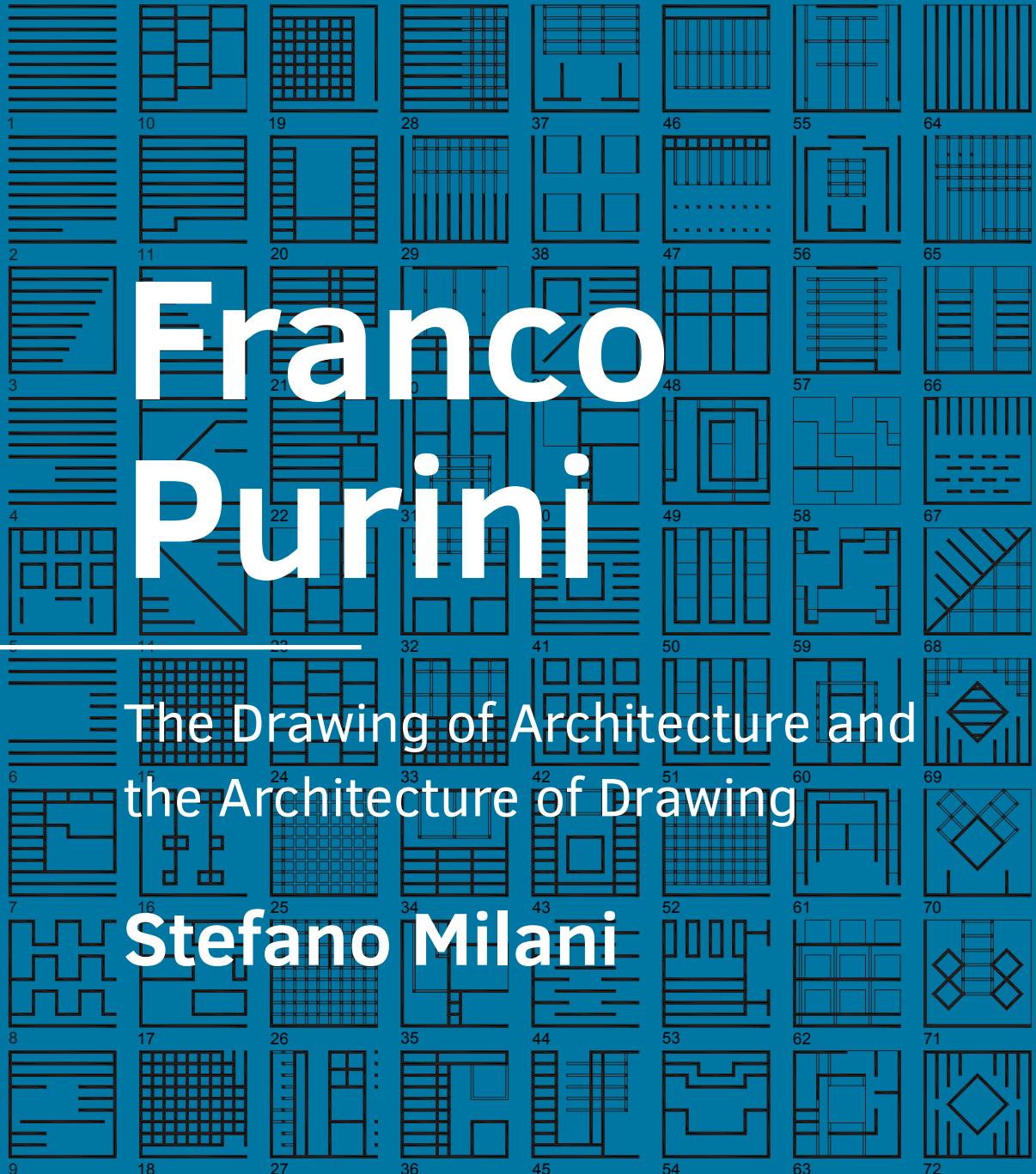


Franco Purini

The Drawing of Architecture and
the Architecture of Drawing

Stefano Milani



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Franco Purini

The Drawing of Architecture and the Architecture of Drawing

Dissertation

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by the authority of the Rector Magnificus, prof.dr.ir. T.H.J.J. van der Hagen
chair of the Board for Doctorates
to be defended publicly on
Thursday 8 January 2026 at 10:00 o'clock

by

Stefano MILANI

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This work is dedicated to my mother and to the memory of my father.

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Summary

This doctoral research investigates Franco Purini's early foundational architectural inquiry 'Una ipotesi di architettura' [A hypothesis of architecture] (1966–1968), examining it through the lens of drawing. With the analysis of Purini's experimental work, the dissertation develops the concept of an "architecture of drawing"—a critical framework wherein drawing is not merely a representational tool but a form of architectural thought and theoretical investigation.

Purini's 'Una ipotesi di architettura' consists of a series of experimental projects and analytical research on architectural language aimed at establishing a new architectural system. At its core, it is argued here, lies a radical conceptual move: reducing architecture and drawing to a shared, hypothetical "degree zero," where the two become indistinguishable and await definition. This reduction allows drawing to be seen as a description of architecture and architecture itself. Within this framework, drawing acts as both an analytical and conceptual tool, simultaneously constructing and deconstructing architectural ideas.

The dissertation is structured into two chapters. Chapter 1 begins by reaffirming drawing as a form of knowledge and a critical area within architectural research. Drawing is examined both as a practice rooted in Renaissance ideas and as a contemporary disciplinary discourse, providing theoretical insights into the analytical and conceptual foundations of drawing.

More specifically, Chapter 1 discusses Pliny the Elder's mythical origin of drawing, Federico Zuccari's concepts of *disegno interno* and *disegno esterno*, Konrad Fiedler's aesthetic theory on the origin of the work of art, Manfredo Tafuri's reading of Piranesi's systematic critique of architecture, the "constructive" and "destructive" character of the work of art in the experience of *De Stijl*, and the phenomenon of the *Architettura disegnata*. Parallel cases, including Manfred Mohr's algorithmic drawing and Dogma's hypothesis for a non-figurative architectural language, help situate Purini's work within a larger discourse on the critical potential of drawing.

Chapter 2 introduces Franco Purini's main ideas on architecture and exposes the fundamental principles of 'Una ipotesi di architettura'. Subsequently, it analyses Purini's research, starting with the projects that elaborate on his critiques of architectural conventions. These include: 'La città compatta. Studi di strutture

urbane' [The compact city. Studies of urban structures] (1965-1966), 'Ricerche di transizione' [Transitional research] (1967), 'Progetto di strada "costruita" tra Roma e Latina' [Mechanised road from Rome to Latina] (1968), and 'Progetto di biblioteca a Roma' [Design for a library in Rome] (1968).

The dissertation further explores the 'Programma di fondazione grammaticale del linguaggio architettonico' [Programme for the grammatical foundation of architectural language] (1968), in which Purini's critical approach culminates in a proposal for a new grammar-based architectural language, inspired by linguistic and musical models. The main case study of this speculative research is 'Classificazione, per sezioni, di situazioni spaziali' [Classification, by sections, of spatial situations] (1968), a drawing analysed in depth through graphic and textual interpretation. This drawing encapsulates the essence of 'Una ipotesi di architettura', functioning both as a synthesis of Purini's research into architectural language and as a visual recollection of this experience. In the last part of Chapter 2 the dissertation applies the research findings on drawing derived from the analysis of 'Una ipotesi di architettura' to a series of experimental projects, including: 'Progetto di un edificio lamellare' [Design for a lamellar building] (1968), 'Progetto di ponte a San Giovanni dei Fiorentini a Roma' [Design for a bridge in San Giovanni dei Fiorentini in Rome] (1968), 'Casa nella campagna romana' [House in the Roman countryside] (1971), and 'Padiglione in cemento e vetro' [Concrete and glass pavilion] (1976).

Central to doctoral research is the assertion that architectural drawing is inherently dual: it generates and interrogates architectural meaning. This dual role - constructive and destructive - reflects the tension within Purini's research approach, where drawing is a tool for questioning the systems it constructs, therefore leading to new investigations. Furthermore, it is also the record of this process.

The methodology revolves around close visual analysis and analytical drawing. This approach has been employed to reinterpret both the projects and the research on the architectural language. In particular, the analytical drawings for the 'Classificazione, per sezioni, di situazioni spaziali' and 'Padiglione in cemento e vetro' substantiate the drawing-centred methodology by illuminating and even expanding Purini's concepts.

Finally, the thesis posits that the structure underlying the "architecture of drawing" is paratactical, enabling drawing to function as an open-ended form of architectural inquiry. Consequently, drawing is capable of both reinforcing and resisting conventional design logic - a capacity that lies at the heart of its ongoing relevance and poetic potential in architectural practice.

In summary, this research not only repositions Purini's 'Una ipotesi di architettura' as a critical episode in contemporary architectural research but also affirms drawing as a site of theoretical production. It establishes the architecture of drawing as both a methodological tool and a conceptual framework through which architecture itself can be reimagined.

Samenvatting

Deze promotie onderzoekt Franco Purini's vroege fundamentele architectonische studie 'Una ipotesi di architettura' [Een hypothese van architectuur] (1966–1968) met een specifieke focus op het tekenen. Met de analyse van Purini's experimentele werk ontwikkelt het proefschrift het concept van een "architectuur van het tekenen" – een kritisch kader waarin tekenen niet slechts een representatief instrument is, maar een vorm van architectonisch denken en theoretisch onderzoek.

Purini's 'Una ipotesi di architettura' bestaat uit een reeks experimentele projecten en analytisch onderzoek naar architectonische taal met als doel een nieuw architectonisch systeem te ontwikkelen. In de kern, zo wordt betoogd, ligt een radicale conceptuele stap: architectuur en tekenen reduceren tot een gedeelde, hypothetische "nulgraad", waarbij de twee niet meer van elkaar zijn te onderscheiden en in afwachting zijn van een definitie. Deze reductie maakt het mogelijk om het tekenen te zien als een beschrijving van architectuur én als architectuur zelf. Binnen dit kader fungeert het tekenen als analytisch én conceptueel instrument, dat tegelijkertijd architectonische ideeën construeert en deconstrueert.

Het proefschrift is opgedeeld in twee hoofdstukken. Hoofdstuk 1 begint met de bevestiging van het tekenen als een vorm van kennis en een cruciaal architectonisch onderzoeksval. Tekenend wordt onderzocht als een praktijk die geworteld is in renaissance-ideeën, maar die ook een hedendaags disciplinair discours biedt dat theoretische inzichten biedt in de eigen analytische en conceptuele fundamenten.

Meer specifiek bespreekt Hoofdstuk 1 de mythische oorsprong van het tekenen in Plinius de Oudere, de concepten *disegno interno* en *disegno esterno* [in- en uitwendig tekenen] van Federico Zuccari, de esthetische theorie over de oorsprong van het kunstwerk van Konrad Fiedler, de lezing van Piranesi's systematische kritiek op architectuur van Manfredo Tafuri, het "constructieve" en "destructieve" karakter van het kunstwerk in de ervaring van De Stijl, en het fenomeen *Architettura disegnata*. Parallelle casussen, waaronder Manfred Mohr's algoritmische tekening en Dogma's hypothese voor een niet-figuratieve architectuurtaal, helpen Purini's werk te plaatsen binnen een groter discours over het kritische potentieel van tekenen.

Hoofdstuk 2 introduceert Franco Purini's belangrijkste ideeën over architectuur en legt de fundamentele principes van 'Una ipotesi di architettura' bloot.

Vervolgens biedt het hoofdstuk een analyse van Purini's onderzoek, te beginnen met de projecten die zijn kritiek op architectonische conventies verder uitwerken. Deze omvatten: 'La città compatta. Studi di strutture urbane' [De compacte stad. Studies van stedelijke structuren] (1965-1966), 'Ricerche di transizione' [Tussenonderzoeken] (1967), 'Progetto di strada "costruita" tra Roma e Latina' [Project voor een "gebouwde" weg tussen Rome en Latina] (1968), en 'Progetto di biblioteca a Roma' [Ontwerp voor een bibliotheek in Rome] (1968).

Het proefschrift onderzoekt verder het 'Programma di fondazione grammaticale del linguaggio architettonico' [Programma voor een grammaticale basis van de architectonische taal] (1968), waarin Purini's kritische benadering culmineert in een voorstel voor een nieuwe grammatica-gebaseerde architectuurtaal, geïnspireerd door taalkundige en muzikale modellen. De belangrijkste case-study van dit speculatieve onderzoek is 'Classificazione, per sezioni, di situazioni spaziali' [Classificatie, door middel van doorsneden, van ruimtelijke situaties] (1968), een tekening die in dit hoofdstuk diepgaand wordt geanalyseerd door grafische en tekstuele interpretatie. Deze tekening vat de essentie van 'Una ipotesi di architettura' samen en functioneert als synthese van Purini's onderzoek naar architectonische taal zowel als een visuele weergave van deze ervaring. In het laatste deel van Hoofdstuk 2 past het proefschrift de onderzoeksresultaten over het tekenen die zijn afgeleid van de analyse van 'Una ipotesi di architettura' toe op een reeks experimentele projecten, waaronder: 'Progetto di un edificio lamellare' [Ontwerp voor een lamel-vormig gebouw] (1968), 'Progetto di ponte a San Giovanni dei Fiorentini a Roma' [Ontwerp voor een brug in San Giovanni dei Fiorentini in Rome] (1968), 'Casa nella campagna romana' [Huis op het Romeinse platteland] (1971), en 'Padiglione in cemento e vetro' [Paviljoen in beton en glas] (1976).

Centraal in het promotieonderzoek staat de stelling dat architectonisch tekenen van nature tweeledig is: het genereert en onderzoekt architectonische betekenis. Deze dubbele rol – constructief en 'destructief' – weerspiegelt de spanning binnen Purini's onderzoeksbenadering, waarbij tekenen een instrument is om de systemen die het construeert in twijfel te trekken, wat leidt tot nieuw onderzoek. Bovendien is het ook een afdruk van dit proces.

De methodologie draait om het nauwkeurig visueel analyseren en analytisch tekenen. Deze benadering is gebruikt om zowel de projecten als het onderzoek naar de architectuurtaal te herinterpretieren. In het bijzonder onderbouwen de analytische tekeningen voor 'Classificazione, per sezioni, di situazioni spaziali' en 'Padiglione in cemento e vetro' de tekengerichte methodologie door Purini's concepten te verhelderen en zelfs uit te breiden.

Ten slotte stelt het proefschrift dat de structuur die ten grondslag ligt aan de “architectuur van het tekenen” paratactisch is, waardoor tekenen kan functioneren als een vorm van architectonisch onderzoek met een open einde. Daardoor kan tekenen de conventionele ontwerplogica zowel versterken als weerstaan – een vermogen dat aan de basis ligt van de voortdurende relevantie en het poëtische potentieel van het tekenen in de architectuurpraktijk.

