# The Drawing of an Intuition. Interrupted Paths in the Design Practice of Vico Magistretti

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## Abstract

The essay concerns the concept design of Milanese master Vico Magistretti, focusing on a limited series of sketches belonging to unrealized projects.

Within furniture design, the analysis and study of some seat sketches, for Cassina and Alias, interrupted in the early stages of design evolution, testify how drawing is an expressive necessity of prefiguring reality and becomes a means of communicating the essence of the object even before its artifactual translation.

The 3D translation hypotheses of the 'armchair roller shutter' sketches, geometrically traceable to ribbed surfaces systems supported by tubular metal elements, aim to reconstruct a possible imaginary, tracing the continuous variations that follow on from the initial prototype and creating a logical link with the birth of other iconic objects of the designer.

The use of digital is intended to return a plausible image of the artifact from fragments and notes that, in a guise of immediacy and personal obsession, synthesize not only ambitions and intuitions, but also technical problems and shortcomings in existing products. The drawings thus become valuable tools of inquiry through which a creative project takes shape, which our technologies have a duty to redesign, reconstruct and communicate.

Keywords: Magistretti, unrealized projects, concept design, sketching, digital reconstructions.

"Design, through the iteration of ideas and models, first of all designs 'representations', that is, things that show themselves to our eyes, but end up inhabiting our minds" [Falcinelli 2017, p. 11]

## Introduction

The figure of Vico Magistretti emerged in the postwar period by virtue of the need for flexibility and lightness of furnishings that were able to adapt to changing situations and social habits [De Fusco 2002; D'Amato 2005; Dardi Pasca 2019]. Rejecting the spread of gratuitous and repetitive formalisms, within furniture design, attributable mainly to the domestic sphere [1],

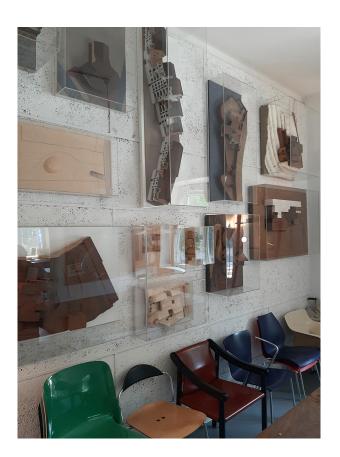
Magistretti demonstrates his intellectual skill in renewing the anonymous tradition [2], in making craft skills his own and in experimenting with innovative materials in a refined process of synthesis and geometric simplification that have decreed his extraordinary success with the public and critics [Ghigiotti 1992, pp. 58-67; Irace, Pasca 1999; Mondadori 2005; Koivu, Banchi 2020].

The presence of kinematics and movement constraints that blend into a simple and clean formal aesthetic are winning results and adaptable to previously ignored usage needs.

Underlying the positive outcomes of the Milanese master we find the realizing will of enlightened entrepreneurship that created the optimal conditions for still active mass



Fig. 1. Vico Magistretti Studio Museum Foundation, wall display of plastic models (photo by the author, May 18, 2021).



production, Consistently Magistretti, a two-time Compasso d'Oro award-winner nationally and internationally, maintained that: "making design means penetrating into an industrial, productive and technological reality in a real way" [Tassinari 1973, p. 47] and it was precisely the close collaboration between the Milanese designer and companies in the Lombardy region and beyond that led to an almost total concretization of his design proposals [3].

Having had access to the Magistretti Foundation and discussing with the head of the historical archive, Margherita Pellino [4], it emerged how there remained a very limited series of sketches belonging to unrealized projects (figs. 1, 2).

This verification is very significant because it suggests an extremely positive market response to Magistretti's ideas and vice versa raises a reflection on the reasons for an interrupted path for those sheets that did not have a happy realization. It surely becomes stimulating to understand the creative process that guided the master in this circumstance as well, and to attempt to construct a productive logic by highlighting strengths and weaknesses encapsulated in those abandoned sketches. By viewing these paper documents, digitized as traces of a thought to be preserved over time, but not present in the online Archive [5], it is possible to reflect on and explore the concept design that leaves multiple avenues open in the continuation of the project evolution, allowing reflection on the one hand on the master's design process, and on the other on an attempt to actualize design products in light of the new digital technologies that CAD systems make available today.

