architectural Technology* – who, I recall – were at the time few, influential, and close to one another, were affectionately rechristened. At one of their dinners, after yet another meeting, to underscore their lively mobility around Italy, from one conference to the next, a playful ditty was sung that echoed a character from a song by the *Piccolo Coro dell'Antoniano di Bologna*, the penguin Belisario, who had volunteered for a legendary launch to the moon. In the version tailored to our technologists, the original spacebound destiny was transposed into the more prosaic railway routes they traveled, so the refrain became *il pinguino Belisario che sta sempre sul binario* [the penguin Belisario who is always on the platform]. The little tune was appreciated, and with it that label, which became a kind of badge of a (powerful) coterie.

of securing a School identity profile. Milan lacked, at that moment, intellectually unifying faculty [21](#) who would involve and steer the research domains and give them visibility on the national scene [4](#). In short, Milan lacked one of those *penguins* present in other university seats [22](#) who could do so much and did so much. The political commitment that permeated the classrooms of Politecnico di Milano informed the teaching proposals of the Technological Area research group in the 1970s.

The introductory documents for the research to be assigned to students, written mostly by Seassaro, are ambivalent in their tenor: some are strongly politicized, as was in the spirit of the time, and others delineate in exemplary fashion the landscape of technological studies, its principal directives, the results achieved between the theoretical-methodological moment and economic and productive practice, and thus, disciplinarily speaking, are informed and learned.

The aim was to spur students to a critical reflection that would unmask the ways in which private and state capital had addressed the problem of building industrialization without a genuine interest in the good of the country. From these accounts a certain split in Seassaro's persona comes into view: on the one hand, the practitioner who works neutrally in the service of that capital, also driven by the needs of a growing family; on the other, the politically attuned academic, who warns of the risks of the operation in light of the *conflict between hegemonic classes and subaltern classes*.

If the assignment proposed to students in the 1969-1970 academic year was to start from his Montecatini Edison catalogue of industrialized components for building, in relation to the positions of the *Components Approach*, it was structured in a way quite different from what Ciribini had proposed a few years earlier, because the aim was to articulate a political

reading of the explicit *capitalist use of technology*, which contradicted the *democratic* intent presumed by component-based industrialization [23](#) [5](#) [6](#) [7](#). In another 1970 document, Seassaro, beyond the specific definition he gives of the architect as «the organic technician of society as a whole, within the logic of class struggle» (Crespi, Fiori,

Seassaro, Zanuso, 1970), and beyond the political positions he adopts there, affirms his belief in the importance of technology – for its *formative* character – in architectural education and in professional practice, convinced that only when «the architect's technical capacity becomes a *matrix factor* in design, such that training in the use of techniques is placed among the initial components of the process through which design is expressed» (Ibidem).

This conviction leads him to state, in the text, that the courses pertaining to *Technology* constitute a *globalizing discipline* 83. Seassaro would reiterate this point in a later piece devoted to research within the university setting, where he argues that it is necessary to establish a more organic research program within the university, one he likely saw taking shape elsewhere and deemed indispensable for Milan (Seassaro, 1972). It is precisely this confidence in research that characterizes Seassaro's position in the 1970s.

His professional activity unfolded not only in private design practice but also in consultancy with public bodies operating in the building sector and in participation in CNR programs on prefabricated construction. In other words, in clear-eyed counterpoint to the critical political analyses set out in the university documents mentioned above, he pursued, unaffectedly, experiences that enriched his profile as a technologist. This is what emerges from a volume he edited in 1979, for which he involved faculty from the area whose studies and acquired expertise he had followed, from Giacomo Scarpini to Valerio Di Battista to Fabrizio Schiaffonati. The undertaking implied the intention to give a voice and an identitarian profile to a group that was devoting itself with enthusiasm to university work without, like him, holding any stable and recognized institutional role, and to highlight its relations with the *Gruppo nazionale CNR Produzione Edilizia*, within which he held coordinating and directing roles. The purpose of the publication was to retrace the characteristics of the Italian building sector since the postwar period, outlining and delineating the most recent modifications in its structural configuration. The essay Seassaro reserved for himself analyzes research and