Samenvattend herpositioneert dit onderzoek niet alleen Purini's 'Una ipotesi di architettura' als een cruciale episode in het hedendaagse architectuuronderzoek, maar bevestigt het ook het tekenen als theoretische productie. Het bevestigt de architectuur van het tekenen als methodologisch hulpmiddel zowel als conceptueel kader waardoor architectuur zelf kan worden heruitgevonden.

Introduction

The Theme of the Research

This work investigates Franco Purini's research 'Una ipotesi di architettura' [A hypothesis of architecture], developed between 1966 and 1968 and comprising a series of experimental designs and analytical research on architectural language. Purini's ambition was to establish a new and comprehensive architectural system. In the study, 'Una ipotesi di architettura' is viewed as the basis for formulating a hypothesis of architectural drawing - the architecture of drawing. In a manner analogous to Purini's approach, this investigation initially reduces the relationship between drawing and architecture to a "degree zero"; to a basic hypothetical state, or more precisely, to a pre-hypothetical state in which the two concepts of drawing and architecture virtually overlap: all aspects of architecture are conveyed to the conceptual field of the drawing, while simultaneously, the drawing itself is understood as an architecture. This experimental artifice will facilitate the scrutiny, organisation, and validation of the coherent structure of the relationship between drawing and architecture in its particular components.

As a starting point, my research contemplates drawing on its most general and broad understanding. I consider "drawing" and "the drawing" as instruments for developing an architectural idea or analysing an architectural problem, but also as a specific form of architectural thought. This broader notion of drawing, which is often underrated and has a deep-rooted tradition traceable to the Renaissance, becomes a fundamental factor in identifying drawing as both practice and concept. It serves as the focus of rigorous disciplinary research aimed at challenging and redefining the system of relationships governing architectural conception and, more generally, the theoretical definition of architecture.

Consequently, this work is inevitably also an attempt to reaffirm drawing as both a mode and a field of academic research in architecture, particularly in the realm of architectural design theory. This dissertation, focused on drawing, has been shaped and developed through the analysis of drawings and the creation of analytical drawings of drawings.

The main argument presented here – the identification of an “architecture of drawing” emerging from ‘Una ipotesi di architettura’ – offers a point of entry into the issues of drawing and its role within contemporary architectural culture, while my investigations into drawing also allow me to explore the work of Purini in greater detail. In fact, the study of Purini’s drawing(s) commonly focuses on the magnificent and exuberant drawing series that corresponds to a more mature research stage – arguably inaugurated in 1976 with the series of three drawings entitled ‘Angoli’ [Corners]. In this dissertation, however, the focus on drawing is shifted to Purini’s early foundational research between 1966 and 1968. By examining juvenilia and tracing the tight logic of its development, Purini’s most prolific and recognised work on drawing, along with his theoretical writings on the subject, can be further clarified. For instance, the very approach of developing an architectural theme through a series of drawings can be considered a procedure inspired by the sequential characteristic of the research phases established by ‘Una ipotesi di architettura’. This consists of a critique of architectural conventions, specific analysis of the findings within the field of architectural representation, definition of new architectural principles, and their verification through experimental designs and drawing series that disclose new architectural problems to be investigated anew.

Furthermore, for the same reason, the study of Purini’s research can clarify his position within the context of more established discourses on drawing and the renowned discourse of drawing in the sixties in the Italian version of the *Architettura disegnata* and the international version of “Paper Architecture”. It could be argued that Purini’s drawing series from the seventies and eighties became instrumental for scholarship in illustrating the general characteristics of *Architettura disegnata* rather than being the subject of a rigorous investigation of its premises and genesis. In this dissertation, the link to the phenomenon of *Architettura disegnata* is considered too reductive to explain the extent and intrinsic sophistication of Purini’s work. Purini’s work transcends a typical example of *Architettura disegnata*. Indeed, he should be regarded as one of the main forerunners of this highly heterogeneous experience, which acknowledged a general attitude towards reformulating architectural specificity within the drawing field. Simultaneously, he is also one of the sharpest critics of this cultural phenomenon. His work deserves a more specific and in-depth analysis for these simple reasons.

Franco Purini and ‘Una Ipotesi di Architettura’

Franco Purini (1941) is a distinctive figure in Italian architectural culture, renowned for his intellectual and professional contributions. His activities span numerous stratifications. Alongside his work in drawing, which is the specific focus of my investigation, his extensive input in architectural design (in collaboration with Laura Thermes), his role as an academic and educator, and his numerous writings covering a multitude of architectural subjects should be highlighted: from architecture to the city and the landscape; from rigorous theoretical production to historical-critical contributions on architectural and urban design, as well as his regular engagement in Italian architectural discourse. Franco Purini’s contributions are extensive and multifaceted, encompassing a wide array of architectural design projects, drawing series, and numerous publications on architectural representation, design theory, as well as art, literature, and aesthetics.

It is important to note that in Purini’s practice, drawing serves multiple purposes. Rather than being limited solely to theoretical reflection, as this research might suggest, Purini’s drawings permeate every aspect of architecture, functioning as an expressive whole. His work is characterised by complex layers, each deserving of in-depth study that extends beyond the scope of this particular research. Nonetheless, identifying the key features of Purini’s work opens the door to broader discussions in areas such as architectural typology, the relationship between architectural history and design, landscape and large-scale studies, as well as the intersection of creative and constructive techniques, accompanied by a keen interest in architectural language.

In 1965, Franco Purini was a member of the Roman student collective *Gruppo Atrio Testaccio*, which began formulating a radical critique of the discipline, driven by a shared dissatisfaction with the state of architecture in Italy and a desire for new collective experiences.¹ They specifically targeted the way architecture, as an integral part of the ‘productive system’, which is commonly perceived and rapidly consumed through mediatisation and the growing influence of information technologies – topics that were already shaping architectural debate at the time. With this broad perspective in mind, Purini proposed a series of programmatic themes advocating for a rethinking of architecture outside traditional design conventions and called for the addressing of new problems in representation techniques.

¹ Franco Purini, (with Gruppo Atrio Testaccio), ‘I motivi di fondo – Sulla tecnologia – I problemi della città’, in *Grammatica* no. 3 (Rome: Editrice Feltrinelli, 1969), 64–65. English translation ‘Fundamental Principles – On Technology – The Problems of the City, (1966)’. (Writer’s translation in Appendix 1)

Purini particularly emphasised the necessity for a new notational system capable of representing and thoroughly managing the complexity of the architectural object, extending beyond established figurative frameworks and the conventional limitations imposed by the plan or section. For example, the plan was traditionally regarded as the generator of a programme's organisation, while the section acted as a spatial determinant. In this second, more analytical phase, Purini shifted his focus to architectural representation as the primary field for exploring and developing a new architectural system, which redefined the characteristics of the architectural object and propelled the discovery of new dimensions in architectural experience. These ideas culminated in the project commonly known as 'Una ipotesi di architettura'.

'Una ipotesi di architettura' comprises investigations that progressively develop a comprehensive approach to architectural design. Purini's work is organised along two parallel lines of inquiry: one focused on design experimentation, the other more abstract and theoretical. In some instances, these lines converge, yielding complementary results; in others, they diverge, leading to further experimentation.

The first line can be viewed as a systematic critique of the concepts that govern the conception of architectural form, explored through specific projects designed to expose the limitations of these conventions. The concepts requiring reformulation include the definition of architecture, the architectural project, architectural form, architectural figuration, architectural order, architectural composition, architectural techniques, architectural language, architectural representation, architectural typology, architectural elements, ornaments and details, the house, the place, the city, the landscape, and architectural drawing. The initial research approach consists of experimental design projects, including the design for 'La città compatta' (1965-66), which will drive the development of the research. In Purini's framework, the idea of architecture as a continuous reworking of historical precedents is ultimately rejected. Simultaneously, for example, the classical notion of typology takes on new significance as a mediator between formal resources associated with fundamental spatial organisations (e.g., the hypostyle hall, the square, the gallery) and direct references to archetypes or building types. Rather than relying on historical reinterpretation, the formal definition of architecture emerges as a confrontation that encompasses all aspects that characterise its concreteness and individuality.

The second line of research is more autonomous and has led to the development of a new architectural language and, crucially, a new grammar that governs the conception of architectural form – its grammar. This research phase, titled 'Programma di fondazione grammaticale del linguaggio architettonico' [Programme

for the grammatical foundation of architectural language] (1968), began by reducing all the main established concepts of architecture to their “zero degree.” The fundamental notions of architecture were all subject to reformulation.

For this experiment, Purini selected the cube understood as the generator of basic architectural elements. He believed that this form possesses geometric and constructive qualities, as well as a highly recognisable perspectival character, which makes it ideal for studying and defining the grammatical rules of architectural language. By employing a cube structure, the elements that can reconstruct the cube’s space can be distilled into a series of volumes, planes, and lines. Through various transformations of these basic elements, all the constructive possibilities of the cube’s architectural space were examined.

This intricate exploration draws upon a diverse array of experimental influences from art, linguistics, and music. Notably, it finds inspiration in Donald Judd’s Specific Objects, Noam Chomsky’s theory of transformational grammar, and Arnold Schoenberg’s theory of the dodecaphonic compositional method.²

Another fundamental characteristic must be acknowledged when discussing the general aspects of Purini’s research. ‘Una ipotesi di architettura’ is not merely a collection of projects and experiments. Such an interpretation would be overly restrictive and would fail to capture the dynamic interplay – what might be called the synaesthesia – among the various phases of research, which is a defining feature of the work. Thus, ‘Una ipotesi di architettura’ is a reconstruction of the research experience itself: a subsequent attempt to describe all aspects inherent in the design process, achieved by selecting relatively finite propositions. These re-descriptions of the research stages are crystallised in specific drawings testing intermediate hypothetical research levels. This process naturally leads to further investigations, followed by additional rounds of validation. The reordering of this material and the definition of the links between these intermediaries create a conceptual and methodological framework that has informed the hypothesis and development of the present research.

² See: Donald Judd, ‘Specific Objects’, in *Arts Yearbook no. 8, Contemporary Sculpture* (New York: The Art Digest Inc., 1965), 74-82. Reprinted in *Donald Judd: Complete Writings 1959-1975* (Halifax and New York: The Press of the Nova Scotia College of Art and Design/New York University Press, 2005), 181-189; Noam Chomsky, *Syntactic Structures* (The Hague: Munton, 1957), and Arnold Schöenberg, ‘Composition with Twelve Tones’, in *Style and Idea* (New York: Philosophical Library, Inc., 1950).

This process assumes particular significance in the final work, a drawing, that concludes the analytical phase of ‘Una ipotesi di architettura’ and arguably encapsulates its essence: ‘Classificazione, per sezioni, di situazioni spaziali’ [Classification, by sections, of spatial situations] (1968). This drawing represents the development of a grammatical foundation for architectural language and its corresponding notational system. In it, Purini explores, through a sequence of seventy-two sections, the potential for spatial subdivision within a cubic unit, and more specifically, the various spatial conditions created by the interplay between the cube’s perimeter and Purini’s element of architectural language.

‘Classificazione, per sezioni, di situazioni spaziali’ crystallises the moment when the potentially infinite proliferation of formal architectural compositions generated by Purini’s grammar is halted in a finite series of seventy-two configurations. Rather than proving the validity of the ‘Programma di fondazione grammaticale del linguaggio architettonico’, it reveals the limitations of architectural language, both as an organising principle and as a generative tool.

If formulating an architectural language system represents the constructive phase of Purini’s research, then the ‘Classificazione’ symbolises its deconstruction. It documents this process and ultimately presents itself as a project in progress – an ongoing hypothesis of architecture.

‘Una Ipotesi di Architettura’ and the Hypothesis of Architectural Drawing

Looking at the Ipotesi, it becomes clear that Purini starts from “degree zero” of architecture; Purini’s research embarks on an unceasing process of experimentation. At each step, Purini identifies and investigates the theoretical issues of architecture, evaluating their potential to be delineated, described, and therefore, as Purini would argue, drawn. In this ongoing exploration, the role of drawing is progressively elevated, serving simultaneously as the medium for formulating architectural hypotheses and as the internal mechanism for their preliminary verification – hypotheses which can later be scaled up and evaluated in broader contexts.

My research posits that within a hypothesis about architecture, the Ipotesi are also a hypothesis on how to draw. This hypothesis has a discernible structure that can be investigated to redefine the conceptual and instrumental roles of drawing in relation to architecture.

Throughout the development of 'Una ipotesi di architettura', the architectural drawing takes on both a constructive and a deconstructive theoretical role. Drawing provides the theoretical framework through which Purini's architecture is articulated, and the concept of description is central to this study as it establishes and assesses the relationship between architectural ideas and their representation through drawing.

I also argue that the constructive characteristics of architectural drawings are essential for formulating an architectural idea, as this process inherently involves creating an alternative to conventional codes. In Purini's case, the research begins by analysing and questioning architectural conventions, ultimately revealing their internal contradictions and ambiguities. Thus, drawing becomes not only a constructive practice but also a deconstructive one.

The hypothesis that drawing serves as both a constructive and theoretical moment within architecture also contains the seed of its own destruction and crisis: drawing establishes the foundation for dismantling the very architectural ideas it formulates. In Purini's case, this process of drawing ultimately challenges the architectural principles that it initially defines.

Methodological Ambition

My thesis formulates the methodological hypotheses following the general hypothesis described above. I assert that the group of works comprising the 'Una ipotesi di architettura', which consists of a non-systematic combination of speculative design projects and abstract research, can be analysed and reordered in light of the evolving role of drawing in Purini's research, which facilitates this organisation. Although the analysis of individual creative languages is typically discouraged in scientific research, which favours investigating the relationship between the work and the context in which it is developed, I argue that Purini's formal language, comprising basic and relatively architectural elements derived from the cube, signifies his didactic premises of the research.

The central concept guiding the reordering of 'Una ipotesi di architettura' is drawing. The analysis focuses on reading the drawings (design documents) and conducting drawn analyses, such as those produced for the investigation of the 'Classificazione, per sezioni, di situazioni spaziali' (1968) and 'Padiglione in cemento e vetro' (1976). The analysis of the 'Classificazione', explores how the plan and section establishes a spatial situation, and what kinds of spatial situations are included in the drawing, as well as the relationship with Purini's hypothesis of architectural language, the

relationships among the spatial conditions, and the overall analysis of Purini's drawing. The analysis of 'Padiglione in cemento e vetro' instead aimed to apply the methodology devised for the investigation of the 'Classificazione, per sezioni, di situazioni spaziali' to provide an interpretation of the project through the lens of 'Una ipotesi di architettura' but also to reveal a new interpretation of the project.