# The sketch of an insight

In Magistretti's design practice, his objects, functional furnishings conceived as structural complements of the inhabited space and defined as "furniture characters" for their formal composure and ironic nonchalance [Irace, Pasca 1999], arise from a deep reflection on the conceptual value of sketching in an attempt to attribute to drawing: "since its very first formulation the task of illustrating not so much the image but the meaning, the soul [...] suggesting the technical means and materials definitions necessary for an economical and correct realization of mass production" [Pasca 1991, p. 119].

At the beginning of the composition process, all the sheets examined [6], some thirty (fig. 3), pertaining to the group 'armchair roller shutter 1985' -a series of drawings on various kinds paper- present a recurring concept, borrowed in size, color and three-dimensional visualizations, sometimes accompanied by measures or brief informative writings.

In detail, the master sees in the common and well-known element 'roller shutter' a potential tool that can be reworked out of its well-established functional context. traceable to the system of window shading.

The roller shutter specifications -modularity, rollup, adaptability— are adopted to inspire an outdoor collection of seating and related accessories, ranging from the bench, to the sofa, to the single or series chair, to the coffee table, to the sun lounger. Ideas, proofs, details follow one another in the paper sheets to hold together the supporting and carrying parts and to define in the drawing a form.

The sketch thus becomes the translation of an intuition, which often springs from every day and traditional reality, as for the celebrated Carimate chair, a happy interpretation of the typical popular seat in wood and straw material with the red aniline paint used for toys. The intuition is not lost in the process of forms metamorphosis, it is strongly asserted and enhanced by the colors that trace the initial black lines, correcting or marking a specific sheet area. Like his iconic objects, it is always the concept that guides the hand to quickly trace, on any support, the geometry that substance the form and thus the first images of his thought. These are drawings of meditation, of analysis, of communication where annotation, sometimes compulsive, becomes an essential graphic mediation in a project that meditates about the body and its diversified human postures.

Understanding and interpreting ambitions, mistakes and attempts encapsulated in the paper sheets, sensing the contribution that could result in the world of production, also testifies to the importance attached to geometry that punctually accompanies the master in prefiguring reality.

In the continuous marks, from which arise decisive colored fields translated into seamless surfaces, we understand how geometry is: "a little like consecutio temporum in Latin: it is something that makes one stand in reality, that gives meaning to reality, that provides a tool for measuring reality" [Feraboli 2011, p. 110].

Fig. 2. Foundation Paper Archive (photo by the author, May 18, 2021).



Fig. 3. Sketches 'Roller Shutter Chair' (1985). Foundation Vico Magistretti ©.





Sketches are governed by geometric proportions as an indispensable tool to control aesthetic/functional form and to establish a relationship between us and the matter around us.

Precisely the individual rods modular nature, the overall surface flexibility, the sign that struggles by alternating straight or curved, continuous or broken lines become the trace of a narrative that, beyond the lack of material experimentation within Cassina or Alias, may have an outcome in the contemporary virtual world.

# Interrupted paths

Four sheets, dated June 10, 1985, present both orthogonal, axonometric and perspective views and an essential, but comprehensive, dimensioning system augmented by block letters and completion specifications. Alternating between the use of pencil, colored crayons, black stroke pen, and red or blue markers, the marks chase freely without the aid of tracing tools (fig. 4).

In addition to this composed and clearly legible sequence of drawings structured in orthogonal projections that allow for a redrawing and plausible reconstruction of the artifacts, there are numerous other drawings with predominantly red, blue, and black strokes in which the sketches overlap swirlingly, omitting measurements and mixing several elements together: chair and small table, lounger and seat, bench and armchair. All belong to an integrated system that in one sheet the designer notes as Vania Collection or Cherry Tree Garden [7] and where he marks the various pieces in alphabetical order: lounger A, table B, bench C, low table or seat D, bench E (fig. 5). These elements return obsessively in the various sketches, graphically demonstrating the aesthetic and functional reasoning for the curves and surfaces, often resorting to a single marker mark to highlight the size of the metal tubing.