**Note 23.**

See the documents supplied to students as reproduced in *Design Philology*: A. Seassaro, *Area di Ricerca Tecnologica 1. Proposta per la definizione di una area di Ricerca Tecnologica nella Facoltà di Architettura di Milano*, A.A. 1969-70 [academic year 1969-70]; A. Seassaro, R. Crespi, L. Fiori, M. Zanuso, *Area di Ricerca Tecnologica 2, Natura disciplinare e natura politica dell'industrializzazione edilizia per componenti*, A.A. 1969-70; A. Seassaro, *Area di ricerca tecnologica 3. La via italiana della industrializzazione edilizia. Note di metodo e discriminanti politiche di lettura del Catalogo componenti industrializzati Montecatini-Edison*, A.A. 1969-70.



5. Alberto Seassaro, *Area di Ricerca Tecnologica 1. Proposta per la definizione di una area di Ricerca Tecnologica nella Facoltà di Architettura di Milano*.  
[Document →](#)



6. Alberto Seassaro, Raffaella Crespi, Leonardo Fiori, Marco Zanuso, *Area di Ricerca Tecnologica 2. Natura disciplinare e natura politica dell'industrializzazione edilizia per componenti*.  
[Document →](#)



7. Alberto Seassaro, *Area di Ricerca Tecnologica 3. La via italiana della industrializzazione edilizia*.  
[Document →](#)



technological experimentation up to 1970 and reveals a steady hand, stripped of any polemical charge, analytical and erudite, confirming him as a reliable scholar (Seassaro, 1979). Yet the true objective was to underscore the cultural profile of those researchers gathered under the aegis of the Institute of Technology of the Faculty of Architecture in Milan, in no way inferior to those at other institutions.

## 11.5 An Enterprising Department within a Receptive University

In 1980, the Italian university system underwent a significant change, albeit one lacking a fully articulated reformist vision. It did not address the issue of admissions, whose growth had been so substantial that one now spoke of a *mass university*, nor the relationship between the educational offer and the labor market, but only the matter of faculty staffing, with the aim of stabilizing the large number of precarious positions – *borsisti, assegnisti, contrattisti, incaricati* [scholarship holders, research fellows, contract lecturers, adjuncts] – through which the vertiginous rise in enrollments had been managed. *Legge 28 del 21 febbraio 1980 – Delega al Governo per il riordinamento della docenza universitaria e relativa fascia di formazione, e per la sperimentazione organizzativa e didattica* [Law 28 of February 21, 1980 – Delegation to the Government for the reorganization of university teaching staff and the related training tier, and for organizational and educational experimentation], accompanied by *DPR 382 dell'11 luglio 1980 – Riordinamento della docenza universitaria* [Presidential Decree 382 of July 11, 1980 – Reorganization of university faculty], established the ranks of full and associate professor, contract professor, and researcher; introduced the option of full-time or defined-time appointments; instituted the doctoral degree; enabled the creation of Departments to promote and coordinate research activities; and, in a more tentative way, envisaged the possible creation of degree programs.

Thanks to this, a small organizational *tsunami* swept through the Italian university system and, in our case, the Faculties of Architecture. A series of competitive examinations rewarded scholars, providing the various campuses with a substantial number of full professors, asso-

ciate professors, and researchers, while each faculty set up a Department to gather them according to their cultural profile. In 1981, *Dipartimento di Progettazione Programmazione Produzione Edilizia (PPPE)* [Department of Building Design, Planning, and Production] was created at Politecnico di Milano; it brought together faculty belonging to the technological field, among them Marco Zanuso, Raffaella Crespi, Fabrizio Schiaffonati, Valerio Di Battista, Achille Castiglioni, and Alberto Seassaro himself who, having become an associate professor in 1983 and opting for full-time status, devoted all his energies to shaping the area, organizing conferences, encouraging colleagues to present their studies, and developing research of his own on behalf of CNR, ANCE, CRESME, AICAR, and Assoarredo, on the relationship between design and production, as well as on the economic and productive structure of industrial sectors, particularly construction though without neglecting furniture. Other fields he addressed were environmental design and lighting design. Thanks to all this, he was appointed full professor in 1990.