My research is also a core entry into the large thematic realm of Purini's oeuvre and *poiēsis*. It offers the critical tools and key evidence to confront the thematic complexity of Purini's work, which has developed throughout the years. For instance, Purini's methodological approach to classification analysis can be applied to other works. For instance, in this research, I demonstrated the correspondence between the design project for 'La città compatta' and 'La città uguale', which is viewed as an alternative vision within a city with a continuity of themes. Other examples for analytical research could include the work 'Parete' [Wall] (1976), a drawing conceived as an accumulator of architectural themes. This investigation offers the opportunity to expand the methodological approach to the theme of the façade.³ The comparison between 'Una ipotesi di architettura' and the deliberately retrospective drawing series 'Ciò che e' fatto, e' da fare' [What is done, have to be done] (1997) could shed light on the development of the theoretical themes of 'Una ipotesi di architettura' and the translation of Purini's design work.⁴

Current Scholarship on Purini

In recent years, Franco Purini's work has been the subject of academic investigation in the doctoral research of scholar Pietro Zampetti, which examined Italian experimental works on architectural notation between 1964 and 1973 and included an analysis of Purini's 'Classificazione'.⁵ This study employs a methodological approach similar to that of the analyses of the 'Classificazione' that I devised. In particular, the similarities concern the idea of identifying homogeneous classes of spatial situations within Purini's drawings. However, Zampetti's investigation is limited and primarily illustrative. Furthermore, it aims to contextualise Purini's work among other experiments on language and is not specifically focused on drawing. Notably, Zampetti's research follows a line of inquiry into the notational system

³ See: Franco Purini, *Luogo e progetto* (Rome: Edizioni Kappa, 1981) (1976), 194, 195.

⁴ An incomplete selection of drawing from the series 'Ciò che e' fatto, e' da fare' [What is done, have to be done] (1997) is published in the new edition of *L'architettura didattica*. See: Franco Purini, *L'architettura didattica* (Rome: Gangemi Editore, 2002) (1980), 148.

⁵ Zampetti, Pietro. *Progetti di linguaggio. Notazione e composizione nell'architettura italiana 1964-1973* (Melfi: Libria, 2019). 97-116.

arguably initiated in Italy by Marcello Séstito under Purini's supervision in the 1990s. For the study of notational systems in architecture and art, Professor Marcello Séstito's work, 'Alfabetti di architettura', serves as a treasure trove of information and provides an essential bibliographical guide in this field. Séstito explores architectural alphabets and notational systems as theoretical and design tools. By examining signs, matrices, and the syntactic structures of drawing, Séstito proposes an approach to architecture as writing, where design is organised as a system of generative rules and combinations.⁶

Another recent addition was the exhibition 'L'invenzione di un linguaggio. Franco Purini e il tema dell'origine 1964-1976', 2019, organised by the 'Archivio Progetti' of the IUAV in Venice and curated by Laura Thermes, Roberta Albiero, and Teresa Ianni. This exhibition showcased unpublished design drawings and sketches from Purini's early work but did not provide new insights beyond a retrospective view.⁷

Resonance

Outside the specificity of my dissertation, my methodological ambition aims to reinvigorate the role of drawing as a means of architectural research. Indeed, there is no better way to investigate an architect's ideas than by retracing their genesis and development through drawing. My methodological approach was inspired by the work of Peter Eisenman, whose practice and writings consistently regard drawing as a space of conceptual inquiry. From his early 'House' series (1967–1978), Eisenman employed drawing to generate formal transformations based on internal logics rather than functional or symbolic criteria. Drawing, in these projects, functions as a recursive system for testing architectural syntax. Eisenman's analytical work on Giuseppe Terragni and Andrea Palladio continues this approach. Through redrawing, he examines Palladio's geometric frameworks and reveals tensions in Terragni's 'Casa del Fascio' between rationalist form and ideological content.⁸

⁶ Séstito, Marcello. *Alfabetti di Architettura* (Rome: Gangemi Editore, 1994). On this subject see also: Goodman, Nelson. *Languages of Art* (Oxford: Oxford University Press, 1968); Valentina Ricciuti, *Le scritture dell'arte* (Melfi: Libria Editrice, 2005).

⁷ Roberta Albiero (Ed.), *L'invenzione di un linguaggio. Franco Purini e il tema dell'origine 1964-1976* (Siracusa: LetteraVentidue Edizioni, 2021).

⁸ See: Peter Eisenman, *The Formal Basis of Modern Architecture. Dissertation 1963 Facsimile* (Zurich: Lars Muller, 2006). From the same author see also: *Houses of Cards* (Oxford: Oxford University Press, 1987); *Giuseppe Terragni: Transformations, Decompositions, Critiques* (New York: Monacelli Press, 2003), and with Matt Roman, *Palladio Virtuel* (New Haven: Yale University Press, 2015).

However, my analysis of ‘Una ipotesi di architettura’ does not aim to illustrate the project but to interrogate how drawing operates within it. My approach is deliberately tentative, focusing on how drawing articulates architectural reasoning through a system of visual operations. Like Eisenman, I utilise drawing as a critical instrument, but my focus remains on drawing itself, not language, as the space where architectural ideas are constructed, examined, and tested.

My research also resonates with the plan analysis tradition at TU Delft, which has played a central role in shaping Dutch architectural education and discourse. Although my approach does not specifically emphasise the role of the plan as in the plan analysis study, it includes other drawing types such as sections, taxonomies, and details. The understanding and approach to drawing remain the same: as a generative tool to document a design, its creative process, and as a tool for thinking. Another crucial concordance with the research tradition of plan analysis is the methodological emphasis on redrawing and analysis to reconstruct the architect’s conceptual choices. This, in my case, was vital for acquiring actual knowledge of my case study and proposing the hypothesis of my dissertation. Redrawing can reveal what is not immediately evident and enhance architectural experience. Thus, akin to the plan analysis tradition at TU Delft, drawing research is viewed as both pedagogical and theoretical. It trains the designer to observe precisely and think through form while producing knowledge about architecture’s internal order. It transforms drawing into an epistemic tool – one that not only records but also generates architectural understanding.⁹

Scholarship and Documentation on ‘Una Ipotesi di Architettura’

Purini’s writings for ‘Una ipotesi di architettura’. Purini’s texts, which accompany the projects and research included in ‘Una ipotesi di architettura’, are seminal for integrating and elucidating the project’s content; however, the linguistic density of Purini’s writing complicates the choice of approach even further.¹⁰ They stand out in a particular way.

⁹ For the plan analysis studies at TU Delft see: Eric Hordijk, Ernest Israëls, Henk Döll, Janne Hobus, Karin Theunissen, Miel Karthaus, Peter Drijver, Roy Bijhouwer (Eds.), *O, no. 1 Planalyse* (Rotterdam: Nai Publishers, 1981).

¹⁰ Purini’s writing for the works examined in my research are collected in: Franco Purini, *Luogo e progetto* (Rome: Edizioni Kappa, 1981) (1976). Purini selected writing are collected in: Francesco Moschini and Gianfranco Neri eds. *Del Progetto. Scritti teorici di Franco Purini 1966-1991* (Rome: Edizioni Kappa, 1992); and Margherita Petranza and Gianfranco Neri eds., *Franco Purini. La città uguale* (Padua: Il Poligrafo, 2005). See also the more recent collection: Monica Manicone ed., *Architettura. Sostanza di cose sperate. Scritti in onore di Franco Purini* (Campi Calabro, RC: Iriti Editore, 2017).

Many scholars, particularly within the Italian academic context, have explored Franco Purini's writings, especially noting their complex nature. Here, we specifically recall the essay by scholar Francesco Moschini, 'Lo spazio e le parole' [The space and the words]. At the beginning of this essay, the author clarifies the terms of the relationship between drawing and writing in Purini's work:

*'In the work of Franco Purini, the writing plays a programmatically disquieting role, completely complementing the project as a parallel configuration capable of cracking architectural forms. The dialectic established between writing and drawing, as a continuous and reciprocal reference, allows one to push "beyond" an investigation that would otherwise be constrained within disciplinary language and its discontinuous time: the time of a moment. The limits of drawings are therefore shattered through the action of writing, which introduces a temporal moment that is not necessarily historical, narrating the becoming of forms.'*¹¹

Another and more general source, yet highly indicative of the sense of exasperation in confronting the thematic density of Purini's work, is provided by scholar Pierluigi Nicolin:

'Critique. He raises more problems than we can handle. The wisdom of the ancient emperors lay in setting various beliefs side by side in a pantheon, leaving an abstraction at the centre, which is quite alien to his Roman desire for domination. Purini has set out to put all his gods in that central point, ignoring the advantages of arranging them around the perimeter, the sense of relief to be gained by placing the symbols of our mythologies around the circumference. (...)'¹²

In this dense core of Purini's work, where ideas are expressed in writing and drawing, the nuances seem impenetrable. My research maintains a steady focus on analysing the aspect of drawing, and in selected cases, by analysing them "through drawing". Consequently, I engage with Purini's expressive redundancy by highlighting the moments of development that nourish the identification of the alternative idea of drawing signalled by Purini in the 1966 essay 'I motivi di fondo...' (The motivations...).¹³ Since Purini's projects are experimental and engage with what one would call

¹¹ See: Francesco Moschini, 'Lo spazio e le parole', in: *Del Progetto*. Ibid, X. Writer's translation.

¹² See: Pierluigi Nicolin. 'For Franco Purini.' In Franco Purini. *Around the Shadow Line. Beyond Urban Architecture*. (London: Architectural Association, 1984), 7. An anthology of the scholarship on Purini is published in: Gianfranco Neri ed., *Franco Purini. Le opere, gli scritti, la critica* (Milan: Electa, 2000), 239-253.

¹³ See: Purini (with Gruppo Atrio Testaccio), 'I motivi di fondo - Sulla tecnologia - I problemi della città, (1966).' In *Grammatica* no 3, Gastone Novelli and Achille Perilli eds. (Rome: Edizioni Libreria Feltrinelli, 1969), 64-68. In English translation as *The Motivations – On Technology – The Problems of the City*, (1966) in Appendix 1 of the present research.

absurd logic, the exploration of an alternative architectural description is also translated and autonomously developed in the project texts. In these writings, the descriptions of the “unusual architectural configurations” accurately reveal all the elements of the process and the buildings presented, down to the details of the materials and colours of the designed structures. Yet, this meticulous character of the text is only disguised, as some necessary elements to outline and clarify are clearly missing.

The works in ‘Una ipotesi di architettura’ have been extensively published, primarily in Italian-only publications and predominantly by Purini. Purini’s research has appeared in various formats, with differing degrees of completion, and sometimes with inconsistent denominations. Some of the early publications have presented the work that was still in the process of definition.¹⁴ By cross-referencing different publications, it is impossible to precisely attribute the documentary and the precise temporal boundaries framing this research. Most commonly, bibliographical sources indicate the research span in the triennial between 1966 and 1968.¹⁵

For my research, I follow the structure published in *Luogo e Progetto*, which, for the first time, describes, but only part, of the early projects as ‘Una ipotesi di architettura’. ¹⁶ I extend this definition to all the works realised between 1966 and 1968, because I acknowledge a precise systematic character in them. Furthermore, it should be clarified that the publication *Luogo e progetto* is not centred solely on ‘Una ipotesi di architettura’ but presents the first decade of Purini’s work within a broader theoretical ambition that is not discussed in my study.

Central to my investigation was compiling a synopsis of Purini’s drawings, projects, and writings from 1966 to 2005.¹⁷ This assembly draws on several key sources, including the monographic work *Franco Purini. Le opere, gli scritti, la*

¹⁴ Manfredo Tafuri, ‘Il progetto che presentiamo...’, in *Palatino. Rivista Romana di cultura* no. 2, (April-June) (Rome: Edizione Palatino 1968), 225.

¹⁵ See: Franco Purini, ‘Una ipotesi di architettura. 1966-1968’, in *Luogo e Progetto*, Ibid., 63-69. See also: ‘Una Ipotesi di Architettura. 1966-1968’, in Gianfranco Neri ed., *Franco Purini. Le opere, gli scritti, la critica* (Milan: Electa, 2000), 28-29. Additional images integrating the set of documents illustrating the research can be found in the more recent: Roberta Albiero, ed. *L’invenzione di un linguaggio. Franco Purini e il tema dell’origine 1964-1976* (Siracusa: LetteraVentidue Edizioni, 2021), and in Franco Purini and Laura Thermes. *Aforismi Architettonici* (Milan: Giancarlo Politi Editore, 1995) unnumbered.

¹⁶ *Luogo e Progetto*, Ibid., 63-69.

¹⁷ The year 2005 marks a provisional endpoint of this period with the drawing series ‘Inizi’ (Beginnings), 2005, created by Purini to re-examine and redraw his own foundational and formative principles. The archival work continued beyond 2005, albeit with a lesser degree of completeness.

critica,¹⁸ the archive of Purini's drawings series from the Studio Purini Thermes, the online documentation of A.A.M. Architettura Arte Moderna (A.A.M. Galleria) in Rome, curated with great dedication by Professor Francesco Moschini,¹⁹ and the recent exhibition catalogue 'L'invenzione di un linguaggio. Franco Purini e il tema dell'origine 1964-1976', 2019.²⁰

Additionally, the documentation has been enriched by my own research into lesser-known published materials, including newspapers and records of contributions to documentaries and radio programmes.²¹

Compiling this documentary collection and the accompanying visual information has enabled cross-referencing, particularly between drawings from different periods and between drawings and writings. This visual document has been vital in instigating and verifying my research idea. It has facilitated a deeper understanding of the connections between his early research and later work, and for my research purposes, how the late work can be seen as a continuous attempt to clarify the premises of 'Una ipotesi di architettura'. Therefore, this compilation served as a valuable resource for studying the breadth of Purini's work and as a tool for clarifying the premises and exploring the evolving themes and ideas that have shaped his architectural practice over the years.

This dissertation includes an appendix containing selective documentation of Franco Purini's 'Una ipotesi di architettura' alongside my analyses conducted in the present study, as well as English translations of four key essays by Purini, which offer insights into his motivations, theoretical framework, and objectives. It also includes graphic documentation of architectural projects and experimental exercises, along with analytical drawings and writings from the current research.

¹⁸ Gianfranco Neri ed. *Franco Purini. Le opere, gli scritti, la critica*, (Milan: Electa, 2000),

¹⁹ See <http://ffmaam.it/a-a-m-architettura-arte-moderna>. Accessed on 19-10-2024.

²⁰ Albiero, ed. *L'invenzione di un linguaggio*, Ibid.

²¹ One lesser-known source of Purini's work is the documentary *Della conoscenza* (1968) by Alessandra Bocchetti. The video presents an interview with a young Franco Purini at the Architecture faculty of Valle Giulia in Rome during the student occupation, surrounded by his drawings for 'La città compatta'. The Roman student movement commissioned the video to analyse the ideological motivations and historical context behind the students' struggle. See: *Della conoscenza*, directed by Alessandra Bocchetti, (Unitelefilm, Movimento studentesco, 1968), 29m. <https://openddb.it/film/della-conoscenza/>.