Careful observation of the graphic flow of lines that intensify, overlap, and erase, alternating between the different methods of representation, allows one to follow and understand the initial formulations, the modifications, the rethinking, the exploration of forms and materials [Tassinari 1973, p. 43] that underlie the master's thinking. In the narrative sequence recognizable from one sheet to the next, it is evident how the concept remains constant,

that is, the system of rods that fit the metal structure recalling the image of the shutter. The master, however, implements a process of simplifying and emptying the volumes, abandoning the compact load-bearing portions in favor of slender tubular weaves that lend lightness to the artifacts (fig. 3). The 'shutter' system runs on tracks with reduced sections that leave an elegant graphic mark in the space, without weighing down the view.

In the formal solutions of the table, conceived in the most essential version as a support base (B), replicated in a reduced size in the small bench (E) or in the multiple table version with the seat function (D), the aesthetic form is well defined and the reasoning is limited to the possibility of inserting on the furniture D four small wheels, pinned in the sketch with the English word castor wheel to ensure movement.

Certainly the most recurring element is the deck chair, precisely because of the problems related to its transformability that the designer wants to ensure at the seating time: the shape of the supporting metal frame, the free movement of the backrest and the footrest, both subject to a rotary motion, necessitate numerous reasonings about the connecting hinge and the possibility of inserting a wooden food rest, which would maintain horizontality, in a front or rear position, for both sides.

Fig. 4. Sketches 'Roller Shutter Chair' (1985), four drawings dated June 10, 1985; Foundation Vico Magistretti ©

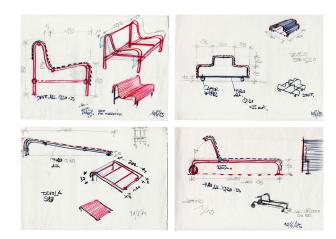
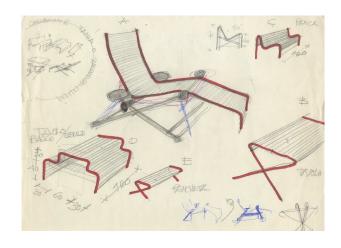


Fig. 5. Sketch collection 'Roller Shutter Chair' (1985). Foundation Vico Magistretti ©.

Fig. 6. Four variations of the deck chair: hypothesis I (undated), hypothesis 2 (January 16, 1982), hypothesis 3 (undated), hypothesis 4 (January 18, 1 983). Foundation Vico Magistretti ©.



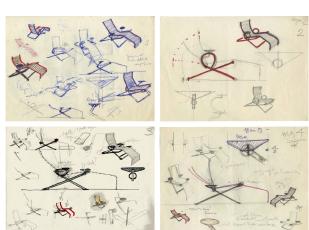
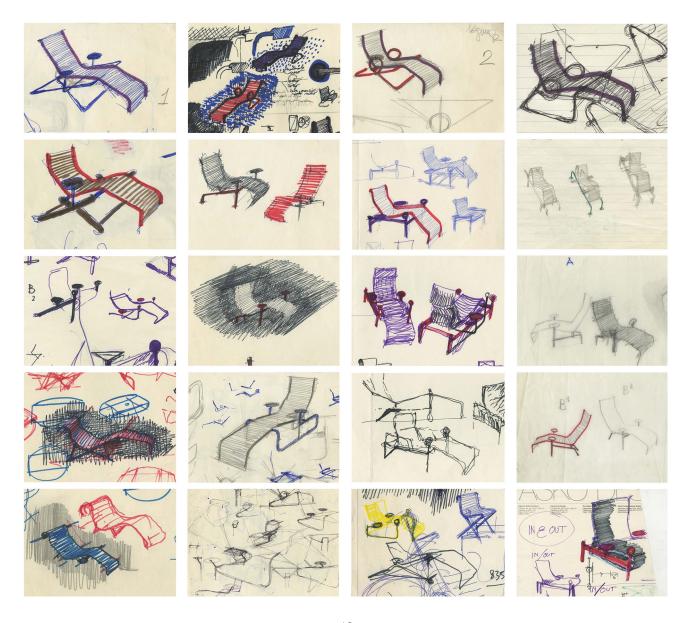


Fig. 7. Variants of the reclining seat, details. Foundation Vico Magistretti ©.



