



THE SCHOOL OF MATHEMATICS AT ROME'S UNIVERSITY CAMPUS

GIO PONTI, 1935

Edited by Simona Salvo | Sapienza University of Rome

The Getty Foundation | Keeping It Modern Project

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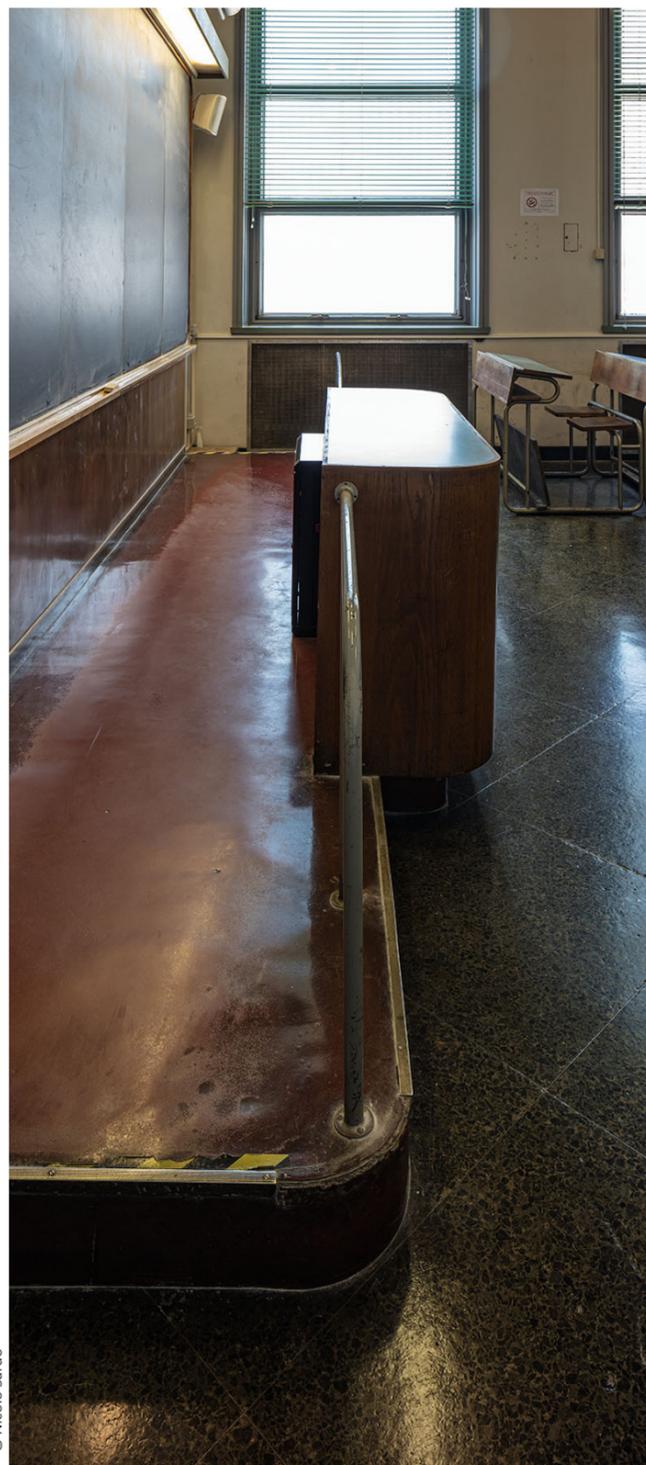
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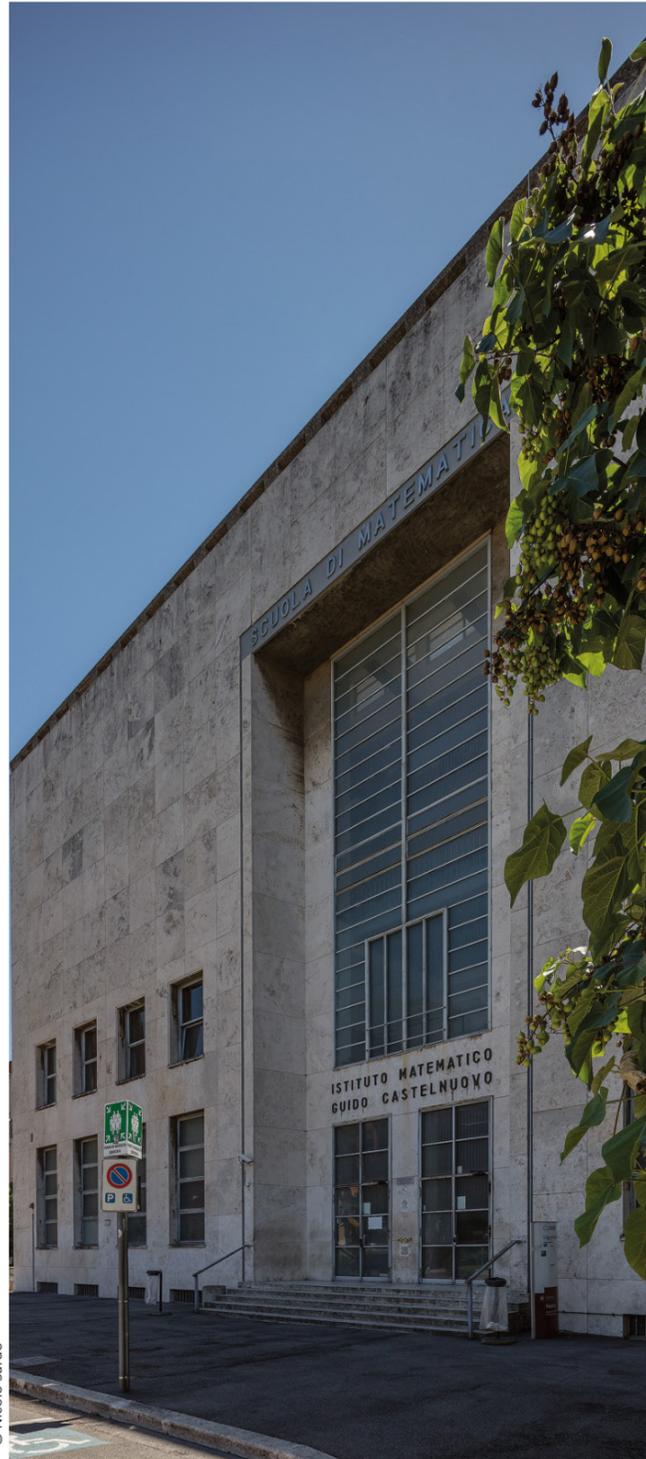
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**WHAT'S WHAT:
A CATALOGUE OF
FURNITURE AND DOORS**
Flaminia Bardati, Chiara Turco

FURNITURE

There are many discrepancies between the furnishings documented in the archival sources and those currently present in the School of Mathematics. Many original items are lost, while many pieces of furniture were added to the building without leaving trace in the documents. This is partially true also for elements that are present in the building from the very beginning, such as the black marble benches and the wall lighting fixtures that furnish the atrium of the front building, which are clearly visible in the historical photographs but are never specifically mentioned in the archival documentation. However, at present, every piece of furniture retaining artistic or historical interest deserves to be considered and cataloged, in view of its correct conservation, albeit its unknown origin. This also applies to the doors, which have been listed here in a specific catalogue.