Research Structure

The research is divided into two major chapters. The first addresses the study of drawing within a broader context, not limited to Purini, but rather situated within the wider artistic and scientific debate. The conceptual framework highlights both the cognitive dimension of drawing and the theoretical necessity for representation, thereby elevating the status of art and architecture. This chapter was also instrumental in uncovering the thematic articulations of architectural language, enabling me to delineate the connection with drawing in this field, which will be further clarified in the second chapter.

The second introduces the main characteristics of Franco Purini's work, his ideas on drawing, and the relationship to the complex ideological and cultural situation in Rome during the sixties, the period in which this work took form. This provided additional entries to position and evaluate the more direct references informing 'Una ipotesi di architettura'. This background established the space for a systematic analysis of 'Una ipotesi di architettura' and the specific elaboration of the research thesis. Lastly, the methodological approach was tested for the interpretation of other design projects by Purini.

The dissertation concludes with a critical summary isolating the characteristics of the "architecture of drawing," followed by an appendix compiling the analytical work undertaken in the research, along with the documentation that served as the foundation for the analysis.

Chapter 1, *The Drawing: An Analytical Line*, focuses on the research argument and adopts an analytical approach to drawing. This chapter identifies a series of thematic areas where the concepts and issues emerging from Purini's 'Una ipotesi di architettura' find their origins, broader contextualisation, or simply a resonance that allows for discussion and critical evaluation. Through these areas, I will establish a wider framework for understanding drawing, forming the foundation to contextualise Purini's work.

The chapter is structured into five sections, beginning with the chapter introduction. The second section, *Theoretical Bases of Drawing as Thought*, explores historical perspectives that view drawing as a mode of thinking. The text reflects on these ideas by examining the legendary origins of drawing, as outlined by Pliny the Elder in *Naturalis Historia*.²² It then considers the concepts of *disegno interno* and *disegno esterno* [inner drawing and external drawing], developed by Italian painter and theorist Federico

²² Pliny the Elder (d.79 CE), *Natural History: A Selection*, trans. John F Healy (London: Penguin Books, 1991).

Zuccari in the early seventeenth century, and finally, Konrad Fiedler's theories on the origins of the work of art.²³ The choice to focus on Zuccari's theory offers a conceptual framework that underscores both the cognitive dimension of drawing and the theoretical necessity for representation, elevating the status of art and architecture. This discussion is further contextualised in relation to Fiedler's work, which offers criteria concerning the specific knowledge produced by art in contrast to other forms of knowledge.

The third section, *Drawing and the Analytical Line: The Constructive and Destructive Character of Drawing*, delves into the dual constructive and destructive nature of drawing as it relates to architectural analysis. The notion of drawing's "destructive" character is inspired by artist Bart van der Leck's writings, published in *De Stijl* in 1917,²⁴ which examine the relationship between art and architecture and challenge drawing's purely representational function. This section begins with discussing Manfredo Tafuri's interpretation of Piranesi's work,²⁵ dissecting and isolating the constructive and destructive aspects of his representations and critiques of architectural conventions. This is then expanded in relation to *De Stijl*, comparing the analytical nature of drawing within various artistic and architectural movements of the 1960s. The analysis continues with a review of Filiberto Menna's seminal work, *La linea analitica dell'arte moderna* [The Analytical Line of Modern Art],²⁶ and the writings of Franco Purini, with specific reference to *Architettura disegnata*.

The final two sections, *Early Digital: Manfred Mohr's Drawings* and *On Dogma's Project: The Controversies of a Non-Figurative Hypothesis of Architecture*, examine two diverse and unconventional case studies. The first focuses on the early digital drawings of Manfred Mohr, a pioneer of digital art. In contrast, the second evaluates early projects by Dogma, an architectural office based in Brussels, which places drawing at the centre of its exploration of architectural autonomy. Mohr's examination implicitly critiques current research on the digital, which has yet to provide a substantial theoretical framework for understanding its influence on architectural thought. Conversely, the review of Dogma's work seeks to assess the resurgence of theoretical themes and a drawing-based research approach characteristic of the 1960s and 1970s, compared to contemporary architectural research.

²³ Konrad Fiedler, *On Judging Works of Visual Art*, trans. H. Schaeffer-Simmern and F. Mood (Berkeley and Los Angeles: University of California Press, 1949).

²⁴ Bart van der Leck, 'De plaats van het moderne schilderen in de architectuur', in *De Stijl*, no. 1 (Delft: Technische boekhandel en drukkerij J. Waltman Jr, October 1917): 6.

²⁵ Manfredo Tafuri, "L'architetto scellerato", in *La sfera e il labirinto* (Turin: Einaudi, 1980), 33-75.

²⁶ Filiberto Menna, *La linea analitica dell'arte moderna. Le figure e le icone*, 2nd ed. (Turin: Einaudi, 2001).

Chapter 2, *Descriptions: A Hypothesis of Architecture and a Hypothesis of Architectural Drawing* is organised into six sections.

Following the Chapter Overview, Section 2- *Main Directions of Franco Purini's Work in Relation to Drawing*, serves as a critical introduction to Purini's architectural ideas, particularly focusing on his approach to drawing. This section sets the stage for the subsequent analytical sections by outlining the key themes in Purini's work, with a particular emphasis on his views on the subject of drawing. It explores how Purini's thoughts on drawing evolved, providing a critical selection of works that relate directly to this research. The section highlights the pivotal role drawing assumes in Purini's broader theoretical formulations on architecture. It also examines the cultural milieu in Rome, where 'Una ipotesi di architettura' emerged, paying particular attention to the influence of architects such as Maurizio Sacripanti, Ludovico Quaroni, and Manfredo Tafuri, alongside artists Gastone Novelli and Achille Perilli. The text highlights specific themes in Purini's research, including the intersection of language and drawing, the revival of classificatory methods, and the development of creative techniques and procedures. This foundation leads to a detailed reading of Purini's early writings, particularly the collective essay 'I Motivi di fondo – Sulla tecnologia – I problemi della città (1966)',²⁷ which outlines the key principles and content of 'Una ipotesi di architettura'.

Sections 3 to 5 delve into the research components, progressing in parallel with a step-by-step analysis of the various phases of 'Una ipotesi di architettura'. With reference to the architectural drawing, I summarise Purini's research through several key elements: identifying architectural representation as the primary field for exploring the idea of architectural; examining the role of drawing in conducting a systematic critique of architectural conventions; and analysing the dual constructive and destructive functions that drawing assumes within this critique. I also consider the conceptual shift away from traditional understandings of drawing in relation to architecture, with an emphasis on the grammatical experiment in architectural language. Here, Purini develops a notational system that clarifies and interprets his work precisely, providing an unambiguous description of architecture. I will explain how he achieves this. Through a series of projects related to this grammatical study, a figurative autonomy of architectural drawing emerges, revealing the architect's identity. Finally, I explore how drawing exposes the limitations of architectural language and the consequent redefinition of theoretical and instrumental approaches governing the relationship between drawing and architecture, centred on drawing as an act of pure recollection.

²⁷ Franco Purini, (with Gruppo Atrio Testaccio), 'I motivi di fondo – Sulla tecnologia – I problemi della città', in *Grammatica* no. 3 (Rome: Editrice Feltrinelli, 1969), 64–65. English translation 'Fundamental Principles – On Technology – The Problems of the City, (1966)'. (Writer's translation in Appendix 1)

Section 3 - *The Premises of ‘Una ipotesi di architettura’* analyses the works: ‘La città compatta. Studi di strutture urbane’ [The compact city. Studies of urban structures], (1965-1966); ‘Ricerche di transizione’ [Transitional research] (1967); ‘Progetto di strada “costruita” tra Roma e Latina’ [Mechanised road from Rome to Latina] (1967); ‘Progetto di biblioteca a Roma’ [Design for a library in Rome] (1968). This investigation highlights the design premises of ‘Una ipotesi di architettura’ by revealing the gaps in conventional architectural systems and the inability to represent certain spatial and figurative situations. This analysis prompts a reconsideration of the principles that underpin architectural conception and, for the purposes of this research, the role of drawing within it.

Section 4 – *A New Notational System for Architecture: The Role of Drawing in Purini’s ‘Programma di fondazione grammaticale del linguaggio architettonico’* [Programme for the grammatical foundation of architectural language] (1968) explores the role of drawing in the development of a new architectural system. Purini’s ‘Programma di fondazione grammaticale del linguaggio architettonico’ devises a new notational system, which excludes architectural precedents and incorporates ideas from Noam Chomsky’s transformational grammar and Arnold Schönberg’s dodecaphonic music theory. This section details the components of Purini’s architectural language system, including the notions of architectural sign, composition, and the reassessment of drawing’s instrumental role. This leads to a reinterpretation of the figurative and tectonic aspects of architecture and a new understanding of architectural experience.

Section 5 – *The Drawing: ‘Classificazione, per sezioni, di situazioni spaziali’* [Classification, by sections, of spatial situations] (1968) is the core and synthesis of the dissertation. This section offers a graphic analysis of Purini’s drawing ‘Classificazione’ and provides a comprehensive interpretation by cross-referencing it with Purini’s writings. It reveals how the drawing reaffirms the fundamental role beyond language, acting as the visual memory of the research experience, while simultaneously establishing its historical authenticity. This section demonstrates how the drawing encapsulates the essence of architecture, its creative process, and, ultimately, its object. Moreover, this section crystallises the drawing analysis as a research methodology, serving as a pivotal point for the current research.

Section 6 – *The Description of Drawing and the Description of Architecture* concludes Chapter 2 by assessing the content of ‘Una ipotesi di architettura’ and the ‘Classificazione’ through a series of experimental architectural projects. Specifically, I evaluate the principles of Purini’s ‘Programma di fondazione grammaticale del linguaggio architettonico’ through two design investigations: the ‘Progetto di un

edificio lamellare [Project for a lamellar building] (1968), and the ‘Ponte a San Giovanni dei Fiorentini a Roma’ [Bridge at San Giovanni dei Fiorentini in Rome] (1968). These projects allow for examining the two primary graphic structures Purini developed: the themes of frontality and the base, which serve as supporting structures for his compositions.

The analysis of the ‘Classificazione’ is then applied to the design for the ‘Casa nella campagna romana’ [House in the Roman countryside] (1971), a project investigating the architecture materiality and culminates in an original interpretation of Purini’s ‘Progetto per un padiglione in cemento e vetro’ [Project for a concrete and glass pavilion] (1976). This final investigation, supported by analytical drawings, validates the methodology established in the present research.

The Conclusion provides a critical summary of the key findings from the research. This final section explores the concept of the “architecture of drawing” in broader terms, proposing that the binding qualities of this approach to drawing do not follow a rigid, connective framework, as the term ‘architecture’ might typically imply. Instead, I propose that the structure is paratactical – non-hierarchical and ordered without a fixed sequence. It is precisely this lack of hierarchical organisation that gives drawing its distinct value in the architectural process. The absence of a rigid system allows for greater freedom in the architect’s creative exploration. While architectural conventions are vital in expressing the synthesis of architectural and construction culture, and in defining the instrumental role of drawing, they become even more valuable when the architect recognises their fictional nature – an aspect that the architectural project itself should actively question and challenge. This flexibility encourages innovation and poetry and constantly reinvigorates the role of drawing in architectural practice.

1 The Drawing

An Analytical Line



FIG. 1.1 Giulio Paolini, *Disegno Geometrico* [Geometrical Drawing] (1960) Fondazione Giulio e Anna Paolini.

1.1 Introduction

This chapter is structured in four parts. The first part presents a selection of historical ideas that see drawing as a mode of thinking; the second part evaluates the constructive and destructive role of drawing within an analysis of architectural language; and the last two parts discuss two unconventional cases that, in different ways, can contribute to juxtaposing this present research on drawing with current research.

In the context of this dissertation, architectural drawing is understood not solely as an instrument, as a mere illustration of an architectural object, or as a representation of a design process. Instead, drawing is understood as a general concept capable of incorporating all these aspects: it is a vessel that conveys an interiorised and subsequently exteriorised vision of the world, and vice versa, within a continuous redefinition of its content. I will examine these ideas by reflecting firstly on the legendary origin of drawing as illustrated by Pliny the Elder in his *Hystoria Naturalis*,²⁸ then by considering the concepts *disegno interno* and *disegno esterno* [inner drawing and external drawing] elaborated by Federico Zuccari,²⁹ a seventeenth-century Italian painter, architect and theorist and, finally, Konrad Fiedler's ideas on the origins of the work of art.³⁰ The decision to discuss Zuccari's theory on drawing is preferred in this context to a more in-depth analysis of canonical sources such as Leon Battista Alberti³¹ or Giorgio Vasari,³² given that Zuccari offers a conceptual construction that establishes both the cognitive dimension of drawing and the theoretical necessity for representation that dignify the work of art and architecture. These ideas are further expounded in relation to the work of Konrad Fiedler, which provides a set of criteria concerning the specific knowledge generated by the work of art in relation to other knowledge forms and

²⁸ Pliny the Elder (d.79 CE), *Natural History: A Selection*, trans. John F Healy (London: Penguin Books, 1991).

²⁹ Federico Zuccari *L'idea de' pittori, scultori et architetti*, 2 vols. (Turin: per Agostino Disserolio, 1607). See also the reprinted edition, in *Scritti d'arte di Federico Zuccaro*, ed. Detlef Heikamp (Florence: L. S. Olschki, 1961).

³⁰ Konrad Fiedler, *On Judging Works of Visual Art*, trans. H. Schaeffer-Simmern and F. Mood (Berkeley and Los Angeles: University of California Press, 1949).

³¹ Leon Battista Alberti, *L'Architettura*. 2 vols. (Milan: Edizioni Il Polifilo, 1966). English translation *De re aedificatoria. On the Art of Building in Ten Books*, trans. Joseph Rykwert, Robert Tavernor and Neil Leach (Cambridge, MA: MIT Press, 1988).

³² Giorgio Vasari, *Le vite de' più eccellenti pittori, scultori ed architetti italiani, da Cimabue, insino a' tempi nostri* (1550) (Turin: Einaudi, 2005). English translation *The Lives of the Artists* (Oxford World's Classics), trans. Julia Conaway Bondanella and Peter Bondanella (Oxford and New York: Oxford University Press, 1991).

establishes the large field of ideas in which Franco Purini's work can be collocated and generalised within a broad cultural tradition. For instance, with particular reference to the Italian tradition of studies on drawings, it is essential to recall the influence of Zuccari's work on Giorgio De Chirico's writings during his involvement with the *Valori Plastici* movement in his attempt to translate, or better, to confront the revolutionary ideas of *De Stijl* within the Italian cultural context.³³ Analogously, Zuccari was also crucial for the analytical work of the renowned artist Giulio Paolini in the early sixties.