In a short span, the Milan technological area succeeded in closing the gap noted in the 1970s with respect to other national centers, finding its shape and acquiring a cultural and proactive profile [24](#). The change of pace had been fostered, everywhere, by those early-1980s competitive examinations which, by opening a large number of tenured posts and stabilizing people, spread, evenly across all campuses, a substantial cohort of motivated and well-prepared faculty, making it possible for every Faculty of Architecture to have a Department of Technology that was proactive and intellectually lively. The strategy of our *penguins* was unified, guided by the goal of consolidating the discipline across the many cultural trajectories in which it had taken shape and of asserting it, with its constructive stances, in both research and teaching. It increasingly emerged as a given that architectural technology – understood in a broad sense – should no longer be considered an ancillary subject to *Architectural Composition*, but an autonomous discipline, endowed with its own features and thematic possibilities, integrated in social responses, proactive in environmental ones, and engaged in a conscious, positive dialogue with industry. Moreover, it claimed a design role, more constructive than that of Composition, and, thanks

**Note 24.**

A profile of the PPPE Department can be found in the essay by Elena Mussinelli, Monica Lavagna, Gian Luca Brunetti, and Matteo Gambaro, and in the piece by Erminia Attaianese and Mario Losasso on research in environmental design.

to its methodological structure and its criteria both for responding to human needs expressed as requirements and performance and for managing the building project – in relation to the complexity of technical standards and environmental regulations, as well as to changing modes of building production – it was better equipped to oversee conception, design, and realization as an inseparable whole.

Meanwhile, Alberto Seassaro served as Chair of the Technological track of the Degree program in Architecture. In 1982 a decree was issued – *DPR 806 del 9 settembre 1982 – Modificazioni all'Ordinamento didattico universitario* [Presidential Decree 806 of September 9, 1982 – Amendments to the University Teaching Regulations] – that changed the Regulations for studies in Architecture, with the aim of defining students' competencies. It envisaged a structure of courses in nine disciplinary areas, with the possibility of four degree tracks, the defining ones of *Design*, *Restoration*, *Urban Planning*, and *Technology*. This was a recognition for our field, to which as many as thirteen subjects were assigned, including *Industrial Design*. Moreover, the decree allowed other tracks to be activated at the discretion of individual faculties. Seassaro therefore devoted himself with conviction to composing a curriculum for the Technological track, outlining, based on the competencies of the faculty then in place, three distinct strands: one in programming, one in design, one in production, echoing, in some way, the very name of the Department. In the final year, for the thesis, the capstone reaffirmed as indispensable the centrality of project development, emancipating it and freeing it from *Architectural Composition*. Seassaro's elaborate 1981 plan would soon be reconsidered.

The Milan technological area enjoyed prominent representation in Industrial Design in its twofold sense, product design and design for industrialized construction, with two full professors of no small national stature: Achille Castiglioni, long attentive to the definition of the object, and Marco Zanuso, who in his teaching addressed, with assured command, industrial themes in both building and small-scale products. The latter could also count on two of his pupils, Francesco Trabucco and Alessandro Ubertazzi, already integrated into the academic ranks and trained by him to engage with the topic. From this *substantial* presence came the idea of leveraging it to propose a novelty, at least for the university world, an exclusive track in *Industrial Design*.

The position was strongly promoted by Cesare Stevan, Dean of the Faculty of Architecture, a figure keenly aware of institutional and political dynamics and endowed with a marked capacity for listening, including to students' expectations. The ever-growing number of enrollments in Architecture, considered worrisome by the university because it upset the balance hitherto maintained with those matriculating in the Faculty of Engineering, was vigorously defended by him. In light of this, he investigated that excessive level of appeal, asking himself what its reasons and attendant expectations might be. He therefore set about updating the educational offer, removing from *Architectural Composition* the dominant centrality deemed no longer suited to the moment. To secure acceptance of the new track he nonetheless involved a liminal wing of *Architectural Composition*, that of *Architettura degli interni* [Interior Architecture], albeit at the risk of confining design within the perimeter of furniture. The underlying rationale was justified not only by the Lombard production context, devoted above all to furniture products, but by the collaborations and possible professional outlets it could open or secure. Thus, with the alliance of part of the compositional area, the proposal took shape to activate, alongside the four degree tracks considered standard – in *Progettazione architettonica* [Architectural Design], *Tutela e recupero del patrimonio storico-architettonico* [Protection and Restoration of the Historic-Architectural Heritage], *Urban Planning*, and *Technology* – a fifth, experimental one in *Disegno industriale e arredamento* [Industrial Design and Furniture]. This would gratify all constituencies within Architecture, allowing the various disciplines to enhance their own autonomous design agendas; it would strengthen both the technological area and design itself, no longer dispersed among the other avenues of project development in the technological discipline; it would leave the Technology track free to address its core themes of industrialized building, prefabrication, components, and environmental design. In addition, it would signal an adjustment to contemporaneity, beneficial to the image of Politecnico di Milano, already appealing and attractive to students.