Cataloguing the furniture implies, above all, to survey all the objects according to a specific methodology. This step consists in organizing the entire set of furnishing in categories and typologies, quantifying the items related to each type. In the case of the School of Mathematics, seven categories of furnishings have been identified, and associated to a color reported in the catalogue: seats, tables, lighting fixtures, leaning furniture, suspended furniture, platforms. Every category includes several types of items, characterized by different shapes and/or materials, which belong to different phases, quite often not documented.

Figure 1 - Two seater desks of the "model "Milano" at the ground floor (© Salvo 2021)



In order to systematize all the collected information, the catalogue also describes the details of all the selected objects, organized by categories and types. For each typology the catalogue registers the total number of items found, their location (at the time of the last inspection, as of 2021), the date of production (documented or hypothesized), and the state of conservation. More specifically, every single selected item is associated to a code that allows to identify its location, category, type, quantity. For example, the code "F_Sc_01_chr_a_01 / 50" identifies an item located in the front building (F), second floor (Sc), room 1 (01) that is the library, corresponding to a Parma chair (chr_a), numbered from 1 to 50 (1/50).

Each sheet provides:

- macro category (color);
- type code + associated coloured symbol, instrumental to mapping;
- photograph;
- item code, which allows mapping and counting of items survived;
- state of conservation (original, modified, delocalized);
- notes;
- associated archival documentation;
- date of production (documented or hypothesized).

Figure 2 - Categories and typologies of the furniture catalogue: coloured symbols are associated to each typology, thereby allowing the mapping of each item on plans (© Bardati 2020)

Figure 3 - A sample of the furniture catalogue; the sample shows chair model 14 produced by the firm Parma (© Bardati 2020)

MACRO-CATEGORIES		FURNITURE CODES
SEAT	chr: chair	chr_a: @; chr_b: *; chr_c:
	ach: armchair	ach_a: £; ach_b: \$; ach_c: #; ash_d: >
	stl: stool	ach_e: \$; ach_f: ç; ach_g: %
TABLE DESK	bnc: bench	stl_a: \; stl_b: /; stl_c: }
	tbl: table	bnc_a: [; bnc_b: °
	tsk: teacher's desk	tbl_a: @; tbl_b: #; tbl_c: *; tbl_d: ^
LIGHTING FIXTURE	dsk+chr: desk+chair block	tbl_e: \$; tbl_f: +; tbl_g: >; tbl_h: %
	lfx: lighting fixture	tbl_i ç; tbl_l: ç; tbl_m: ¶; tbl_n: ✕
LEANING FURNITURE	ofb: office cabinet	tsk_a: \$; tsk_b: "; tsk_c: &
	bks: bookshelf	tsk_d: £; tsk_e: [
SUSPENDED FURNITURE	hdr: handrail	dsk+chr_a: x+o; dsk+chr_b: X+O
	ntb: notice board	lfx_a: @, lfx_b: *, lfx_c: #, lfx_d: &
FOOTBOARD	cth: coat hanger	ofb_a: ^; ofb_b: &; ofb_c: #; ofb_d: @
	blb: blackboard	bks_a: \$; bks_b:); bks_c: £
	ast: ashtray	hdr_a: ¶; hdr_b: \$
	ftb: footboard	ntb_a: #; ntb_c: \$
		cth_a: %; cth_b: ¶
		blb_a: £; blb_b: \$; blb_c: ç
		ast_a: @
		ftb_a: >; ftb_b: \$; ftb_c: ç

Chr_a @ (tot. 88 + undefined number in the basement floor)

	LOCATION and QUANTITY	STATE	MATERIALS	NOTES	SOURCES	DATING
	F_Fr_05_chr_a_01/12	01-12: original, delocalized	chromed steel	Parma Company, n. 14	ASS_drw_83	
	F_Sc_01_chr_a_01/50	01-50: original	tube; seat and	of the catalog, modified by	ASS_dcm_115	1936
	F_Sc_03_chr_a_01/14	01-14: original, delocalized	back in polished	Ponti.	ASS_dcm_155	
	F_Sc_05_chr_a_01/07	01-07: original	oak	Originally 196 objects.	ACS_pht_16	
	F_Sc_07_chr_a_01	original, delocalized		Perfect state of	ACS_pht_30	
	F_Sc_10_chr_a_01/03	01-03: original, delocalized		conservation, in use.	ACS_pht_31	
	F_Tr_04_chr_a_01	original, delocalized			BBL_pht_33	
	WE_Bs_01_chr_a_undefined	original, delocalized			GPA_pht_05	
				GPA_pht_06		

Further on, the survey and cataloguing activity has referred to materials and production processes. This phase of the research allowed to date non-documented furniture, also helping a thorough understanding of the materiality of such a peculiar heritage. The “seats” category is one of the richest and comprises 15 typologies, including chairs, armchairs, stools, and benches; yet the origin of only four types is documented from the 1930s, while the others seem to belong mainly to phases 1- 3 (1935-1949) or to the beginning of phase 4 (Figure 4).

Chairs are of three types: The Parma model (chr_a, documented in the 1930s) consists of at least 88 items; chr_b (16 items) and chr_c (2 items) probably date both to phases 1- 3 (1935-1949).