I will subsequently examine the constructive and destructive character of drawing in relation to an analysis of architectural language, and, by extension, to an analysis of architecture as a whole. The excursus starts with a discussion of Manfredo Tafuri's reading of Piranesi's work,³⁴ disarticulating and isolating the constructive and destructive character of his representations, which is then further expanded in its relationship within *De Stijl* to confront the analytical character of drawing within a highly heterogeneous set of experiences in the art and architecture of the sixties. This phase is then elaborated by examining art critic Filiberto Menna's seminal work *La linea analitica dell'arte moderna* [The analytical line of modern art]³⁵ on this subject, and works by Franco Purini, with particular reference to *Architettura disegnata*.

The analytical content of drawing will lead to a discussion of German digital artist Manfred Mohr's work, which resonates with Purini's research in their shared questioning of the foundations of artistic and architectural expression, as well as the processes that define the work – whether art or architecture – as a progression through intermediate hypothetical stages derived from a foundational project. For both Mohr and Purini, this project is rooted in a rigorous investigation of the geometry of the cube.

³³ For Giorgio De Chirico see the following publications: 'Il ritorno al mestiere', in *Valori Plastici*, A. I, (15 November 1918): 10-11; 'Classicismo Pittorico', *La Ronda*, (July 1920): 506-511; *Piccolo trattato di tecnica pittorica* (1928), (Milan: Editore Giovanni Scheiwiller, 1983).

³⁴ Manfredo Tafuri, "L'architetto scellerato": G. B. Piranesi, l'eterotopia e il viaggio.' in *La sfera e il labirinto: Avanguardie e architettura da Piranesi agli anni '70* (Turin: Einaudi, 1980), 33-75. English title, "The Wicked Architect": G. B. Piranesi, Heterotopia, and the Voyage', in *The Sphere and the Labyrinth: Avant-Gardes and Architecture from Piranesi to the 1970s* (Cambridge, MA: The MIT Press, 1987). Further references to this publication are taken from the English edition of the book.

³⁵ Filiberto Menna, *La linea analitica dell'arte moderna. Le figure e le icone*, 2nd ed. (Turin: Einaudi, 2001).

Lastly, I will challenge the notion of a ‘non-figurative architectural language’ proposed by Brussel’s based architectural office Dogma’s³⁶ since it represents an intriguing antithesis to Purini’s ‘Una ipotesi di architettura’, where instead figuration denotes the specific field in which it is possible to research architectural language. Additionally, I will also emphasise how figuration also constitutes a characteristic and a precondition of the architectural drawing, which the present research aims to highlight as part of its claims that the concept of an architectural drawing emerges in parallel with a critique of the conventions through which architecture is conceived.

1.2 Theoretical Bases of Drawing as Thought

Drawing has often been regarded as the origin of architectural form in its purest and most enduring essence. Although common and practical sense views drawing as a tool for expressing and representing ideas, according to Purini, it would be more appropriate to say that it is “thought”, as are all activities that require a synchronised and fluid interconnection of receptive and executive functions.³⁷ In the act of drawing, we engage the same principles and mental representations and logical procedures that are attributed to what we normally call “thought”. Architects “think” by means of a system of *lineamenta*: a system of lines used to unfold and progressively refine their formal ideas in the course of creating the design. Purini states: ‘The drawing is the place where formal thought is exclusively manifested’; consequently, as a postulate, it is arguable that there is no formal thought before its elaboration within the drawing.³⁸

³⁶ See Pier Vittorio Aureli and Martino Tattara, ‘Stop City’ (2007), in *Dogma: 11 Projects* (London: AA Publications, 2013), 10. It should be clarified that Dogma’s hypothesis is a direct transposition of Archizoom’s ideas informing the project No-Stop City. In particular, the reference should go to the ‘non-drawing’ plan realised with the typewriter ‘Diagramma abitativo omogeneo. Ipotesi di linguaggio architettonico non-figurativo’ [Homogeneous housing diagram. Hypothesis for a non-figurative architectural language] (1969).

³⁷ Franco Purini, *Una lezione sul disegno* (Rome, Gaangemi, 1996), 33.

³⁸ Ibid., 33 (Writer’s translation).

1.2.1 The Mythical Origin of Drawing

The legend of the origin of drawing is often traced back to the Roman author Pliny the Elder's *Historia Naturalis*.³⁹ The myth narrates the history of Diboutades, the daughter of a pottery maker, tracing on a surface the shadow of her departing lover, a Roman soldier being deployed abroad. By placing a light source in front of the soldier, Diboutades created a profile of her lover's head, from which her father, Butades, later built his relief: 'Placing a lamp in front of the young man, she drew the profile cast on the wall behind. Butades then pressed clay onto the silhouette to produce a relief of the young man's face.'⁴⁰

While this simple scene features Pliny discussing the complex nature of the genesis of drawing, it seemingly offers all the elements needed to formulate questions about the reality and virtuality of the object, which the drawing projects, as well as the virtuality and reality of the drawing itself. More specifically, the legend also highlights the gap between a sign and its referent. As noted by scholar Peter Wood: 'In Diboutades' case, the invention of drawing is initiated by removal and separation so that it immediately speaks of loss and of a mimetic substitution.'⁴¹ The implications are immediately apparent in the fact that in the scene, the origin of drawing has two distinct components: the first is the projection and initial recording by Diboutades; the second, the point at which Butades makes this recording permanent with clay 'so that his daughter's lover [doesn't need to forget] both who he is, and who he was – a condition concerned with place and time, motivated by the prospect of his inevitable loss. Without this drawing, the soldier suffers an inevitable death at his new posting, a death through posting. Represented in this way the soldier is relegated to an act of memory, but this is also a dissolution, a separation through time and space.'⁴²

However, the lover is not the only figure projected onto the surface; another element is unmistakably part of the scene: the act of tracing the profile of the lover is coupled with the projection of Diboutades' own hand. The definition of the form therefore encompasses not only the presence/absence of the very object of representation but also the absence/presence of the subject – the drawer's hand.

³⁹ Pliny the Elder, *Natural History*.

⁴⁰ Pliny the Elder, *Natural History*, 336.

⁴¹ Peter Wood. *Drawing the Line: A Working Epistemology for the Study of Architectural Drawing*. Dissertation (Thesis submitted in partial fulfilment of the requirements). University of Auckland, 2002. (Unnumbered). Accessed 28 February 2014, <https://researchspace.auckland.ac.nz/bitstream/handle/2292/426/02whole.pdf?sequence=2>.

⁴² Ibid., (Unnumbered).

Pliny's legend could also portray the symptomatic association/dissociation that exists between the 'architect' Diboutades' drawing and the 'builder' Butades' construction of architecture. The 'architect' Diboutades, who invents – through drawing – but does not make, seems to be affected by a lack of power, a state that is represented (but only represented) by her love for the soldier. It is as if Butades' materialisation of the soldier's profile, by giving him weight, on the one hand, institutionalises the architect's impediment to 'possessing' his architecture, and, on the other, the impossibility of architecture to be an active subject. If drawing is 'invention', then construction seems to institutionalise (i.e. establishes a status or a phenomenon within a convention) the drawing's inevitable lack of fulfilment. Drawing seems to be inextricably caught between being an instrument of expression and one of representation, between being an 'arm' of architectural invention and an institutionalised convention of communication.

Pliny's legend was also an essential point of reference for Purini's reflections on drawing, providing fertile ground for exploring its deeper implications. In his reading of the episode, Purini highlights a crucial aspect: 'the act of tracing the lover's profile is able to represent a nostalgic element, not through its content, but through its very form.'⁴³ Thus, for Purini, the nostalgia, the broken heart of a young woman due to the loss of her beloved man, are expressed and represented through their contour, through a line that binds them together, their 'very form'. For, it could be argued, and as is suggested in Pliny's description, within the field of representation, form seems to have a greater importance than content itself.

1.2.2 Federico Zuccari's Concepts of *Disegno Interno* [Inner Drawing] and *Disegno Esterno* [External Drawing]

But when did drawing actually start to become 'the drawing'? With the development of graphite in the fifteenth century, the practice of drawing, until then only used by craftsmen, became for the first time the field for a further, more complex extension of the imagination: it became a project. From this moment on, the drawing also became a source of philosophical investigation.⁴⁴ With Leon Battista Alberti we have the first theoretical formulation that organically binds drawing to architecture, where lines and structure express a creative phase strictly connected to its object: 'Tota res

⁴³ Purini, *Una lezione sul disegno*, 44. (Writer's translation).

⁴⁴ An extensive survey of the philosophical ideas in relation to the subject of drawing can be found in Manlio Brusatin. *Storia delle linee* (Turin: Einaudi, 1992). See in particular Chapter 2, 'La linea, la luce e l'ombra.'

aedificatoria lineamentis et structura constituta est'.⁴⁵ As a result, the drawing is no longer considered a mere graphic device for the work of the artist, but becomes the field where an 'idea' is elaborated. Alberti, however, notoriously attentive to aspects of execution, considers the transfer of the 'Idea' to the hand to be a journey full of obstacles, where 'the artist proceeds, wandering like a blind man.'⁴⁶

More generally, Renaissance artists positioned drawing as the foundation and origin of the visual arts, and Giorgio Vasari emphasised this primacy by coining the notion of *arti del disegno* [the arts of drawing].⁴⁷ By reuniting the three arts of painting, sculpture, and architecture into a single origin, the confrontation between painting and sculpture, which animated the artistic debate of the time, loses its significance. In fact, by establishing a common artistic foundation, drawing becomes the unifying conceptual model that can transcend the quest for primacy among the arts: from drawing, all the arts follow. In principle, Federico Zuccari shared this perspective; however, he considered Vasari's definition of drawing as the 'father' of the three major arts to be reductive, as the author of the *Vite* did not elaborate on the true intellectual implications of drawing.

Federico Zuccari was one of the most renowned personalities of the Roman artistic scene at the end of the sixteenth century, and the influence of his work spread throughout the whole Italian peninsula and beyond. As a member of the Accademia del Disegno in Florence, Zuccari also played an important role in the history of art education. In addition, he promoted the reestablishment of the Accademia di San Luca in Rome, the centre of a wide and ambitious programme of reforms in the field of arts – a commitment that still continues today. Investigating the multiplicity of artistic expression and the immense creative opportunities generated by drawing, Zuccari reduced any human activity that presides over intellectual and material production to drawing. For Zuccari, drawing is a divine act. In addition, it is important to consider that Zuccari wrote his notes in the late Mannerist period, when the concept of drawing was no longer affected by an infectious enthusiasm for perspective. In his major work, *L'idea de' Pittori, Scultori et Architetti*, Zuccari indicates that the supremacy of drawing consists in the 'Idea', which he exemplifies

⁴⁵ Leon Battista Alberti, *L'Architettura*. vol. 1 (Milan: Edizioni Il Polifilo, 1966), 19. English translation: 'The whole matter of building consists of lineaments and structure'. See: Leon Battista Alberti, *The Art of Buildings in Ten Books*, Joseph Rykwert, Neil Leach, and Robert Tavernor, Transl. (Cambridge, MA: The MIT Pres, 1991), 7.

⁴⁶ 'E mentre che s'avolgerà fra quelle tenebre d'errori e quasi come il cieco con sua bacchetta, così lui con suo pennello tasterà questa e quest'altra via.' Leon Battista Alberti, *De pictura*. vol. 2 (Rome-Bari: Laterza, 1980), 100. (Writer's translation).

⁴⁷ Vasari, *Le vite*. The notion of 'arti del disegno' is developed throughout the thirty-five chapters of the first part of the *Vite*.

as a spark of fire that illuminates the mind of the artist and finds its natural external realisation in the drawing itself. To illustrate the relation between drawing and 'Idea', Zuccari makes frequent use in the text of the metaphor of the *scintilla* – implanted by God – and of the fire illuminating the mind of the artist:

'And because examples facilitate things, I will present an example of how the drawing forms in our mind. Therefore let me say that just as when fire is made and the fire steel strikes the flint, and the flint releases sparks which light the tinder, then sulphur matches held close to the tinder kindle the lamp, in the same way, the intellect strikes the flint of the mind's concepts, and the first concept that sparks, lights imagination's tinder and stirs inspiration and ideal imaginings. The first concept is boundless and confused and cannot be understood either by the power of the soul or that of the intellect. But the spark gradually becomes form, idea and a real image, and the spirit created by a speculative and formative mind. Then the senses are kindled like sulphur matches and ignite the lamp of the intellect, the agent and potential, which, once lit, spreads its light in the speculation and organisation of all things; so that clearer ideas arise, and more reliable judgments, through which the intellect grows in an awareness and formation of things. And from forms derive order and rule, and from these, experience and practice: and in this way the lamp of intellect becomes clear and bright.'

⁴⁸

The notion of 'Idea' is particularly important in the Italian treatise production of the second part of the sixteenth century and constitutes the theoretical substratum of Mannerist artistic production, which abandoned the study and imitation of nature. The drawing, associated with the concept of 'Idea', consequently, becomes the original form of all that a human mind is able to conceive. A form which, when further studied and developed through the speculative process of an active intellect, leads to its finalised concrete definition. In his treatise, Zuccari makes no distinction

⁴⁸ 'E perchè gli esempi facilitano le cose, io apporterò un esempio in che modo nella mente nostra si formi il Disegno. Però dico, che siccome per formare il fuoco il fucile batte la pietra, dalla pietra n'escono faville, le faville accendono l'esca, poi appressandosi all'esca i solfanelli s'accende la lucerna; così la virtù intellettuva batte la pietra dei concetti nella mente umana; e il primo concetto, che sfavilla accende l'esca dell'immaginazione, e move i fantasmi, e le immaginazioni ideali; il qual primo concetto è interminato, e confuso, né dalla facoltà dell'anima, o intelletto agente, e possibile è inteso. Ma quella favilla diviene a poco a poco forma, idea, e fantasma reale, e spirito formato di quell'anima speculativa, e formativa; poi s'accendono i sensi a guisa di solfanelli, e accendono la lucerna dell'intelletto agente, e possibile, la quale accesa diffonde il suo lume in ispeculazione, e divisione di tutte le cose; onde ne nascono poi idee più chiare, e giudizi più certi, presso de' quali cresce l'intelligenza intellettuva nell'intelletto alla cognizione, o formazione, delle cose; e dalle forme nasce l'ordine, e la regola, e dall'ordine, e regola l'esperienza, e la pratica: e così vien fatta luminosa, e chiara quella lucerna dell'intelletto'. In Federico Zuccari *L'idea de' pittori, scultori et architetti*, 2 Vols (Turin: per Agostino Disserolio, 1607), vol. 1, 25. (Writer's translation). See also the reprinted edition in, Detlef Heikamp ed. *Scritti d'arte di Federico Zuccaro* (Florence: L. S. Olschki, 1961).

between drawing and 'Idea' (as Vasari does, for instance), and he theorises the existence of a *disegno interno*, an inner drawing, and a *disegno esterno*, an external drawing. In Chapter 1 of *L'idea de' pittori, scultori et architetti*, Zuccari explains that the distinction between *disegno interno* and *disegno esterno* is essential for structuring reasoning on the nature of drawing. In the first volume of the treaty, the idea of *disegno interno* is developed in both its general and particular characteristics. In contrast, the second volume discusses *disegno esterno* in its general and particular aspects, its relationship to artistic forms, and its scientific and philosophical dimension.