In 1984, once this pilot was activated, a series of meetings was held at Politecnico di Milano to reflect on curricular content, needed tools, and critical issues. It is instructive to read the speakers' contributions and the cues that emerge, because the themes addressed, the doubts



voiced, and the warnings articulated would, a few years later, shape the creation of the Degree program in *Industrial Design* (Piccinno, Servetto, 1984) [9](#).

The Milan technological area's enhancement of industrial design did not stop there. In 1988, drawing on the possibilities set out by *DPR 382/1980* [Presidential Decree 382/1980], it considered establishing a PhD in *Industrial Design*, justifying it by the need to reflect on product design in relation to changes brought about by ongoing technical innovation, by the environmental question and the challenge of a proper use of energy resources, by the advent of new designable materials (consider the interest aroused by the 1986 volume *La materia dell'invenzione* [The Matter of Invention] by a young Ezio Manzini), and by the communicative possibilities of digital tools.

Its structure was calibrated, appropriately, not only to the timeliness of these themes but also to the cultural profile of the unit's faculty, from Raffaella Crespi to Tomás Maldonado (who in 1984 had come to Politecnico from *DAMS* [Discipline delle Arti, della Musica e dello Spettacolo]), from Achille Castiglioni to Ezio Manzini to Francesco Trabucco, summoned to a commitment that was perhaps demanding in teaching and organizational terms, yet stimulating and rewarding, repaid by the experience of working with a small number of motivated candidates, a mere fraction compared to the roughly fifteen thousand students enrolled in the Faculty. It was also the first doctoral program in this discipline at the national level which, while granting Politecnico di Milano an institutional visibility aligned with contemporaneity, showcased the full proactive potential of the Milan technological area and established it, relative to other campuses, as a context capable of advancing all its voices.

It should be said, for historical accuracy, that in Palermo Anna Maria Fundarò, full professor since 1977, had long moved with assurance, working largely on her own, to promote design teaching. She succeeded in creating an experimental degree track in *Industrial Design* in the first half of the 1980s, a *Scuola di specializzazione* [postgraduate specialization school] in 1989, and, roughly at the same time, a *Dottorato in Disegno industriale, arti figurative e applicate* [PhD in Industrial Design, Fine and Applied Arts], in cooperation with the Faculty of Humanities and Philosophy of Palermo. In a sense, Fundarò anticipated Milan's

steps and, like Milan, sought to engage with the scale and character of place. Aiming to rebuild Sicily's productive vocation and its heritage of material culture, she delved into local crafts to regenerate them and improve the quality of places, within a pedagogical model that – though appreciated by certain circles of the Milan design scene and surely worth revisiting today, when much confusion surrounds craft and the relationship between craft and design – is very different from that of Politecnico di Milano. Her venture therefore slightly precedes the one under consideration, yet it takes a path which, however exemplary, is of limited usefulness in its cultural profile for being considered a fruitful precedent.