Armchairs are of seven types, most of which probably date back to the same phases 1- 3: ach_a (14 items); ach_b (6 items); ach_d (14 items) and ach_e (4 items). As none of these is mentioned in archival sources directly related to the School of Mathematics, it is possible that they were purchased for other Institutes of the university campus and entered the building later, probably in the post-war years or after 1968. Such hypothesis is based on the shape but also on the type of materials and on workmanship, in particular padding with belts, springs, and jute. Ponti was one of the designers who participated to the industrial program of Pirelli of 1933-1940 concerning the experimentation of foam-rubber produced by Pirelli for furniture padding, as evidenced in Franco Albini’s editorial “La Gommapiuma Pirelli alla VI Triennale”¹: the use of jute instead of foam rubber could prove a dating at the end of the 1940s and, at the same time, the exclusion of Ponti’s authorship.

chr_a @ (tot. 88)



chr_b * (tot. 16)



chr_c | (tot. 02)



ach_a £ (tot. 14)



ach_b § (tot. 06)



ach_c # (tot. 06)



chr_d > (tot. 14)



ach_e \$ (tot. 04)



ach_f ç (tot. 02)



ach_g % (tot. 03)



bnc_a [(tot. 02)



bnc_b ° (tot. 18)



stl_a \ (tot. 09)



stl_b / (tot. 18)



stl_c } (tot. 07)



Figure 4 - General overview of chairs, armchairs, benches, and stools included in the furniture catalogue: coloured symbols are associated to each typology, thereby allowing the mapping of each item on plans (© Bardati, drawing Turco 2020)

For the same reasons, armchairs ach_f (2 items) and ach_g (3 items), characterised by padding in expanded polyurethane, were purchased later, probably during phases 4- 5 (1950-1980), during which the furniture of the building required to be renewed and integrated. The armchairs of the Council Hall (ach_c, 6 items) are the only documented in the 1930s.

Concerning the stools, only one type (stl_a, 9 items) is documented in the 1930s, while the two others (stl_b, 18 items and stl_c, 7 items) are probably datable to the 1950s.

Benches bnc_a, corresponding to the two black marble benches of the atrium, are visible in the 1936 photographs and certainly belong to the original design, while bnc_b (18 items), appear in a picture taken by Carlo Severati between 1983 and 1992, and are therefore datable to phases 4- 5 (1950-1980), as the increase of number of students required the supply of many more seats, probably for the tiered lecture halls of the Tower.

As shown by the mappings and by the item codes in the following chapter, many objects have been delocalised and mixed without logic, nor a criterion regarding their dating, original function and location, stylistic homogeneity with other furnishing etc. Many of them are waiting to be repaired or have been stacked in the basement, where humidity represents a true danger, especially for the wooden frames and for the pad-dings.

Moreover, the catalogue lists only few among the original lighting fixtures (Figure 5). At present, all 102 spherical pendent lamps produced by the firm Bianchi and supplied in September 1936 (ASS_dcm_159) with three different diameters (40 cm, 35 cm, 30 cm and 25 cm) have gone lost, and have been replaced by rectangular ceiling lights. Photos of the 1930s show their presence them in the lobbies of the Tower of classrooms, in the drawing halls of the curved wings and in the annular corridor at the ground floor; but

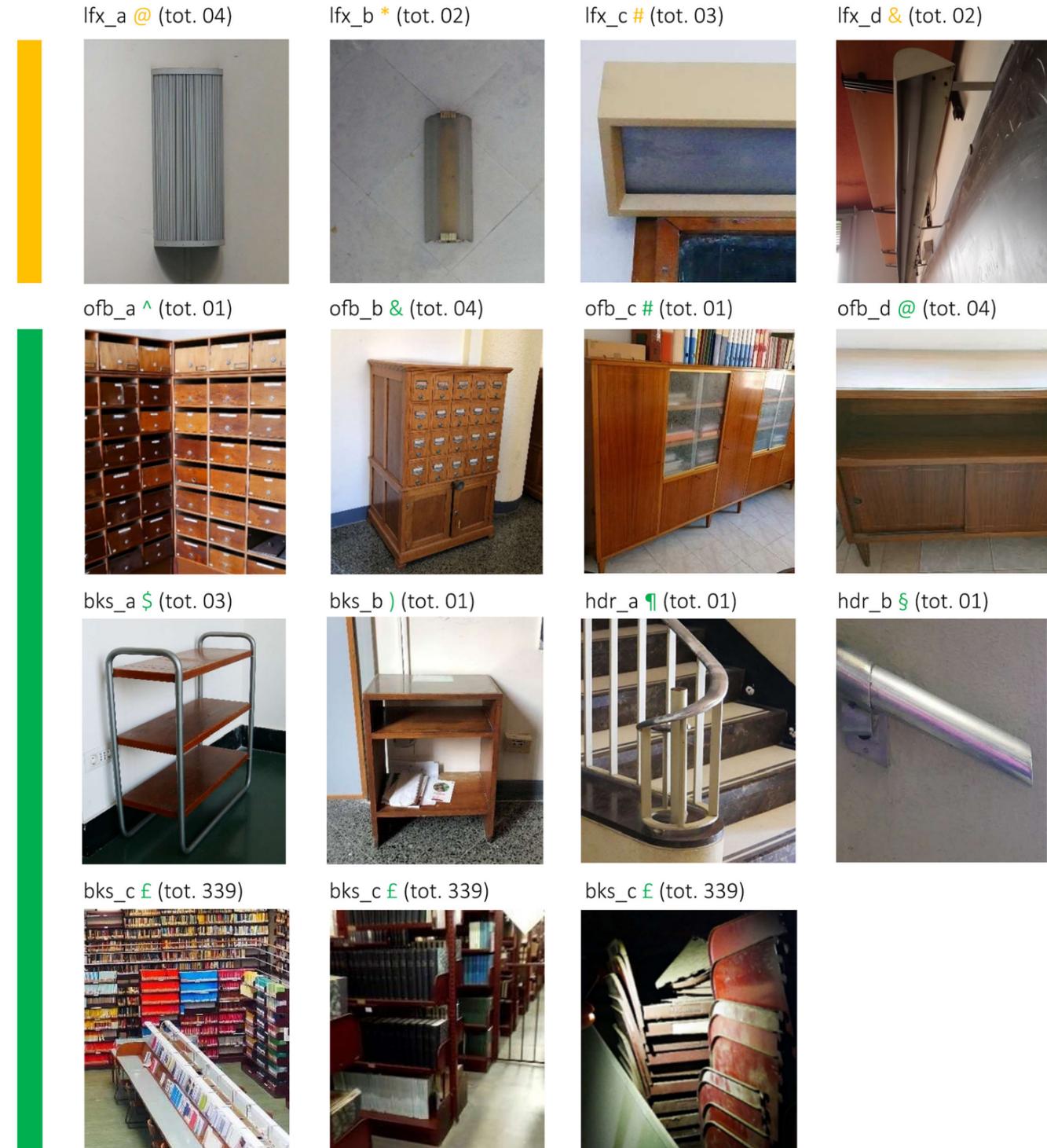


Figure 5 - General overview of the lighting fixture and furnishing included in the catalogue: coloured symbols are associated to each typology, thereby allowing the mapping of each item on plans (© Bardati, editing Turco 2020)

most probably they had been used in all rooms of the building, with few exceptions. This was in fact a basic model, adopted many in other Institutes of the university campus, which but Ponti seemed to very much appreciate for its shape. He adopted this same type in other projects of the 1930s, such as the reading room of the Liviano building at the university of Padua, the Italian Institute of Culture in Wien and the Vetrocoke building in Milan.