'Therefore, since my intention is to examine and discuss Drawing as the origin and rule of an [ideal] order, then I too should proceed in an orderly way. I will do so in the footsteps of the philosophers, in particular Aristotle, because they traditionally begin with the main general principles, then conclude with issues discussed in particular. I will discuss Drawing first in general, considering the term itself and its definition and properties, then I will focus my investigation on each category of drawing, demonstrating its necessity, definition and qualities, since all things can be found in Drawing: imagined and created, invisible and visible, spiritual and corporal. Finally, I will extensively discuss drawing as a human practice, inasmuch as it belongs to our noble professions of painting, sculpture and architecture, and given that this is my primary aim. To proceed in philosophical order and for the greater clarity and comprehension of those whom it will please to read my work, I have divided it into two books, and these into chapters. In the first book I explain the essence, properties and operation of the inner drawing, both in general and in particular; in the second, I discuss the external drawing and its normative principles, and their general and particular use by painters, sculptors and architects.'⁴⁹

⁴⁹ 'Volendo dunque trattare, e discorrere del Disegno come causa e regola dell'ordine, è dovere, che io ne ragioni con ordine; e però seguendo l'orme de' filosofi, e particolarmente d'Aristotele, che è di cominciar sempre dalli principi primi, e generali, e poi passar alle conclusioni delle cose, che si trattano in particolare; discorrerà del Disegno prima in genere quanto al nome, alla, definizione, e sue proprietà; poi mi ristringerò a trattar di esso in singolare, cioè di qualsivoglia sorta di disegno, e mostrando anco la neceissità, la definizione, e qualità di ciascun disegno in ispecie; poiché intendo trattar del Disegno in quantocche' si trova in tutte le cose increate, e create, invisibili e visibili, spirituali, e corporali; sebbene poi nell'ultimo mi stringerò a ragionar diffusamente del disegno umano pratico, in quanto appartiene alle nostre nobilissime professioni, pittura, scultura, e, architettura, sendo, che questo è l'intento mio principale. E per procedere con ordine filosofico, ed anco per maggior chiarezza, e capacità di quelli, che averanno gusto di leggere quest' Opera mia, io l'ho voluta dividere in due libri, e questi in capitoli. Nel primo libro mostro l'essenza, proprietà, ed operazione del disegno interno in comune, e poi in particolare. E nel secondo ragiono del disegno esterno, massime del disegno, che a' pittori, scultori, ed architetti è generale e proprio'. Zuccari, *L'idea*, vol. 1, 3. (Writer's translation)

The *disegno interno* is a mental concept that exists a priori to artistic execution. It is instigated by the sudden manifestation of a universal principle – God's will – the artistic and geometric-mathematical root of drawing. Invention, model, form, and style are concepts derived from the *disegno interno*; thus, it possesses both a speculative and practical dimension. The completion of the work of art from the inside to the outside (*disegno esterno*) becomes the founding principle of the intellectual dignity of the artistic work.⁵⁰

Ruggero Pierantoni, a renowned scholar in the field of the psychology of perception, has underlined that Federico Zuccari has been able to 'describe the excellence, the need and the logical principle of the relationship between a *disegno interno* (an idea) and a *disegno esterno*, (its representation)', and to express the consciousness that 'the philosophical act is a metaphorical drawing of the mind'.⁵¹ Pierantoni continues: Zuccari 'sees within the sign an intellectual light, an act of "illumination", a revelation, before – or beyond – the limits of language. The precision of his analytical approach and the theoretical interpretation of the drawing lie in this very moment of general consciousness of the world, a general disposition (or faculty) of the human being to give meaning and form to the external world'.⁵² Pierantoni notes that Zuccari ends his general definition of the *disegno interno* with another metaphor:

[Drawing is like] a mirror made of the finest crystal that reflects the excellent paintings and the marvellous statues; and it is clear that if I stare at or contemplate it, I come to realise that it is the terminus of my gaze, but also the object clearly and distinctively representing all paintings and statues in their material substance. However, the spiritual forms [of paintings and statues] can only shine in the mirror/drawing.

⁵⁰ The dignity of the work of art is discussed in the second book of the treaty in which the author develops the concept of *disegno esterno*. Architecture is discussed in Chapter VIII, 'Dell'architettura, e sua grandezza' [On Architecture and its Greatness]. Zuccari, *L'idea*, vol. 2, 42-45. (Writer's translation).

⁵¹ 'la qual filosofia, o filosofare è un Disegno, e disegnar metaforico nella mente.' Zuccari, *L'idea*, vol. 2, 60. (Writer's translation). Also quoted in Ruggero Pierantoni, *Verità a bassissima definizione. Critica e percezione del quotidiano* (Turin: Einaudi, 1996): 34-35. The text by Pierantoni exemplifies the relevance of the theoretical ideas of Zuccari within the scientific field that studies the nature and the correspondence between mental images and artificial images. See, in particular, the texts 'Il potere della linea' [The Power of the Line] and 'Disegno interno' [Inner Drawing] in the book.

⁵² Pierantoni, *Verità a bassissima definizione*, 22, 34.

This is the philosophical approach for whoever wants to understand Drawing in general: they have to imagine, that since the mirror is the final object of vision and through it things shine, then the Drawing is the final known object through which our intellect knows the things represented in it.⁵³

Pierantoni concludes that the central assumption of Zuccari's writing is 'to attribute to the imaginary and spiritual *disegno interno* the quality of finality and known object', thus giving the drawing 'epistemological status, a device able to generate knowledge and even "truth". Consequently, the drawing should be a subject matter for our comprehension of the world.'⁵⁴

From these considerations it appears to be consequent to enquire how the epistemological status of the *disegno interno* can also be extended to the *disegno esterno*.

1.2.3 Konrad Fiedler and the Origin of the Work of Art

The work of aesthetic philosopher Konrad Fiedler, whose ideas have been widely influential in the field of visual art and art education, contributed in a decisive way to the foundation of an autonomous knowledge of the artistic work; he examined and demonstrated that the problem of (artistic) form can be grasped only through art.⁵⁵ With Fiedler, the revolution started by Kant's analysis of the processes and mechanisms of knowledge is accomplished through art by studying the epistemological potential of artistic activity. In his first book, *On Judging Works of Visual Art* (1876), Fiedler develops the conceptual framework within which he later grounded the theoretical formulation that led to the foundation of the discipline of art criticism.

⁵³ 'Io dico, che sé si pone uno specchio di finissimo cristallo, che sia grande in una sala ornata di piture eccellenti, e di statue maravigliose; chiara cosa è, che fissando io l'occhio in quello, non pure egli è termine del mio vedere ma anche oggetto rappresentante chiaramente, e distintamente tutte quelle piture, e quelle statue secondo la material, e sostanza loro; ma solo in lui rilucono col mezzo delle lor forme spirituali . Così devono filosofar quelli, che vogliono intendere , che cosa sia is Disegno in generale; cioè immaginarsi, che siccome lo specchio è termine, ed oggetto del vedere, ed in lui si veggan le cose risplendere, così il Disegno è termine, ed oggetto conosciuto, entro al quale conosce l'intelletto le cose in lui rappresentate.' In Zuccari, *L'idea*, vol. 1, 6-7. (Writer's translation). The quote is a re-elaboration in Zuccari's original text of a passage cited but unreferenced in Pierantoni's text. See Pierantoni, *Verità a bassissima definizione*, 34.

⁵⁴ Ibid., 34-35.

⁵⁵ For an evaluation of the relevance of Konrad Fiedler's work in the English-speaking world, see Henry Schaefer-Simmern, Introduction to the 2nd edition, in Fiedler, *On Judging Works of Visual Art*, ix.

It also became a key reference for developing artistic consciousness in artists who have contributed the most to a radical and substantial redefinition of pictorial language, among them Paul Cezanne, Wassily Kandinsky and Paul Klee.⁵⁶

In *On Judging Works of Visual Art*, the question of content is reconsidered within the field of artistic form. Fiedler believed that artists engage with their work through a mental process involving a specific artistic cognition, which is different from abstract and conceptual cognition; thus, artistic activity becomes an autonomous form of thinking. Judging the work of art only in terms of its subject matter is not sufficient; it is necessary to see it as an integral part of the complete artistic form within a unified, structured artistic understanding of the world.⁵⁷ One can draw conceptually without there being any tangible result. ‘Only he who is able to hold on to his perceptual experiences in spite of both sensation and abstraction proves his artistic calling,’ claims Fiedler.⁵⁸

Fiedler argues that if it is possible to conceive of an autonomy of artistic form, then any form of subordination to either scientific knowledge or philosophy becomes unacceptable. For him, this subordination is just as inappropriate, in fact, as any presumed need – whether conceptual, perceptual, or otherwise – to imitate nature through a process of mimesis, as is also true for science. In this sense, art and science share the concept of necessity: the human need for self-expression when confronted with the visible appearance of the world, and the dignity deriving from intuitive logic (specifically cognitive) manifested through creative elaboration.

As in the case of Zuccari, the necessity and dignity of the work of art are emphasised here, too. If, according to Zuccari, the externalisation of drawing is needed to make the inner drawing visible, then in Fiedler, conception and realisation are reciprocally bonded and indissoluble. Although Zuccari sees the ‘Idea’ as originating in the mind of the artist, the concept of the origin of artistic creation as intended by Fiedler is not conceived as a process, but rather as a semipiternal vortex: the irreducible, unachievable foundation of becoming and of life. This implies, *de facto*, the autonomy of the work of art from any historical determination.⁵⁹ Fiedler argues that the work of art begins where visual experience ends, and where the continuous flux of the visible

⁵⁶ Ibid., vi-xx.

⁵⁷ Ibid., 11.

⁵⁸ Ibid., 37.

⁵⁹ Fiedler discusses art history in Chapter 2. At the end of the chapter, (paragraph 5), the author writes: ‘Whoever has a predominately historical rather than artistic interest in works of art will run the risk of considering the historical as the essential value, and through the historical study of the parts will never reach an understanding of the work as a whole.’ Ibid., 20.

leaves room for the activity of the hand to consolidate, through form, the stream of images.⁶⁰ Almost paradoxically, when the impulse towards an act of representation activates the movement of the hand, the hand replaces the eye and the conscious mind. For Fiedler, the exclusive knowledge of art is endowed with tactile values. The continuous creative stream between perception and representation allows for a constant production and reproduction of the signifier and the signified.

1.2.4 **The Construction of the *Disegno Esterno* [External Drawing]**

Fiedler's ideas further develop Zuccari's concept of *disegno interno* and *disegno esterno*. One could argue that the transition from *disegno interno* to *disegno esterno* does not occur merely through intuition or metaphorical illumination; rather, it is predominantly a constructive process that utilises logical and critical-operational ideas, thereby providing concreteness to the transfer. Generally, when transitioning from a mental image to a drawing, we employ codified conventions (i.e., the rules of perspective or axonometric projection). However, the application of these conventions is never entirely objective: there are always interactions between the objectivity of the code and its subjective appropriation. For instance, one can readily distinguish between a perspective drawn by Frank Lloyd Wright and one by Le Corbusier, a sketch by Alvar Aalto, and one by Álvaro Siza, whose research echoes Aalto. More broadly, a drawing always reflects an architect's distinctive artistic approach to their work. The *ductus* of a sign constitutes its uniqueness, demonstrating how it was drawn, the manner in which the artist handled the tool, and its expressive character and artistic personality.

In architecture, however, the mere ability to draw is not a sufficient condition. Between the idea and its representation, the architect always requires a field of mediation to filter his imagination before encountering the instrument of representation (whether a pencil or a computer). This filter can be seen as an intermediate discursive space where an autonomous figurative apparatus, often in opposition to the instrument of representation itself, dialectically orients the formal ideas and the modality in which they may be received within the chosen universe of representation (i.e., paper or the digital sphere, both concrete and virtual). This transitional system comprises figurative embryos and is capable of polarising both formal and representational aspects. Therefore, in this conception, the 'Idea' is not a narcissistic or emotive container but is ready to carry values that are broader

⁶⁰ Ibid., 38-9.

in scope than the subject alone. During the last century, as architectural projects became increasingly self-referential, these notational systems acquired greater importance and various structural expressions and degrees of abstraction. Instances of these normative devices can be found in the work of many architects: Corbusier's 'Five Points'; Aldo Rossi's circular column, cube, and triangular beam; the nine-box grid for the development of the 'Texas Houses'; and, later, the 'Fabrications' (1974) and 'Fabrications 2' (1974) by John Hejduk, the 'Micromegas' (1979) and the 'Chamber Works' drawing series by Daniel Libeskind, and, last but not least, the 'Classificazione, per sezioni, di situazioni spaziali' [Classification, by sections, of spatial situations] (1968) by Franco Purini – which sits at the centre of my research.⁶¹

Within this framework, drawing emerges as a fundamental mode of architectural thought. Its role is not limited to anticipating the form of future construction; rather, it acts as a generative event – an active moment of invention shaped by the inherent ambiguity of the image. Drawing occupies a space between what is imagined and what is realised. It is both distanced from the physical building, which it merely suggests or projects, and simultaneously present as an object in its own right – whether material or digital.

Beyond its role in describing architecture, drawing retains a self-referential quality: it carries traces of the design process, functions as a record of evolving intentions, and can even serve as a structural guide for the formal development of a project. The act of moving from one mode of representation to another – from sketch to technical plan, or from digital model to built form – always involves more than mere technical translation. It opens up new semantic fields that reshape the meaning and intent of design.

The relationship between drawing and building is therefore not a direct correspondence, but rather a layered and interpretive progression. Some architects embed additional value in the drawing itself, enriching the representational field; others shift that richness into the built form. Each phase of the design and construction process operates within its own logic and language, making it impossible to determine in advance which sphere – drawing or building – should be privileged. What ultimately matters is the coherence and integrity of the architectural work as a whole. This research, by focusing on Franco Purini's work, seeks to explore drawing specifically as a space of representation – where ideas take shape, meaning is tested, and architecture begins to find its form.

⁶¹ Regarding notational systems, see the canonical work by Nelson Goodman, *Languages of Art*, in which the author attempts to establish a general theory of symbols and to clarify in the notational systems the technical specificities that this theory identifies. However, since the focus of the present research is not primarily to establish relationships with other disciplines, it will not be discussed. See Nelson Goodman, *Languages of Art* (Oxford: Oxford University Press, 1968). See also the encyclopaedic study on the notational system in architecture: Marcello Sestito, *Alfabetti di Architettura* (Rome, Gangemi Editore, 1994).