In the general sketch of the collection, the furniture is initialed A and there are 4 solutions: hypothesis sheet I (undated), hypothesis sheet 2 (January 16, 1982, perhaps concern an earlier solution), hypothesis sheet 3 (undated), hypothesis sheet 4 (January 18, 1983). An additional sheet is initialed April 15, 1983. Further subdivisions into A, B, B I, and C show definite variations and the beverage holder in the front position, hinted at in hypothesis 3 and 4 (figs. 6, 7). Digital analysis verified that the two

elevations, contained in the third and fourth hypotheses, are superimposable, making it plausible that key elements were traced from sheet 3 to sheet 4.

Certainly, the idea that the conversation chair coexists with the resting chaise longue, in one piece of furniture, echoes the concept of the *Maralunga* transforming sofa in the 1970s. The dual function results in an abundance of sketches that go down in detail to address specific questions about the integration of different materials

Fig. 8. Sketch of the reclining seat, technical detail. Foundation Vico Magistretti ©.

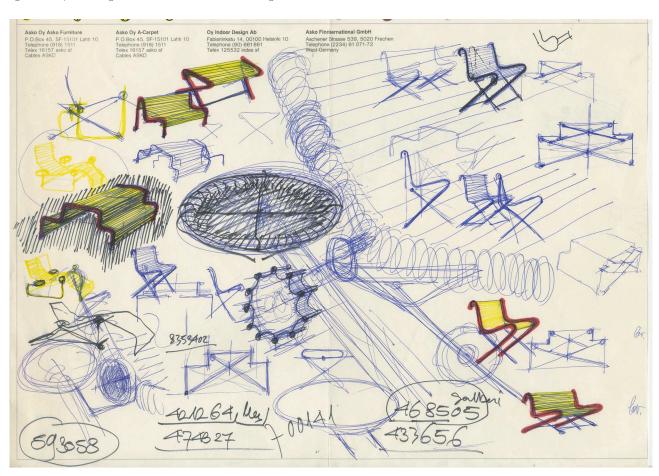
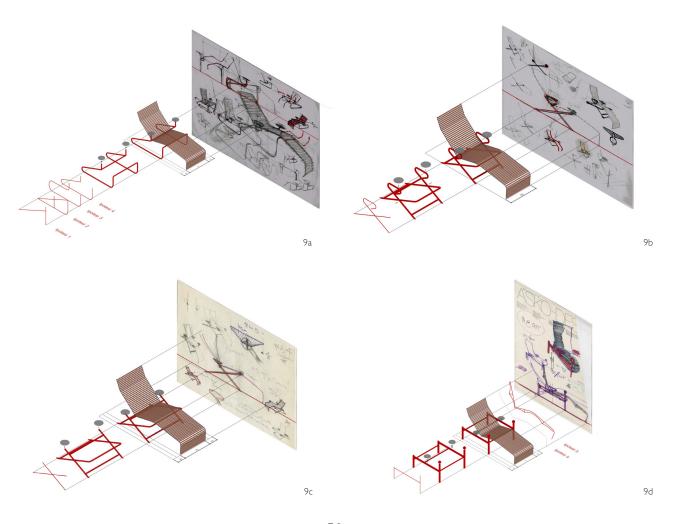


Fig. 9. 3D reconstruction of the lounger seat, hypothesis of the supporting tubulars (digital processing by the author).



elements. In the unrealized sketches, although there are no complex construction details—a lack partly justified by the adoption of industrial components related to metal carpentry— it emerges how Magistretti reasons about the problem of the various element intersection [8], the presence of hinges or joints for the versatility of his furniture. In the sheets dated 1985, on the dimensioned sketch of the crib, there appears the inscription "Giunto Bergamo" necessary for the connection of two parallel elements to be join together to ensure the movement of the backrest.

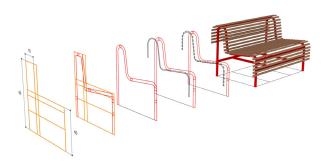
Precisely the use of assisted drawing, even before a physical prototype, allows the construction of such furniture by hypothesizing a possible joint between tubular elements so as to envisage and justify the presence of a swivel joint to connect the two parts while keeping them autonomous [9].