Also, the lamps that had been designed on purpose by the firm S.A.A.R to be fixed upon the big reading tables and on the shelves of the library have been all replaced, as well as the fixtures characterised by a parabolic shape, which projected grazing light on the blackboards' surfaces of the classrooms. This kind of lamps have been replaced by more modern and safe ones (lfx_c), but two items of this type still survive (lfx_d): one in a professor's office in the front building and one in the IndAM offices, where blackboards and lamps were all replaced in 1939.

Some of the most interesting original lighting fixtures were commissioned to the firm Bianchi and consisted of hemicylindrical wall lights composed by several small cylinders in opaline glass, enclosed by two semi-circular plates of painted metal (lfx_a). The supply included 6 items 90 centimetres tall, destined to the library and to the professors' lobby, 22 items 65 centimetres tall placed in the annular corridor, as witnessed in pictures and movies of 1936, and 7 items 45 cm high, whose destination is unknown. Four lamps at present in the library are copies of the originals (Figure 6). The wall lights of the main atrium (lfx_b), in place since 1935 as shown by the photos of the Thirties, are not listed among the supplies by Bianchi or by Palazzo della Luce (Figure 7). They could correspond to Ponti's specific request as a similar model is used in the atrium of the Montecatini building (1936) and placed near the elevator.



Figure 6 - Replicas of the wall light of the library supplied by the firm Bianchi (© Bardati 2020)

Figure 7 - Wall light of the main atrium in the Front building (© Bardati 2020)

The richest category includes tables and desks and includes 17 typologies (Figure 8), not considering the integrated model Milano by the firm Beltrami, which assembled desks and seats, and those for the tiered lecture halls of the Tower produced by the firm Lipore-si.

Beside four types of tables documented in phase 1 (1935-1938) and supplied by the firm Santi (tbl_d), by the firm Beltrami (tbl_e and tbl_g) and by the firm

Parma (tbl_n), plus one item that is attributable to the same phase (tbl_f), it is very difficult to date other tables currently in the building, especially those present in the library and in some professors' studios.

In most cases, materials (oak and sometimes Lino-leum) and shape of the legs could suggest a dating span between the 1940s and the 1950s, when new furnishing entered the building whether to compensate what was lost during the occupation or to pur-

chase new furniture needed by the increased number of students and professors. Obviously, it is possible that some of these tables were purchased for other Institutes and have been moved to the School of Mathematics after the occupation of the building by the allied troops at the end of World War II, or after 1968: yet details concerning shapes and manufacture also encourage other hypotheses. Thanks to the colour, the woodwork process, and the shape of the legs, six comfortable writing desks with drawers hanging