1.3 Drawing and the Analytical Line: The Constructive and the Destructive Character of Drawing

1.3.1 The Destruction of Language as *Grammaire Raisonnée*: Manfredo Tafuri and Piranesi's "Wicked" Drawings

In line with Fiedler's conception of the dynamic interplay between perception and representation – and resonant with Zuccari's notion of the 'Idea' – this continuous, generative flux can equally be traced in the architectural drawing, which has long served as both a source and a site for the formation and dissolution of linguistic structures. However, this association assumes greater significance in relation to the highly stratified phenomena, such as industrialisation and the scientific revolution, that the modern age presented to architecture. Architectural content became more socially regulated, while the architect's creative language adopted a freer and more self-referential style. Particularly in the eighteenth century, this situation culminated in an unavoidable crisis in the classical principles of architecture and their codification within the architectural orders. Consequently, the analysis of the separation between architectural forms and their content emerged as a subject for architectural reflection. The visionary French architect Étienne-Louis Boullée, for instance, begins the introduction of his 'Architecture, Essai sur l'art' (1796–97), precisely by marking a clear separation from Vitruvius's codification of architecture. Boullée writes:

What is architecture? Shall I join Vitruvius in defining it as the art of building?
Indeed, no, for there is a flagrant error in this definition. Vitruvius mistakes the effect for the cause.

In order to execute, it is first necessary to conceive. Our earliest ancestors built their huts only when they had a picture of them in mind. It is this product of the mind, this process of creation, that constitutes architecture and which can consequently be defined as the art of designing and bringing to perfection any building whatsoever. Thus, the art of constructions is merely an auxiliary art, which, in our opinion, could be called the scientific side of architecture.

Art, in the true sense of the word, and science: these we believe have their place in architecture.⁶²

⁶² Etienne-Louis Boullée, 'Architecture, Essay on Art', trans. Sheila da Vallée, in *Boullee and Visionary Architecture*, ed. Helen Rosenau (London: Academy Editions, 1976), 83.

While Boullée still affirms architecture's adherence to natural laws, thus conveying an implicit critique of the arbitrariness of architectural language proposed by French author and architectural theorist Charles Perrault a century earlier, it is evident in this passage that architectural conception becomes the subject of a new, critical investigation, as does its purpose: the architectural object.⁶³

More generally, in the context of modernity, architectural drawing played a vital role in both the renewed understanding and critical redefinition of the architect's work. It emerged as a space for conceptual inquiry, where architecture could reflect on its own processes, languages, and purposes. The architect's role, in turn, became increasingly divided between a productive function – aligned with evolving technical, scientific, and societal demands – and a reconsideration of architecture's artistic and intellectual foundation, with drawing serving as a medium for both experimentation and critique.

One of the most striking manifestations of this shift can be found in the work of Giovanni Battista Piranesi, which will be the focus of this subsection. Piranesi's work also reveals the extent of the crisis surrounding architectural language and arguably inaugurates a more autonomous and self-referential idea of language. Primarily composed of etchings, Piranesi's oeuvre embodies a radical and iconoclastic engagement with the architectural codifications of the eighteenth century, which he gradually destabilised and transformed to the point of fragmentation, thereby exposing the limitations of inherited forms and signalling the need for a new (freer) dimension of architectural language and modern modes of representation.

The following text will investigate architectural drawing in relation to Giovanni Battista Piranesi's research. Especially the text dwells on Manfredo Tafuri's canonical study “L'architetto scellerato”: G. B. Piranesi, l'eterotopia e il viaggio” [“The Wicked Architect”: G. B. Piranesi, Heterotopia, and the Voyage”], to expand upon the reflections it enables within the specific context of architectural drawing.

In fact, Manfredo Tafuri's investigation of Piranesi is also instrumental in informing and orienting my analysis of Purini's work. It is evident that the works of both Purini and Piranesi share many analogies. Nevertheless, incorporating Tafuri's reading of Piranesi into this relationship can draw a more accurate association between the two. Furthermore, it is essential to note that Tafuri's research on Piranesi, culminating in the essay “L'architetto scellerato”: G. B. Piranesi, l'eterotopia e il viaggio” began in

⁶³ Manfredo Tafuri, *Teorie e storia dell'architettura*, 5th ed. (Bari: Laterza, 1988) (First published 1968), 34.

the mid-sixties.⁶⁴ In fact, traces of Tafuri's discussion of Piranesi's work can already be found in *Teorie e storia dell'architettura*, [Theories and History of Architecture] (1968), a book contemporaneous with 'Una ipotesi di architettura', whose front cover illustration shows a project by Franco Purini and Laura Thermes.⁶⁵

More specifically, if Tafuri's investigation of Piranesi is relevant to assessing the emergence of the ideological significance and contradictions of 'imagination' within the history of modern architecture, then in the context of my research, Tafuri's work is utilised to support the idea of drawing as a systematic critique of architecture that will inform my reading and analysis of Franco Purini's 'Una ipotesi di architettura'. For Tafuri, Piranesi's drawn critiques underscore, in fact, a systematic logic and can be viewed as potential architectural hypotheses, which, it could be added, possess a form that allows for an analysis of the compositional and constructive characteristics of the representation.⁶⁶ This interpretation of Piranesi's drawings as hypotheses also applies to Purini's research.

It is precisely along this double path of content and composition that Piranesi establishes the subsequent character of his hypotheses. Nonetheless, both these components are associated with a third unifying element, which is the notion

⁶⁴ Tafuri, 'The Wicked Architect'. See footnote 10.

⁶⁵ Manfredo Tafuri, *Teorie e storia dell'architettura*, 5th ed. (Bari: Laterza, 1988) (First published 1968), 34-36. See also Manfredo Tafuri, 'G.B. Piranesi: l'architettura come "utopia negativa"', in *Angelus Novus* no. 20 (Venice: La Nuova Italia, 1971), 89-127, and Manfredo Tafuri, *Progetto e Utopia* (Bari: Laterza, 2007) (1973), 16-22. English translation: *Architecture and Utopia: Design and Capitalistic Development* (Cambridge, MA: The MIT Press, 1976), 13-19. Surprisingly, the relationship between Tafuri and Purini has never been subjected to accurate study. A short essay, published on an online journal by historian Marco Biraghi seems to have at least begun to consider it. Although in Biraghi's major work on Tafuri, *Progetto di crisi. Manfredo Tafuri e l'architettura contemporanea* (2005), Purini (incredibly enough) finds no place, in the recent 'Il disegno politico di Roma' (2015), Biraghi does draft a correspondence between Tafuri's analysis of Piranesi and a 1987 urban project proposal for Rome by Purini in which Biraghi emphasises the need for a wider political understanding of the concept of *Disegno* as established by Purini and Tafuri. See Marco Biraghi, *Progetto di crisi. Manfredo Tafuri e l'architettura contemporanea* (Milan: Christian Marinotti Edizioni, 2005). English version: *Project of Crisis: Manfredo Tafuri and Contemporary Architecture* (Cambridge, MA: MIT Press, 2013) and Marco Biraghi, 'Il disegno politico di Roma' [The Political 'Disegno' of Rome], in *Viceversa* no. 1, *Gli spazi della politica*, ed. Giovanni La Varra, online journal (Turin: Zeroundicipiù, 2015), ISSN 2465-3020. <http://www.zeroundicipiù.it/wp-content/uploads/2015/03/VV-1-03-Marco-Biraghi-Il-Disegno-Politico-di-Roma.pdf>. Accessed 01-05-2025.

⁶⁶ Tafuri continues his analysis by examining the cultural debate of the Enlightenment though the work of Julien Offray de La Mettrie and Edmund Burke, expounding the particular functionality of utopian representations: 'The rhetoric of the infinite and the linguistic disorder – the language of the imaginary – thus constitute invitations to new techniques of domination. The utopianism of Enlightenment architecture is made clear by a lucid acceptance of this new role: architecture now tends to formulate hypotheses, rather than to offer solutions. And no one will ever claim that a hypothesis must be completely realized.' Tafuri, "'The Wicked Architect'", 30.

of ‘construction’ as it occurs within architectural representation. Piranesi’s representation exceeds a conventional denotative understanding by maintaining the composition of architectural constructions through the graphic illustration of fragments of architectural elements and parts, while simultaneously constructing a narrative instigated by their paratactic juxtaposition in the picture plane, in other words, by the construction of the architectural composition.

In this operation, Piranesi operates as a mad visionary with his *capricci*, obsessions and hyperboles, but also as an engineer, surveyor, technician and keen observer of any aspect of the architectural phenomenon, including the scientific and material part of architecture, in particular ancient Roman construction techniques. What draws the observer into his work is the combination of meticulous detail in the depiction of building elements and the imaginative depth of their graphic rendering. This interplay invites the viewer to engage with the logic of the construction, only to become entangled in a fruitless effort to reconstruct its elusive narrative.⁶⁷

For example, the plates of the ‘Antichità Romane’ [Roman Antiquities] (1784) clearly exhibit the coexistence of imagination and precision, but with an even more stringent character: the ‘Antichità Romane’ are representations of representations. Forerunners of the collage technique, these works create a unifying field that stages the representations of building parts, fragments of urban plans or buildings, building inscriptions and technical descriptions.

In the ‘Carceri’, the characteristics of Piranesi’s images are pushed to an unprecedented limit in which, paradoxically, the representation of spaces is accomplished through the obscurity of its content: the multiplications of labyrinthine spaces, the measured effect of vertigo attempted, the impossibility to distinguish clearly the interior spaces from the exterior, therefore, the impossibility of distinguishing whether the space represents a space or, instead, exceeds the picture frame to also enclose the space and the reality of the observer. Manfredo Tafuri has proposed an interpretation of the two constituent poles of the content represented. Tafuri concentrates in particular on the description of Plate IX of the series, ‘La ruota gigante’ [The Giant Wheel], where Piranesi’s repertoire of catwalks and torture machines are either set in the foreground or enclosed within a sequence of two colossal oval eyes, which establish the main architectural theme of the composition. Tafuri sees within this representation an encounter ‘without any didactic or narrative

⁶⁷ In his analysis of the *Carceri*, Tafuri discusses the relationship between Piranesi’s plates and the spectator and attempts to reconstruct the mental process that created it. Nevertheless, it is possible to argue that this is a characteristic that can be recognised in most of Piranesi’s work. See Tafuri, “The Wicked Architect”, 26.

intent' between 'the evocation of a primordial structurality connected with the Lex Romana', and the disarticulation of the architectural structure represented on the plate 'whose dominating element is the randomness of the episodes, the lawless intertwining of superstructures, the undermining of the law of perspective, so as to make non-existent sequences of structures seem real'.⁶⁸

In this compositional method, Tafuri identifies the complex and programmatic premises through which Piranesi engages a 'systematic critique of the concept of place carried out by using the instrument of visual communication'; namely, through drawings.⁶⁹

However, it is not possible to completely remove the narrative component in Piranesi's drawing or, to be more precise, the descriptive character of the drawing. It could be argued that in Piranesi, description is more than a simple denotation embedded within the particular structure of the composition. It is the complexity of the description within the composition that 'obliges' the observer to reconstruct the content of the representation.

If in the 'Carceri' Piranesi sets his programmatic research, it is in the project for the 'Campo Marzio' that it is possible to evaluate the concreteness of his premises. Conceived as a representation of a representation, according to Tafuri, the 'Campo Marzio' lends itself to a plurality of interpretations, both as a project and as a critique of the notion of urban form. Within the composition of the urban plan, the metamorphic proliferation of typological structures presents the dissolution of the hierarchical principles of the city organism: the buildings that appear on the plan are arranged in a rational configuration, but this also evidences their irrational nature. Moreover, as Purini observed, the plan displays the paradox of an unknown number of variations of the typological configurations: 'all different, the buildings of the 'Campo Marzio' are, in reality, all equal as they are not capable of generating urban fabric, in other words, a growth of artefacts outside the realm of the urban layout,

⁶⁸ Ibid., 26. Here, Tafuri's interpretation is informed by the analyses of Ulya Vogt-Goknil and Mary Patricia May Sekler.

⁶⁹ Ibid., 27. For a consideration of the importance of drawing for Piranesi, see also the passage in *Prima parte de architettura e prospettive* where, in the dedication to Nicola Giobbe, Piranesi declares the subjective and objective impossibility of conceiving a concrete plan for the restoration of architecture's ancient majesty, the recognition of drawing as the only current alternative, but also the warning that to become true intellectual work, drawing has to win back the creative freedom that became a prerogative of sculpture and painting alone: 'No other option is left to me or to any other modern Architect than to explain his own ideas through drawings, and in this way to take away from Sculpture and Painting the advantage that, as the great Juvarra said, they have in this respect over Architecture; and to also take it away from the abuse of those who possess wealth, and who make us believe that they themselves are able to control the operations of Architecture.' Piranesi. *Prima parte di architettura e prospettive*. Cited in Tafuri, 'The Wicked Architect', 29.

a densification of individual buildings substantially homogeneous in all its parts.⁷⁰ Yet, as Tafuri specifies, if the double character of 'Campo Marzio' – as a proposition and as a critique in its re-presentation of ancient ideal urban 'situations' – testifies to the 'impossibility of an unambiguous definition of the architectural language', at the same time 'precisely because of the absurdity of its *horror vacui*, [it] becomes a demand for language, a paradoxical revelation of its absence. Negation and affirmation cannot be separated.'⁷¹

In his examination of how Piranesi carried out a series of 'systematic critiques' of the main components of architectural language, Tafuri sees the prefiguration of the inherent contradictions that lie at the base of the then rising capitalistic system of production, and of the consequent reduction – if not dissolution – of architecture within the new ideological structures of the 'city of the bourgeoisie': from the metaphorical correspondence between the 'Carceri' torture machines and the coercion of the perfect 'machine-universe' to the 'typological negation' and the 'semantic void' generated by the compulsive accumulation of architectures in the 'Campo Marzio'.⁷²

Tafuri identifies the consistency of this ambivalence in Piranesi's work (which also includes a relevant series of writings such as the *Parere su l'Architettura* (1765) written in the form of a Platonic dialogue between the rational Protopiro and the irrational Didascalo) in what he defines as the 'principle of contradiction' – to be set in opposition with the noncontradictory character of the dialectic of the Enlightenment, which upheld the possibility of a synthesis in the form of universality.⁷³

The key argument providing the conceptual framework for my investigation of Purini's work emerges strongly in the 'Cammini' series, one of Piranesi's final works. In these etchings, the rationale behind the systematic destruction of architectural language is crystallised, alongside a compelling vision of what architecture becomes after the collapse of its language.

⁷⁰ Franco Purini, *Attualità di Giovanni Battista Piranesi* (Melfi: Libria, 2008), 60.

⁷¹ Tafuri, "The Wicked Architect", 38.

⁷² Ibid., 35. On this argument, see also Biraghi, *Progetto di crisi*, 68, [Project of Crisis, 33-34].