It should also be said that other Italian campuses offered teaching in *Industrial Design*, and with faculty of proven stature, Florence, for instance, with Roberto Segoni, whose teaching was further supported by Giovanni Klaus Koenig's absolutely charismatic course in *Storia del design* [History of Design], yet none of these could count on a level of confidence and willingness to invest, on the part of colleagues within their Department, comparable to what was present in Milan. The reason likely lay in their inability to organize a close collaborative relationship with local production sectors – moreover scarcely investigated by the almost nonexistent design historians of the time – which might have served as useful interlocutors for a more orderly takeoff of the discipline. To stay with the Florentine example, Koenig was, at that point, speaking of the opportunity to create a postgraduate specialization school in *Industrial Design*, but his sudden death in 1989 deprived the initiative of his considerable cultural experience and, above all, of those useful contacts in the transport sector which, combined with his aptitude for conceiving and involving, could have given the project substance.

Thus, when it nevertheless took shape in the early 1990s, it closed within a short time. In other words, Italian faculty in *Industrial Design* seemed satisfied with their teaching remit and with their students' appreciation, and were not moved by the burning drive to advance the discipline more comprehensively. Although Koenig, in jest, defined the designer as a *pipistrello, mezzo topo e mezzo uccello* [a bat – half mouse and half bird] – alluding to the intelligence, adaptability, and curious concreteness of the one, and to the ease and endurance

of flight of the other – Italian design faculty managed only the timidiest of flutters!

By contrast, the Milan technological area is cohesive, though composed of diverse cultural sensibilities, drawn together by a close relationship with industry, albeit one that, here too, varies from one faculty member to another, and it works synergistically with the Faculty of Engineering, its sister within the polytechnic fold rather than a separate institution impermeable to collaboration. Both, moreover, shared a common denominator, the same matrix: an educational approach conceived as the integration of scientific-technical knowledge with humanistic perspectives, lending credibility to projects in teaching that elsewhere might have been deemed high-risk in terms of their chances of success.

## 11.6 A Degree Program in Industrial Design. And Much More

In the meantime, in 1989 a *Ministero per l'Università e la Ricerca Scientifica* [Ministry for Universities and Scientific Research] was established, autonomous from the *Ministero della Pubblica Istruzione* [Ministry of Public Education], giving the university its own locus of governance. This opened a season of reforms. *Legge 341 del 19 novembre 1990* [Law 341 of November 19, 1990], with the aim of aligning the system with international standards, recognized the educational autonomy of universities and allowed them to award, in addition to the traditional *laurea* [degree], the *diploma universitario* [university diploma], the *diploma di laurea* [degree diploma], the *diploma di specializzazione* [specialization diploma], and the *dottorato di ricerca* [doctoral degree], on condition that all curricula be devised with a new sensitivity to the entrepreneurial fabric of place, so as to guarantee graduates employment and precise professional competences.

The Faculty of Architecture at Politecnico di Milano was quick to seize the opportunity.

Dean Stevan, an enlightened figure, open both to addressing the challenges of a mass university and to interpreting contemporary transformations, who had consistently supported his technologist

colleagues' efforts to consolidate their presence in the name of adapting the university institution to the demands of the present, envisaged the possibility of establishing a degree program in *Industrial Design*, given that design, with its full complement of associations, bodies, journals, exhibitions, as well as enterprises, constituted a specifically Milanese hallmark. He deemed it necessary to overcome the anomaly whereby the Italian university lacked a pathway dedicated to a professional figure so significant for the country's image, and essential that it be Politecnico di Milano to assume this responsibility, in light of the role played by Milan in its international success. Beyond the prestige the Politecnico di Milano would derive from it, its creation would produce two results: one, prosaic, of easing the pressure of the number of students enrolled in the *Architecture* degree program; the other, as a cultural service, of meeting students' expectations for a track aligned with the professional market.

Stevan had by then a firm grasp of institutional mechanisms, and he acted on the Ministry front, using as leverage Tomás Maldonado's favorable opinion, assuming that his viewpoint would be regarded as authoritative, above all thanks to his international background, and capable of countering the Ministry's latent provincialism. He turned to Angelo Cortesi, then president of ADI [Associazione per il Disegno Industriale], to secure his support and help in addressing the problem of a professional framework for future graduates, independent of the *Ordine degli architetti* [Order of Architects], something that could reassure them about their prospects. And he found in Minister Antonio Ruberti an ally so receptive to the project as to resolve the statutory issues that existed <sup>25</sup>.