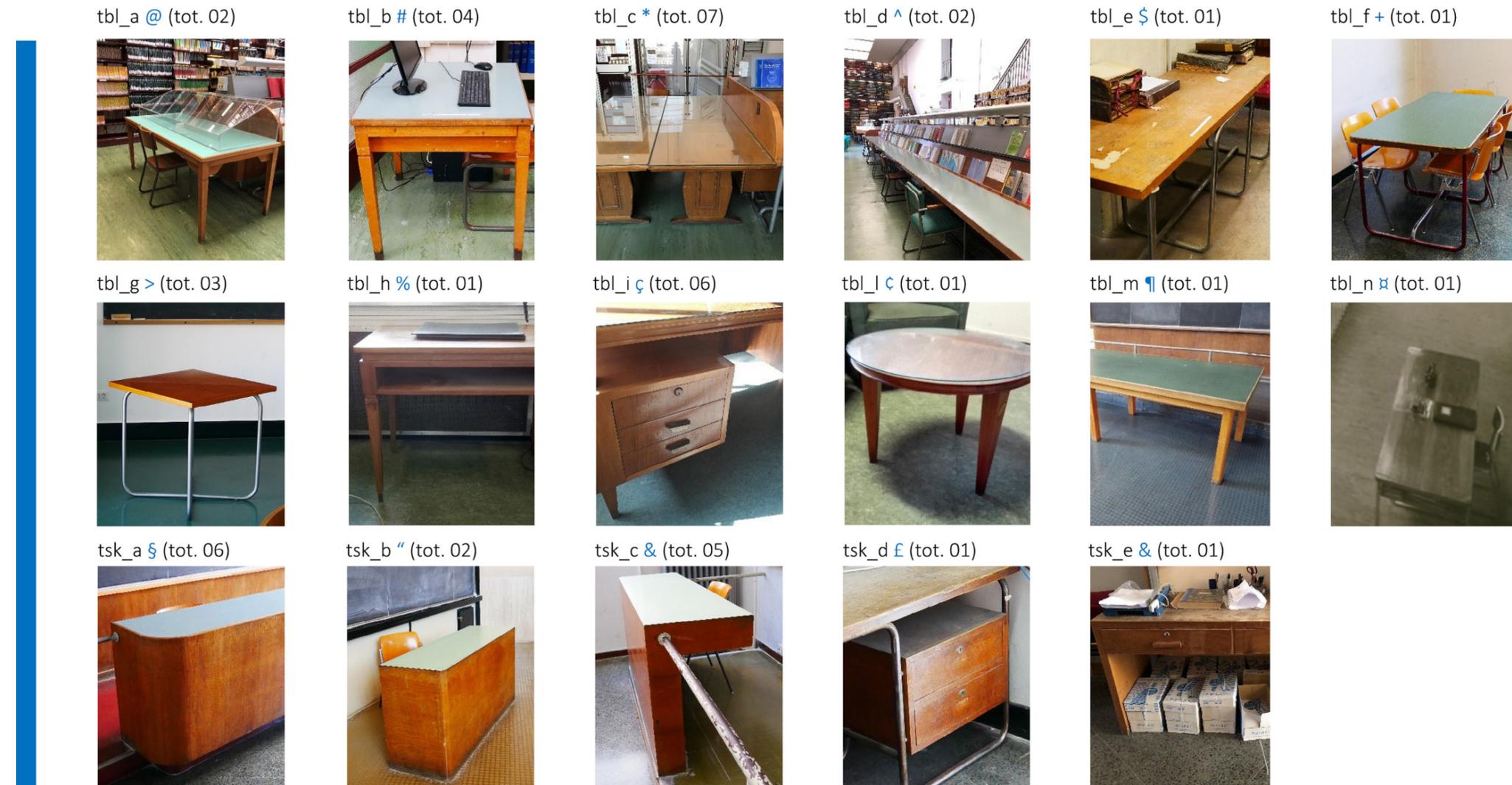


Figure 8 - General overview of tables and teachers' desks included in the furniture catalogue: coloured symbols are associated to each typology, thereby allowing the mapping of each item on plans (© Bardati, editing Turco 2021)

from the wooden structure (tsk_b), are to be linked to some large office cabinet (ofb_c) and to some smaller closets (ofb_d). Very probably they were part of the supply to the furnishing of a few new professors' studios in two main occasions, both dating to the beginning of the 1970s. These were the years when the building in via Vicenza was rented for the purposes of the Institute of Mathematics, and when the newly built additions to the sides of the front building had

been completed and were ready for furnishing. Nevertheless, the style of these items appears quite too decorated for the 1970s.

The lack of archival documentation not only impedes a correct dating but also hinders any hypothesis about Ponti's possible authorship in occasion of the new supplies of furnishing or, as for phase 1 (1935-1938), about Ponti's request of small but significant modifica-

tions in the models proposed by the firms. An example is the small round table, at present in a professor's studio (tbl_l), which is very similar to the "Anna" model designed by Ponti for the Borletti family in 1932. The thin silhouette of a table without drawers, both in a rectangular and in a square version (tbl_a and tbl_b), also with a drawer (tbl_h), recalls Ponti's research. There is in fact a red thread connecting these of the 1930s, and his later works with De Poli in the 1940s,

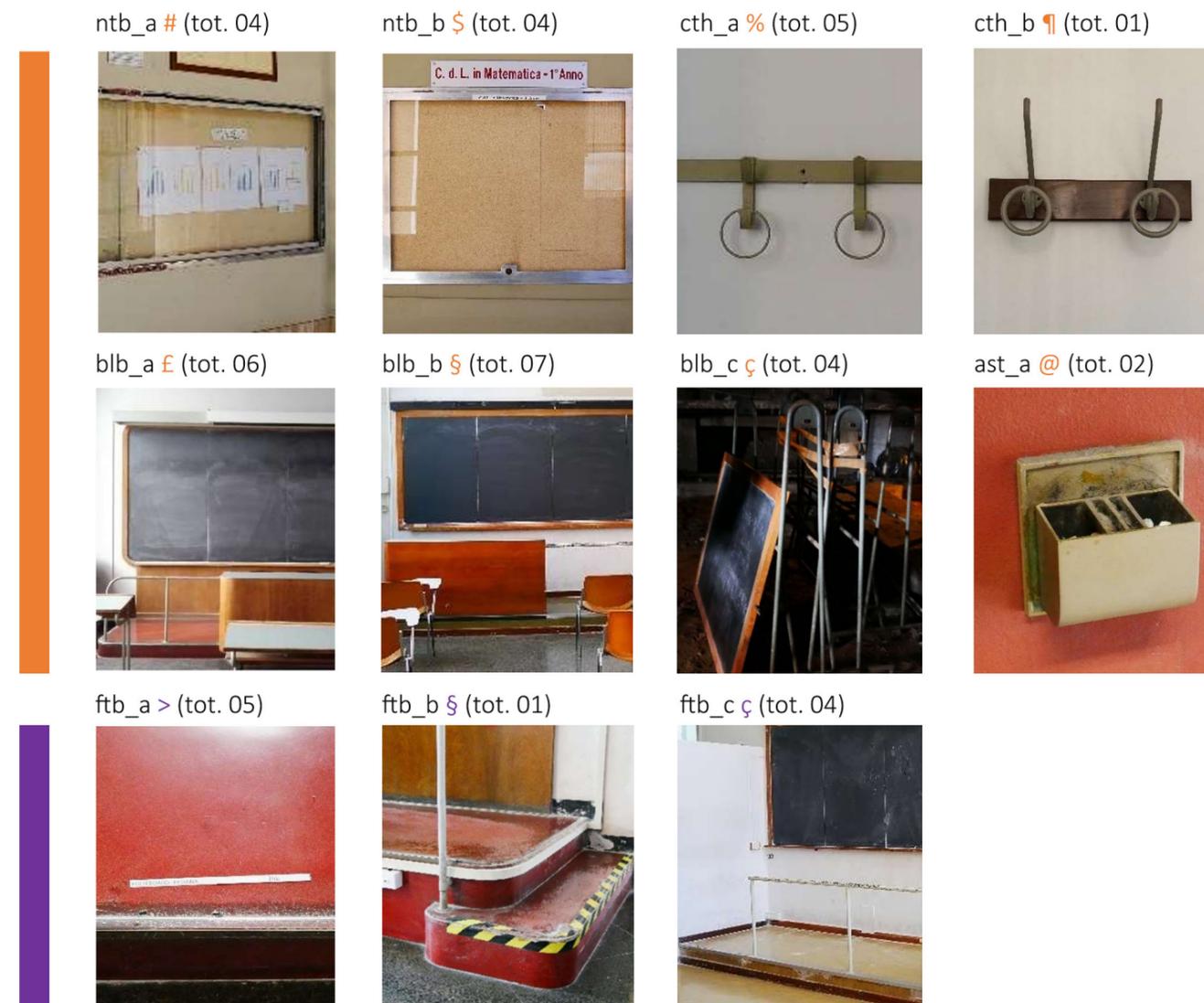


Figure 9 - General overview of suspended furnishings and of footboards included in the furniture catalogue: coloured symbols are associated to each typology, thereby allowing the mapping of each item on plans (© Bardati, editing Turco 2021)

up to the console designed for the hotel rooms of the Hotel Parco dei Principi (1960), although similarities are not strong enough to propose his authorship, even if limited to few modifications the firms' basic models.