The issue also recurs in the reclining seat where the master hypothesizes a more visible wheel mechanism that simultaneously manages the joining of the rods and the voluntary control of the reclining backrest (fig. 8).

# The digital interpretation of sketching

From the methodological point of view, the in-depth study of the material provided by the archive included, in addition to the study of the master's compositional process and the identification of consimilar cases, the 2D digital redrawing first of all of the sketches presenting measurements and

Fig. 10.3D reconstruction of a furniture piece belonging to the drawings June 10, 1985 (digital processing by the author).



elements displayed in true form, and then moving on to a reflection on each representation useful for understanding the evolutionary stages, highlighting inconsistencies or technical errors understandable in the sketching phase. Recognition of functional nodes, not always resolved effectively or blatantly incongruent with reality, but drawn in multiple versions suggesting diverse solutions to be explored further, seem to anticipate the 'algorithmic' and 'parametric' development that CAD systems make available today. These are shifting assumptions that software can quickly simulate and verify by providing the designer with additional degrees of freedom and vision (fig. 9).

The 3D translation of the sheets, which generally date to the 1980s, are geometrically traceable to systems of ridged surfaces on metal supports modeled with closed extrusion profiles that run on a directrix. The continuous design variations that evolve from the initial design are made possible by focusing on the geometry as a tool for simplification and resolution of complex forms and creating a logical link to the emergence of other iconic objects of the designer from the same period, including Sindbad (1981), an integrated sofa/armchair/pouf/table system, Veranda (1983) sofa/armchair/table [10], Ozu (1986) armchair.

Comparing these artifacts, we understand how the master's constant search for simplicity, comfort, flexibility is closely connected to the use of common materials according to a logic of practicality. The idea of 'throwing a blanket over a structure' (Sindbad) [Ferretti 1982, pp. 89-93] or sitting/laying down on a sail (Veranda) share an imagery that we can intuit even in the sketches belonging to unrealized projects, reflecting on the fallout of those graphic signs in relation to the production mechanisms. The interpretation of the sketches and the verification of the ideational and functional constants make us reflect on Magistretti's own compositional methodology, and in the digital sphere, the formal decomposition of the various elements (geometric matrices, generating and directing curves, orthogonal projections, 3D model) exemplify an implicit design process by indicating a representative sequence that is also useful in today's design (fig. 10).

Certainly, in this case we do not have the final product, but the use of digital, which is not meant to detract from or replace the primordial act of design, stands precisely in continuity, in an attempt to enact a compositional continuation by returning, at least virtually, a plausible image of the collection.

Starting with geometric drawings, fragments, doodles, and notes that, in a guise of immediacy and personal urgency, summarize not only ambitions and intuitions, but also technical problems and shortcomings in existing products, CAD reconstructs the formal metamorphoses of the individual objects in the series providing a coherent overview from which to draw any conclusions about the actual abandonment of the project. In addition, digital visualization of technical details, related to the possibility of movement, makes it possible to visualize the critical points of the structure and to suggest possible alternative solutions.

For the 5 elements (A, B, C, D, E), the geometric matrices, drawn in pencil and often erased by overlapping marks, the general inclinations of the various pieces, the curved joints,

Fig. 11. Detail belonging to the sketches 'Roller Shutter Chair' (1985). Foundation Vico Magistretti ©.



the positions of the metal elements intersections, and the claddings characterized by a modular subdivision were obtained. The operation of disassembling the signs makes it possible to obtain a digital model, from the rendering of which the hierarchy of the various elements clearly

Axonometric or perspective views of the various furnishings contribute individually or in groups to reconstruct the master's thinking (figs. 11, 12).

## Conclusions

In the light of these considerations, the sketches examined, far from the perfection of the final state, thus become the emblem of an interrupted, almost forgotten path but, from careful observation, they present themselves as valuable investigation tools in which drawing plays the role, as in past eras, of an irreplaceable means of reasoning [Falcinelli 2004, p. 45].

Fig. 12.3D reconstruction of the 'Vania Collection' or 'Cherry Tree Collection' (digital processing by the author).