At that point he turned to Fabrizio Schiaffonati, Director of the PPPE Department, a learned, approachable, and perceptive lecturer, above all institutionally astute, to devise a convincing draft plan. He obtained his full willingness, although the task was not easy: the educational objectives and the teaching structure had to be defined, the level of design resolution, requiring the establishment of laboratories for the necessary technical-productive verifications, had to be envisaged, and any possible disciplinary gaps had to be filled. And not only that. The ongoing changes in the production landscape were identifying new profession-

**Note 25.**

With *Decreto 24 febbraio 1993* [Decree of 24 February 1993], the Ministry amended the *Ordinamento didattico* [Teaching Regulations] of degree programs, introducing the degree in *Industrial Design*, and appended a new *Tabella XXX* [Table XXX] with the Teaching Regulations envisaged for it.

al profiles as against the generic label of designer, profiles whose contours had to be specified and anticipated in the articulation of study tracks so as to align with the professional market. In the background lay the question of the proposal's appeal which – obviously – was not in doubt, quite the contrary. The real issue was how to organize a structure that would be concrete, functional, and efficient in view of a student body that would certainly be substantial.

The technological area, building on the earlier, successful organizational outcomes of the degree track and the PhD, guaranteed the prospects of success. And Schiaffonati firmly believed in its potential, even though it was no small step: to construct an educational path independent from that of the architect, to shape a professional figure with technical, economic, social, and cultural dimensions, capable of linking them to propose a design synthesis free of stylistic concessions and of temptations toward passing fashions. The concreteness and seriousness demonstrated by the technologists in deepening their themes, their relationship with industry – attentive to its problems yet devoid of any deference – their capacity for dialogue with state and para-state bodies, their aptitude for connecting technical issues with social or human needs, all became guarantees for the successful outcome of the undertaking. It was therefore not only the presence of *Industrial Design* within their area that made them necessary interlocutors, but also their organizational, as well as cultural, capacity, demonstrated in the conduct of their basic research and, above all, of their applied research, together with the related dexterity in managing dialogue with industry.

Schiaffonati, however, after first involving Achille Castiglioni, Marco Zanuso, and Tomás Maldonado, did not obtain the positive response he expected, having failed to appreciate how all three, despite their penchant for leadership, were unable to engage with the bureaucratic and administrative mechanisms of the polytechnic machine, and were hampered by the fact that the first two were already retired from active service and the third was approaching retirement. Unable to count on their contribution, he appointed a new internal committee within the area, bringing together faculty who, by virtue of their expertise, could take on the courses to be planned, and it managed to present a plan for the first year only, drawing on the explicit *Table XXX* of Decree of

February 24, 1993. It was an elementary, almost perfunctory plan, yet sufficient to quiet Stevan's pressure and to launch the degree program in academic year 1993-1994. It was therefore possible to begin, but a Chair was needed who could take on the challenge: capable, intellectually lively, confident and determined, adroit at moving nimbly within institutions, at building relationships, at anticipating needs, convinced of the challenge and eager to carry it forward. In short, a *penguin* with the qualities of a *bat*, one who could speak to *bats*!

Schiaffonati knows whom to back: Alberto Seassaro.

And Seassaro, not without some initial doubts, takes up the gauntlet. Officially he became Chair of Degree program only in 1995, but he very likely began working some time earlier.

He immediately set to work on the curriculum, and the telltale sign is the *Guida dello studente* [Student Guide] for academic year 1994-1995. Compare it with the spareness of the previous year's, which lacked an *incipit*, any kind of anticipatory framing, or even a reassuring note. The new Guide, by contrast, presents, explains, clarifies, and reassures the reader about the pathway; it outlines a program that is already complete and clear, synergistic with the various components of the university, with cultural and professional profiles clearly specified, with the three cycles envisaged by the decree implemented, with the courses activated and described in detail in terms of objectives, method, and examination requirements. The man's constructive restlessness then turns to the organization of the structure, moving adroitly within the polytechnic institution and, again, both within and beyond it, to recruit lecturers from among those of the Faculty, those of the university, and the professionals or experts needed for specific courses and for the laboratories, as well as firms willing to host interns. To give meaning and weight to the new reality, he promoted an expanded configuration of the PPPE Department, which was transformed, in both name and structure, into DI.Tec – *Dipartimento di Disegno industriale e Tecnologia* [Department of Industrial Design and Technology]. But this was only a first step. An autonomous Design Department would soon be established – IN.D.A.CO – *Dipartimento di Industrial Design, Arti e Comunicazione* [Department of Industrial Design, Arts and Communication]. A shrewd move that would enable him, shortly thereafter, to request the creation of a Design Faculty, the *Terza Facoltà di Architettura*