The teachers' desks open another interesting chapter. As said, seven teachers' desks in spirit-polished oak (tsk_a), conceived as a one-block assembling the wooden wall veneering, the blackboard, the footboard, and the steel railing (Figure 9), were ordered to the firm Santi in October 1935. All the elements composing this block, described as *cattedra* in the documents, were ordered to Santi, except the blackboards. They all followed the same design, with the writing desk positioned sideways and the railing continuing to the end of the footboard. But there were differences concerning the dimensions- according to the size of the classrooms' dimensions – and according to the presence of a door cut into the blackboard, which lead to the professors' dressing room, as a filter between the lobby and the tiered lecture halls. This specific solution allowed the professors to enter the classrooms without using the same paths and doorways used by the students, somehow underlining a distinction between the Maths professors and the students in Engineering. In fact, no similar solution is present in the other classrooms in the front building where Mathematicians taught to students in Math.

Such a composition of elements in a unique functional block may be considered as one of the very first occasions for Ponti to design a *parete organizzata* (organised wall), a *leitmotif* of his, already present *in nuce* in a drawing of the 1920s¹. Six of the seven original blocks survived: three are still in the tiered lecture halls at the ground and at the first floors of the Tower, while three are still in the classrooms of the Front building. Unfortunately, one large block disappeared in 1960, as the tiered lecture hall at the third floor of the tower was split into two smaller rooms. The new teachers' desks for these new classrooms are copies of the original ones, but without footboard and integrated blackboard and with relevant differences in terms

of woodwork and materials. In the desks supplied by the firm Santi, the oakwood grain is disposed vertically, and a single sheet of wood draws a large quarter of a circle in correspondence of the external corners (Figure 10). The table is also a single piece with the drawers and its top consists of a thin wood frame that borders the surface, filled in with a sheet of Linoleum. The new desks copy the general shape of the models, but with very different details. They are made by several pieces of oakwood veneering with horizontal grain unless in the corners, where a smaller element with vertical grain rounds up the corners; the top- here in laminated plastic- has no frame.

The order to the firm Santi included four *cattedre* also for the drawing classrooms, but at the end of the description it is clearly specified that the supply does not include writing desks, which in other cases were accompanied by a detailed description of the desk and its joints to the other elements. Therefore, with the term *cattedra* the firm Santi indicated the one-block complete of footboard, wooden wall veneering, railing, and writing desk. Only in the case of the drawing classrooms, the desks were not supplied by Santi- probably for economic reasons- but by Beltrami (tsk_d), only one of which survives although stacked in a closet. At present, there are four footboards with railings in the east wing, which are bigger than those ordered to Santi and lacking the Linoleum finishing as in the original ones. However, it is possible that the footboards of the 1930s have been fixed to fill the wider walls of the new classrooms. All the teachers' desks that are currently in use in this part of the building are copies of the original model and are very similar to those produced in 1960.

The direct observation of the items selected for the furniture catalogue evidences that the main materials that identify the furnishings are chromed steel tubes and polished oak. This is true for the items supplied by all firms: Parma that produced chairs for the library, tables for the reading rooms; Liporesi that produced the curved desk and seats for the Tower of classrooms;

Santi that produced the big reading tables for the library, the teacher desk with railing for all classrooms destined to High or 'Pure' Mathematics; and Beltrami that produced the armchairs for the Council Hall, the stools and teacher desks for the drawing classrooms, the tables for the waiting room of the Council Hall, the *Milano* desks for the classrooms of the Front building, and the whole furniture for the professors' studios. Undoubtedly, these materials encountered the taste and the style of the times, and Ponti uses them in many projects of the 1930s, concerning office buildings but also residences, as in the case of the table for the Marmont House in Milan (1934-1936).



Figure 10 - Teacher's desk in spirit-polished oak and Linoleum supplied by the firm Santi. Detail of the round shaped corner with vertical wood grains (© Bardati 2020)

Experimental or autarchic materials, as Anticorodal and Linoleum, also characterize many objects belonging to the phase 1 (1935-1938). As said, Linoleum was used to veneer the surfaces of footboards and desks, while Anticorodal was used for many different objects supplied by the firm Gaggiottini. Besides the inscription "Scuola di Matematica" on the main façade, other smaller signs mark the original rooms. A hierarchy among the different rooms of the School is underlined by the use of different materials along the staircases: these are richer in the Front building where the steps and paving in marble and the handrail in Anticorodal open the way to the first floor and to the library (Figure 11).

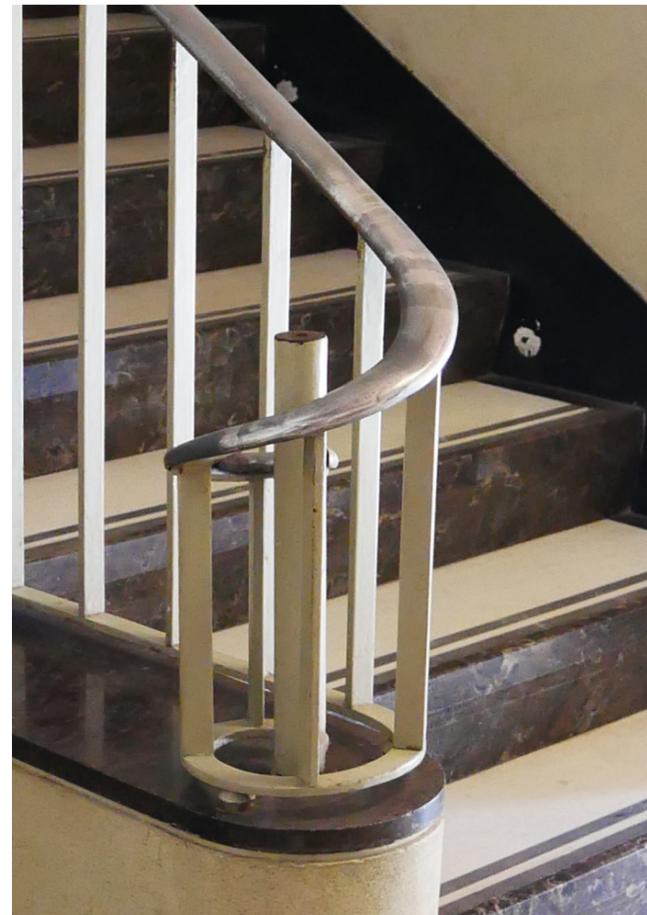


Figure 11 - Handrail in iron and Anticorodal by the firm Gaggiottini; the helix dynamically guides the upward movement from the first to the second floor (© Bardati 2020)

Figure 12 - Phases and typologies of the door catalogue: coloured symbols are associated to each typology, thereby allowing the mapping of each item on plans (© Bardati 2020)

DOORS

Concerning the doors, 18 typologies have been identified, often on the base of archival documentation (Figure 12). The doors catalogue adopts the same methodology as for the furniture and is organized in chronological phases and typologies. Only four main phases have been identified for the doors:

- Phase 1- 1935-1937 (the original project);
- Phase 2- 1939-1940 (foundation of the IndAM and alteration of the first floor of the west wing);
- Phase 3- 1954 (alteration of the professors' lobby to obtain two offices);
- Phase 4- 1969-1980 (additions to the curved wings and fragmentation of the drawing classrooms in the east and west wings).