Drawing is the place of the project where to visualize, verify and share a repertoire of thoughts, memories, suggestions, innovations that materialize in quick and immediate images.

The 33 analyzed sheets tell an idea, record a creative cue: "show the path through which a creative project takes shape, make visible and tangible a mental landscape" [Veneziano 2009, p. 7] that our technologies have the duty to redraw, reconstruct and communicate. From the drawings emerges the essence of the object even before its artifactual translation, and the digital becomes useful to retrace the various steps, select and visualize the different hypotheses in order to build a probable imaginary that guided the master.

The analysis carried out aims to reconstruct some unrealized projects and the study of the archived

material, the comparison of the graphic signs on the various sheets, the observation of repeated shapes and geometries have investigated the evolutionary process of an idea that has not lost its creative strength, despite the project variables. By combining graphic information and the different methods of representation, a coherent and functional outdoor collection has emerged thanks to digital technology.

We do not know why these sketches did not have a physical translation, we can assume dissatisfaction on the part of the designer or in a lack of interest on the part of the manufacturing companies, but it is also plausible to think that these sketches may have been useful for future [11] projects especially in the concepts of flexibility, modularity and movement that would become a hallmark and a constant in Magistretti's production.

#### Notes

- [1] The locution "furniture design" refers to the design activity applied to the field of private, predominantly domestic.
- [2] Magistretti redesigns traditional artifacts by enhancing technical and formal aspects such as the tavern chair, the English club chair, the Thonet or Mackintosh chair. From intellectual curiosity toward new materials, their application in the manufacturing sector begins.
- [3] His design pieces are on permanent display at MoMA in New York, Victoria and Albert Museum in London, Die Neue Sammlung in Munich, and the Triennale Design Museum in Milan.
- [4] Vico Magistretti worked in the studio on Via Conservatorio in Milan from 1946 to 2006, after inheriting it from his father, architect Pier Giulio Magistretti. In 2010, after a lengthy reorganization and enhancement of the archive, the studio became home to the Vico Magistretti Studio Museum Foundation. The enormous material preserved in the archive can be traced back to the painstaking conservation work of surveyor Franco Montella, a historical collaborator and the true interpreter and the translator into executive forms of Magistretti's concepts: <a href="https://www.vicomagistretti.it/it/>">https://www.vicomagistretti.it/it/></a> (accessed September 10 2022).
- [5] The archive, made available online in 2020, collects sketches, drawings, floor plans, project reports, patents, photographs, magazine articles, and catalogs that chronicle Vico Magistretti's entire professional life: <a href="https://archivio.vicomagistretti.it/magistretti/">https://archivio.vicomagistretti.it/magistretti/</a> (accessed September 10 2022).
- [6] The Magistretti Foundation provided the author with three unreali-

zed designs, 'Armchair Roller Shutter' (33 images), 'Armchair Carpet' (14 images) and 'Broomstick Lamp' (7 images). The digital images concern sketches drawn on one side of the sheet or belonging to both sides (front and back).

- [7] The meaning of the word Vania is not known, only later Magistretti uses the name Vanja in the bed produced for Flou (1996). As for the name 'Cherry Garden' it could refer to the material used in the furniture i.e. American cherry wood, with a compact, straight and fine grain, characterized by a dark red or reddish brown hue.
- [8] In the same years Magistretti made the *Edison* table where he experimented with metal interlocks made possible by cast iron cross joints commonly used in gas lighting systems.
- [9] Probably Magistretti was referring to a standardized industrial component. Currently there are modular hinges formed from components to be assembled characterized by a pin in the expanded head or mushroom version with rivet: <a href="https://www.corisnc.it/wp-content/uploads/2017/02/Cerniere\_industriali.pdf">https://www.corisnc.it/wp-content/uploads/2017/02/Cerniere\_industriali.pdf</a> (accessed September 10 2022).
- [10] In a sheet of the 1985 roller shutter chair group 1985, there are sketches traceable to the series Veranda.
- [11] The 'armchair-rolling-shutter' sketches may have contributed to the creation of the *Spigoletto* bed (1992) whose headboard is made of laths and shaped like a rolling shutter, supported at the back by two steel supports covered in leather.

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