Note 26.  
See also what Stevan  
states in a 2024 interview  
with Milano Post.  
[Link→](#)



[Third Faculty of Architecture] at Politecnico di Milano, which Stevan would grant without difficulty, considering it «the university's only true innovation] since its foundation» [26](#). He envisaged the need for dedicated breathing spaces, necessary both for sound operation and for institutional dignity; he negotiated with his friend Stevan and accepted without hesitation the proposal of a peripheral location – Bovisa – which, from a renunciatory hypothesis, a marginal suburb, would be transformed into a reality of winning energy, also a symbol of continuity between its, not by chance, entrepreneurial past and its present of training for enterprise. Not content with this, from the outset he presented himself to the lecturers operating nationwide, at various levels, in the field of university education for *Industrial Design*, as their point of connection: to listen to their needs, to coordinate joint cultural-research initiatives, to reflect on the future of those competitive examinations that would follow in order to strengthen, like a good *penguin*, the disciplinary sector according to the urgencies posed by the various campuses, yet without creating discord or disorganized arrangements. A researcher tied to CNR, he proposed CNR for the first joint research – *Innovazione, qualità e ambiente nel Disegno industriale* [Innovation, Quality, and Environment in Industrial Design] – involving the campuses of Milan, Turin, Genoa, Naples, Florence, Venice, and Rome, and then extending it to Pescara and Palermo, so as to connect and unite, to ensure that debate would stir the dormant and spur them to help the area grow within the various communities, to anticipate and to take flight. With himself as the reassuring navigator of the course.

Seassaro, pressing forward, accomplished all this in a handful of years, and, still pressing forward, he would continue in the years that followed, those of the new century, to create a *Sistema Design Milano* [Milan Design System] and then a *Sistema Design Italia* [Italy Design System]. Not content, he would lay the groundwork to spur his students to secure international recognition for this reality. Schiaffonati and Stevan had placed their bet on the right piece to entrust with their vision of the future for the design area.

Candid and poised, Seassaro had shown, when he steered the Technological track, that he was operational yet not a mere executor, able to move within the university with a blend of tact and mild impertinence; likewise, he made his organizational gifts manifest in struc-

turing the *Corso di perfezionamento in Progettazione illuminotecnica* [Advanced Course in Lighting Design] in 1986, knowing how to enlist professionals, experts, and national and international bodies to lend technically and scientifically rigorous standing to a subject still in need of validation. He displayed the technologist's typical qualities – pragmatism and concreteness – while his earlier, if distant, background in the figurative-aesthetic sphere and in the field of furniture reassured one of an open, even audacious, mindset, yet one ready for the critical exchange consistent with the polytechnic philosophy. As a person he had pragmatism, realism, and tenacity; as a lecturer he was clear about the value of research, the importance of human capital, the necessity of merit-based selection, the obligation to build relationships; as an intellectual he showed neither prejudices nor cultural gaps. Entrusting him with shaping the discipline within the university context was therefore no gamble. And indeed Seassaro proved open to innovation, to new technologies, to combining a culture of design and a culture of product, to broadening teaching domains – think of fashion, nautical design, and *Beni Culturali* [Cultural Heritage] – to creating synergies. In an enlightened way he sought out faculty and teaching collaborations among technologists, architects, engineers, sociologists, and designers. And while structuring his Degree program, he persuaded many lecturers in *Industrial Design* across Italy that they could do something similar by reconfiguring themselves within their faculties, cutting the cord to the technological area, and, with the alliance of our *demiurge*, finding opportunities for personal growth and for the growth of their students. In a word, he built, successfully and generously, something once unthinkable.

Thank you, Alberto, magnificent *penguin*, on behalf of the *bats*!

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