The doors supplied in occurrence of phase 1 have been the model for the following phases, with few exceptions and changes, mainly concerning the manufacturing process and the finishing materials, sometimes also the dimensions (Figure 13). Therefore, the main objective of the research was to identify the original doors, which was not an easy task as these have been thoroughly modified (surface, colour, handles, locks, hinges).

The huge metal-frame doors at the ground floor supplied by the firm Coen are clearly recognizable along the corridor (drs_c), despite the several alterations to the handles, glazing and panic bars. The firm Gaggiottini supplied the Anticorodal frame of the entrance door (drs_a, with modified opening system) and the veneering of other doors in the main atrium of the Front building, which are characterised by rounded arches (drs_b). Other doors, as those of the library (drs_h) and of the elevator (drs_e and drs_f), are also original, and the same goes for the doors that open in the blackboards of the tiered lecture halls of the Tower. Wooden doors that are mostly used in the building are those supplied by the firm Cantieri Milanesi: designed by Ponti, who required a specific wood processing (ASS_dcm_74), they are scattered everywhere in the building and are most often kept in the original condition or have been only slightly modified (drs_A; drs_B1; drs_B2; drs_C; drs_D; drs_E; drs_f; drs_G and drs_H).

The doors' catalogue contains details of all selected items, organized by phases and types, such to provide all the collected information. The catalogue registers the total number of items of each typology, their dimensions, their location, their state of conservation. Also in this case, each item is associated to a code that

PHASES	DOORS CODES
<div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: #e91e63; margin-right: 5px;"></div> <div>Phase 1 (1935-1937)</div> </div>	drs_a: *; drs_b: ^; drs_c: °; drs_d: >; drs_e: <; drs_f: "; drs_g: drs_h: \; drs_i: +; drs_l: /; drs_A.: A; drs_B1.: B1; drs_B2.: B2 drs_C.: C; drs_D.: D; drs_E.: E; drs_F.: F; drs_G.: G; drs_H.: H
<div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: #00ff00; margin-right: 5px;"></div> <div>Phase 2 (1939-1940)</div> </div>	drs_B2.: B2; drs_C.: C; drs_D.: D; drs_E.: E; drs_F.: F drs_G.: G; drs_H.: H
<div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: #0000ff; margin-right: 5px;"></div> <div>Phase 4 (1954)</div> </div>	drs_C.: C
<div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: #00ffff; margin-right: 5px;"></div> <div>Phase 5 (1969-1980)</div> </div>	drs_m: °; drs_n: \$; drs_A.: A; drs_B1.: B1; drs_B2.: B2; drs_C.: C drs_D.: D; drs_E.: E; drs_F.: F; drs_G.: G; drs_H.: H

drs_a * (tot. 02)



drs_b ^ (tot. 02)



drs_c ° (tot. 08)



drs_d > (tot. 02)



drs_e < (tot. 02)



drs_f " (tot. 03)



drs_g | (tot. 01)



drs_h \ (tot. 01)



drs_i + (tot. 06)



drs_l / (tot. 03)



drs_A. A (tot. 07)



drs_B1. B1 (tot. 08)



drs_B2. B2 (tot. 10)



drs_C. C (tot. 10)



drs_D. D (tot. 29)



drs_E. E (tot. 17)



drs_F. F (tot. 09)



drs_G. G (tot. 03)



drs_H. H (tot. 07)



Figure 13 - General overview of the catalogue of doors produced during phase 1 (1935-1938): coloured symbols are associated to each typology, thereby allowing the mapping of each item on plans (© Bardati, editing Turco 2021)

allows to identify type and location: the item code F_Fr_19 / 01_drs_E_01 identifies items located in the Front building (F) at the first floor (fr), connecting rooms 19 and 01 (19/01), the door type “E”.

Each card, as in the case of the furniture catalogue, provides information regarding:

- phase (color);
- type (code) + associated coloured symbol, which allows the object to be mapped;
- code, which allows its location within the building;
- state (original, modified, delocalized);
- archival documentation, drawings or picture associated with to object;
- dating;
- image;
- notes.

Ponti invested much of his aesthetic principles in the design of the doors, as in the case of the arched entrance doors and, among all, in the doors produced by the firm Cantieri Milanesi. Again, he uses this same type of door in many other projects of the 1930s, as in the case of the house model for the *VI Triennale* in Milan, in the Marmont House in Milan, in the Hotel “Paradiso del Cevedale” near Merano, in the Italian Institute of Culture in Wien and in the Vetrococo Building in Milan, but also at the beginning of the 1940s, as in the case of the the Palazzina Salvatelli in Rome (Figure 14) and the Columbus Clinic in Milan. Yet, the idea of alternating painted wood and glass is anticipated in a sketch of the 1920s², showing a solution very close to type “E” later used in the School of Mathematics. Doors are architectural elements used by Ponti to underline hierarchies among different parts of the building and among spaces, by linking a specific design solution to rooms with specific functions. Apart from the doors made special in terms of dimensions or specific position- such as the elegant main entrance doors, the huge doors opening onto the professors’ offices and onto the library (drs_g), and the series of metal and glass doors that rhythmmed the annular



Figure 14 - A door in the Palazzina Salvatelli in Rome (1939-1940), replicating type “E” of the same model produced by the firm Cantieri Milanesi (© Salvo 2019)

corridor of the wings' ground floor, the more common doors produced by the firm Cantieri Milanesi allowed Ponti to distinguish the rooms and their functions. The contract signed by this firm in September 1935, itemizes 9 models of doors: 4 double winged and 5 simple ones. These may be divided into two main groups, with or without glass, each of which including several types, differing in dimensions and surface finishing. Generally, the structure and the frame are in fir, painted with white *cementite*, while the lower and middle bands are in spirit-polished wood (Figure 15).

Types A and B1 are not painted but finished with a thin Linoleum sheet that assured a more compact visual effect and a good maintenance over time. Types B2 and D, supplied in several different width, are the most used. At present they are painted in grey, red or in pale green, also used to paint several walls of the building, but it is not certain if these were the original colours, as the pictures of the 1930s are in black and white. Types G and H are very similar to B2 and D, even if their lower and middle bands are not polished but painted and were used for less important rooms (as closets and the rear of the blackboard doors, or doors at the basement level). Most of the models C and E (respectively double and one-winged doors) carry glass panelling, separated by listels in polished wood; in Type F, glass is only present in the upper part of the door. Such a variety of solutions allowed Ponti to characterise rooms and functions also by using similar, yet different, doors.

Model B1 is used for the doors which give access to the tiered lecture halls of the Tower, and therefore conceived for large numbers of students (434 seats), while model C is used for exterior ones, that give access to the lobbies of the Tower, and to the offices adjacent to the drawing classrooms at the first floor of the wings. Type E identified all professors' studios in the Front building and two rooms with same dimensions, located at the third floor and accessible from the library. Type F was used for the toilets, with a very different veneering, for the door of the lift at

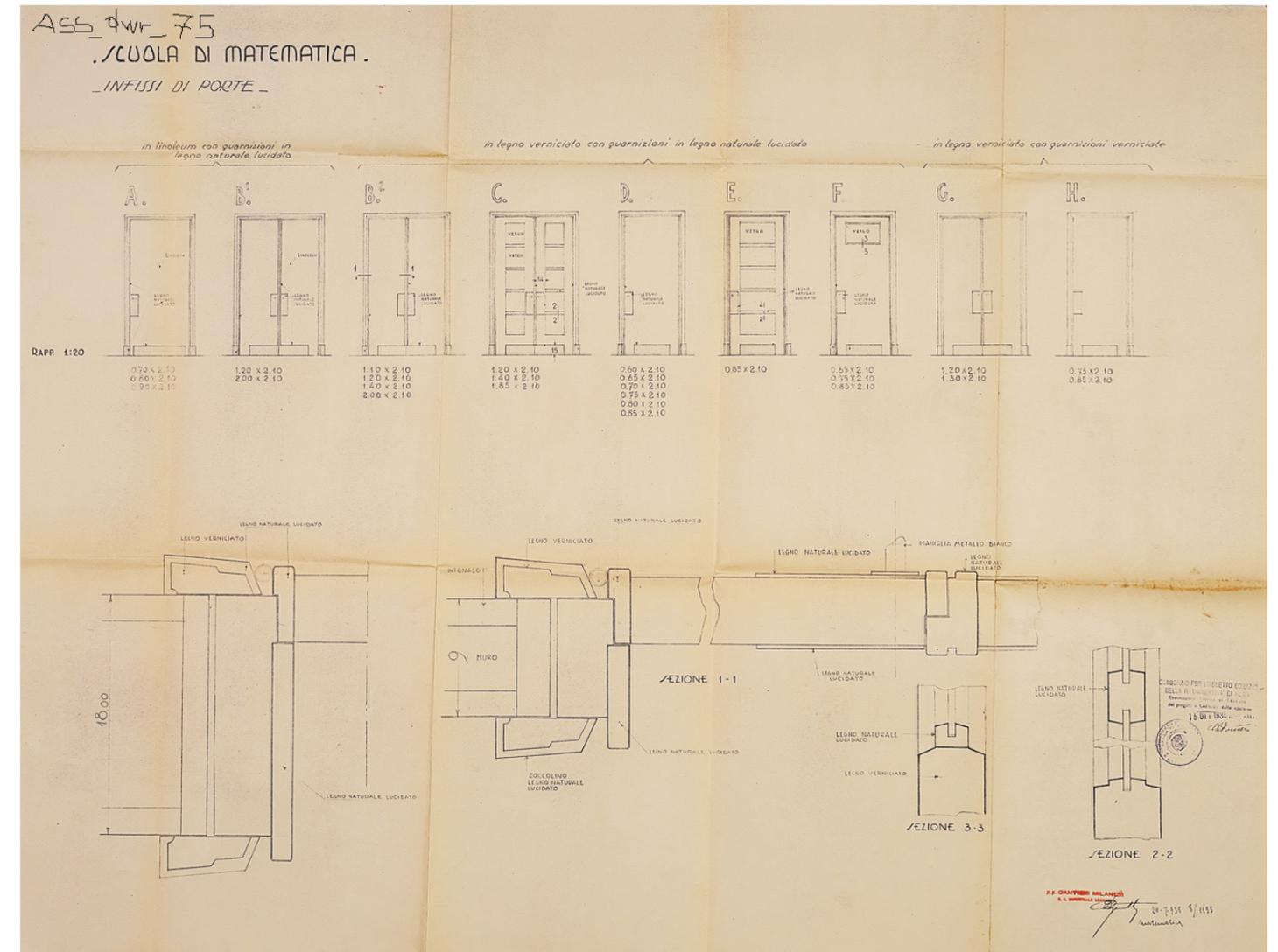


Figure 15 - The doors supplied by the firm Cantieri Milanesi; the drawing specifies models, materials and finishing processes (ASS_drw_75)

the ground floor of the Front building. Here, the door is veneered with a sheet of black rubber with thin vertical flutings; the door opposite the lift has the same finishing (Figure 16). Such an effect recalls Ponti's research around furniture, as in the case of the small closet for the Marmont House³.

Almost all doors of the following phases use these as models. The contract describing the works necessary to adapt the first floor of the west wing to the purposes of IndAM, clearly specifies that all doors must be identical to those that were already in the building: the models chosen were B2, C, D and E. In this case, as the chronological gap is very small, the difference with the original ones of 1935-1938 is almost invisible. One cannot say the same for the two doors produced for the offices obtained from the professors' atrium in the front building in 1954. The model is still type C produced by Cantieri Milanesi, but proportions, materials and manufacture are of inferior quality. Finally, the doors produced in occurrence of further main transformation works copy the models B1, C, D and E, but replace Linoleum with laminated plastic and the handwork processes with the industrial ones. It must also be said that all the doors which open onto classrooms or public rooms have been equipped with safety handles, thereby introducing elements that compromise the original aesthetic idea.



Figure 16 - The door of the elevator at the ground level of the front building (© Bardati 2020)



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