⁷³ Tafuri, "The Wicked Architect", 36. It should be noted that the 'analysis of the contradictions' and their emergence within the condition posed by the advanced capitalist society was one of the driving rhetorical methodologies of the leftist critique in the sixties and seventies. Therefore, by advancing Tafuri's ideologically motivated argument, the re-proposition of this analytical field also implicitly presupposes its validity in the context and motivations of the present research. This aspect, which is to some extent central for an evaluation, requires a more explicit analysis than will be attempted in the conclusion of this work. The values of 'contradiction' in the elaboration of Purini's projects and theory could be, in fact, directly transposed from those by Tafuri.

In discussing the series ‘Diverse Maniere d’adornare I Camini’, Tafuri highlights ‘the destruction of language as *grammaire raisonnée*’, concluding that ‘the plates of the ‘Cammini’ are the fruit of a reduction to zero of architectural constructivity (...).⁷⁴ In the ‘little architecture’ displayed in the ‘Cammini’, anything could hypothetically become material available for the contamination of the composition, thus making it impossible to establish any ordering procedure for it. In fact, historian Giorgio Ciucci has furthered Tafuri’s analysis by observing:

Table I of the ‘Cammini’ series shows a series of architectural elements, from a plan of a town to a temple, from various kinds of walls to a series of decorative objects, from bridges to columns; the elements are represented and described as such, with no mention of the relations that may exist between them. They are like parts of a machine that no one knows how to assemble: order is no longer guaranteed; architecture no longer contains the reason for the machine. The new order is a technical order; it is science that determines the techniques according to which parts of the machine should be assembled. Now, an eclipse is the result of a geometrical operation excluding any deception by the eye. Now, it is possible to ‘describe’ the world by means of a purely scientific language.⁷⁵

Furthermore, art historian Gianni Contessi has noted that the images in the ‘Cammini’ are manipulated through ‘incongruous juxtapositions of details’ and by a ‘nearly taxonomic insistence on conjugating heterogeneous motifs that generate a new and eclectic unity within the drawing of the surface; in other words, of drawing *tout court*.⁷⁶

For the architect, a ‘scientific description’ is partial and inherent to the construction of buildings if Boullée’s reasoning is accepted, or only illusory, if Didascalò-Piranesi is followed. The architectural conception is not a simple descriptive practice that can be deduced (or interpreted), as Purini’s work will demonstrate.

⁷⁴ ‘Quite correctly, in the ‘Diverse maniere d’adornare i cammini’, Piranesi directs his criticism against the very hermetic ‘objectuality’ into which he himself has forced objects (even reducing antiquity to an object). The *desert of the signified* must once again be closely filtered and examined through a further historicist experience. Etruscan and Egyptian architecture are repressed as sources of a primordial constructivity; one can turn to them only to contest again any pretext at a linguistic absoluteness. The destruction of a language as *grammaire raisonnée* is achieved. The plates of the ‘Cammini’ are the fruit of a reduction to zero of architectural constructivity: the richness of the sources and the cult of contamination join in the refusal to render the sources studied truly ‘historical’. See Tafuri, “The Wicked Architect”, 53. (Writer’s translation).

⁷⁵ Giorgio Ciucci, ‘Rappresentazione dello spazio e spazio della rappresentazione’, in *Rassegna*, no. 9, *Rappresentazioni* (Milan: Electa, 1982), 17. (An English translation entitled ‘The Representation of Space and the Space of Representation’ can be found at the end of the cited Italian source).

⁷⁶ Gianni Contessi, *Scritture disegnate* (Bari: Edizioni Dedalo, 2000), 27. (Writer’s translation).

In the attempt to identify a relationship with the new methods of production, the scientific process and the new techniques of rationalisation imposed by industrialisation unquestionably implied radical and highly conflictual reconsiderations of the architect's creative work. However, outside this specific contextualisation that sees the architect as a 'producer' or 'builder', there is also another context, delineating a wider cultural dimension in which the modern architect operates. Within this understanding, initiated by Piranesi, the question of drawing and of representation operates on a more composite cultural ground, where utilitarian, ideological, technical and creative tendencies delineate a collage in which none of the constituent fragments can be representative of the whole. In this scattered picture, drawing and representation operate a systematic critique of any form of rationalisation and of any attempt towards a *reductio ad unum*.⁷⁷

In synthesis, Piranesi inaugurates the architect's tendency towards a conceptualisation of the design work, the birth of the concept of architectural language as an autonomous language, since – as Tafuri reminds us – in order to analyse a language thoroughly it must first be isolated not only from its historical foundations but also from what is signified. But Piranesi also introduces an attitude towards the accumulation of knowledge by means of 'variations on a theme' within the circularity of the representation process.

⁷⁷ An analysis of the inherent criticality of drawing and the question of the architect's creativity in relation to innovation in the productive systems is certainly more complex and would require a different type of investigation from the present one. Certainly, one of the defining moments of a situation that already saw the emergence of the Arts and Crafts movement at the end of 19th century is the well-documented 1914 Deutscher Werkbund Congress debate between Herman Muthesius and Henri van de Velde. On that occasion, Muthesius presented ten guiding principles intended for charting the association's new course. In particular, Muthesius identifies the need for the standardisation of industrial 'types' for both architecture and the applied arts as the key factor for the development of consumer products and for the export of German industry. Henri van de Velde, however, rose to read a statement upholding the absolute freedom and individuality of the Werkbund's artist. Yet if the 1914 Werkbund debate epitomises the argument, it could also be argued that the genesis of these debated ideas can be traced back to Gottfried Semper's formulations in *Wissenschaft, Industrie und Kunst* (1852); and particularly in *Der Stil in den technischen und tektonischen Künsten oder Praktische Ästhetik* (1860), which analyses, through the definition of a robust theoretical and ideological apparatus, the impact of industrialisation, mass consumption and the influence of new methodologies and materials on design. See Gottfried Semper, *Wissenschaft, Industrie und Kunst: Vorschläge zur Anregung nationalen Kunstgefühles, bei dem Schlusse der Londoner Industrie-Ausstellung* (London: Braunschweig, Friedrich Vieweg und Sohn, 1852). English translation 'Science, Industry and Art', in Gottfried Semper, *The Four Elements of Architecture and Other Writings*, trans. Harry Francis Mallgrave and Wolfgang Herrmann (Cambridge: Cambridge University Press, 1989), and Gottfried Semper, *Der Stil in den technischen und tektonischen Künsten oder Praktische Ästhetik* (Frankfurt am Main: Verlag für Kunst und Wissenschaft, 1860). English translation *Style in the Technical and Tectonic Arts; or, Practical Aesthetics*, trans. Harry Francis Mallgrave and Michael Robinson (Los Angeles, CA: Getty Research Institute, 2004).

Thus, he achieves the paradox, but also the extremism, of the intention of the artist-architect (any distinction would be superfluous in this case), which anticipates the dialectic of avant-garde art: art 'that can only destroy itself' and which 'only by destroying itself, can constantly renew itself'.⁷⁸

Analogously, it could be argued – drawing on an idea later developed also by Franco Purini – that Piranesi's apparatus was also the forerunner of the creative languages that have been described as 'bachelor machines', namely machines aiming to produce 'nothing' other than their own internal logic: an unproductive condition that has proved, paradoxically, to be very fertile in terms of creativity. Within this interpretation, the drawing becomes a machine-like apparatus that establishes and fuels only the creative logic of the architect's work. French writer Michel Carrogues conceived the idea of the 'bachelor machine' in the fifties as an interpretative device for confronting Marcel Duchamp's work *Grand Verre* and Franz Kafka's short story *In the Penal Colony*. This 'myth' (as it is often interpreted) was further expounded by Swiss curator and art historian Harald Szeemann in order to characterise certain creative approaches and works in art and literature, typical of modern era culture. According to Carrogues's description, the 'bachelor machines' have no particular function, nor they are the product of a rational elaboration; they present themselves as impossible mechanisms: useless, incomprehensible and often the result of ravings. Even if they seem to correspond to a constructive logic, they remain extravagant mechanisms that find their motivations only within the artists' refusal to 'procreate', and the contemporary assertion and negation of eroticism, death and immortality. Driven only by the laws of subjectivity, the 'bachelor machine' adopts a mechanical figuration to simulate mechanical effects.⁷⁹

With reference to the relationship between the Bachelor Machines and drawing, in his seminal publication *L'architettura didattica* [Didactic Architecture] (1980), Franco Purini concludes the paragraph dedicated to drawing with a consideration on Kafka's *The Penal Colony*, probably inspired by the work of Michiel Carrogues and Harald Szeeman. Purini writes:

⁷⁸ Jean Fautrier, as quoted by Tafuri in the conclusion of the essay. See Tafuri, "The Wicked Architect", 54. The quote in Tafuri is taken from Jean Fautrier, 'Parallelen zur neuen Malerei', in *Blätter + Bilder*, no. 1, (Wurzburg and Vienna: March-April 1959).

⁷⁹ Michel Carrogues, 'Istruzioni per l'uso/Direction for Use; Come identificare le macchine celibati/How to Identify the Bachelor Machines; Come inquadrare le machine celibati, How to Place the Bachelor Machines, in *Le Macchine Celibi. Bachelor Machines*, Harald Szeeman ed., Venice Biennale Exhibition Catalogue (Venice: Alfieri Editore, 1975), 17-49.

I would like to close these notes on drawing with a less serene reference [compared to those investigated] based on an uneasiness that emerged while writing this text, caused by an association of ideas provoked by the topic itself. In the story *The Penal Colony*, Franz Kafka invents a disturbing machine, the 'draughtsman', which kills the condemned person by transcribing a drawing onto his bare skin. The complexity of the Kafkaesque invention can also find a comparison in architecture, where the projects and the drawings also mark the body of whoever draws them, covering him, over the years, with jumbled hieroglyphics. As Piranesi's experience teaches us, the action of drawing is not bloodless, it also implies the author's signature on his body. Signs are commodities that are sold in the city – itself a commodity. Therefore, drawing [*disegnare*] also means subjecting ourselves to a 'draughtsman', which is the city, that *signs* or marks us with its presence. Consequently, we can do nothing else but transcribe onto ourselves – and in essence, onto our consciousness – the responsibility of the forms we propose. The Kafkaesque draughtsman is each one of us.⁸⁰

In conclusion, regarding the purposes of the present investigation, it is important to emphasise the emergence of the 'wicked' character of the drawing, seen both as an autonomous field of architectural elaboration and as a defining characteristic of it. Piranesi's representations reveal in a systematic way the arbitrariness of any rational foundation for architecture – the fatuousness implicit in any attempt to pursue a correspondence between the 'language of architecture' and its factual reality. When acknowledging that this irreducible separation is one of the most characterising conditions of modernity, and that consequently it is also a lens for viewing the architectural problem critically, then recognising drawing as more than the simple denotation of an architectural idea within a codified set of rules should be a logical consequence. What emerges from this is the autonomous condition of the architectural drawing, while the question of its finality is maintained. To consider drawing as being in itself a critical discourse on architecture and a proposition in the form of a *simulacrum* of the architectural object becomes at the same time a form of writing and a form of constructing architectural hypotheses. Architectural hypotheses, when established and radicalised within the drawing, exceed their conventional relationship (the illustration of the constructive, programmatic, aesthetic facets of a building), to become instead, and by definition, the place of their systematic critique. This, as Piranesi purported, appears to be the only horizon conceivable for the architect: 'No other option is left to me, or to any other modern Architect, than to explain his own ideas through drawings.'⁸¹ Hence, it is 'wicked' drawing rather than practical drawing that is under research here.

⁸⁰ Franco Purini, *L'architettura didattica* (Rome: Gangemi Editore, 2002) (1980), 93. (Writer's translation).

⁸¹ Piranesi, *Prima parte di architetture e prospettive*, dedicatory letter to sig. Nicola Giobbe.

But what does a ‘wicked drawing’ imply? Is this attribution not simply another way to bind drawing to an instrumental role? Is this supposed instrumentality not also a contradiction in terms, or even a paradox, considering the type of sources through which it has been formulated? Assuming that the conventional character of drawing is always fictional, and that by internalising its inherent contradiction, it becomes a discursive system for operating a systematic critique, then to what extent is it possible to outline a theoretical formulation of drawing in which the duality of its worthy/ practical character is maintained? Or would such a formulation imply the transformation of wicked drawing into practical drawing? Yet the notion of ‘systematic’ inherently implies sequence, series, and even metamorphosis. In other words, it evokes a dynamic conception of drawing as a process of progressive constructions and destructions – each containing within itself the seeds of new constructions, giving rise to further destructions. The very idea of ‘convention’ thus loses its critical authority, revealing itself not as a stable criterion but as a chimera – an illusion of order masking the paradoxes at the heart of the drawing act. Yet what would be a suitable substitute criterion after any conventional understanding of drawing proves to be paradoxical? What remains fundamental is the presence of an author (in whatever form) and the question of the quality of the work produced.

Obviously, no exit from the paradox is possible, since the inherent ambiguity that characterises drawing cannot be reduced or removed.

And it is precisely when we are willing to engage with these conceptual entanglements that Franco Purini’s work and ideas become most significant. For Purini, drawing is a question that asks: ‘What is drawing?’⁸² Since any argument about drawing in general seems destined to implode within its own contradictions, this must be accepted, and the focus shifted instead to the quality of the ‘writing’ inherent in a drawing, expressing the architect’s relationship with the world. In the early work of Franco Purini, one such hypothesis has been researched.

⁸² Purini writes: ‘Last month the journal *Domus* published a text of mine in the form of a self-interview on the subject of drawing. I’ve asked myself for the nth time about what is, in reality, such a mysterious and also risky activity, and what levels of our consciousness and of our desire to change the world are involved. I said ‘risky’ because, by embodying an often-extreme experimentalism, drawing pushes us towards the uncharted territories of the confusion of languages, their hybridisations and, perhaps, their cancellation. Probably drawing is that part of our spirit that asks us what the act of ‘drawing’ itself is. In this sense, the drawing would be in essence a question.’ (Writer’s translation). Purini, *Una lezione sul disegno*, 32.

1.3.2 Constructive and Destructive Character in De Stijl

The question of the crisis in architectural language, whose early symptoms can be distinctly recognised in Piranesi's work, played a fundamental role in the development of the historical avant-garde at the beginning of the twentieth century; in particular, it was central to the evolution of *De Stijl*. More recently, the subject has become crucial to the radical and conceptually oriented experiences of the sixties and seventies. It also remained central for Franco Purini, who was especially drawn to *De Stijl*'s attempt to systematise artistic language that transcends subjectivity and historicism.

The experience of *De Stijl* as it unfolded between 1917 and 1931 is critical to understanding the specificity of this condition of separation. *De Stijl* presented the challenge of establishing a new codification for the arts. More specifically, this codification addressed the reduction of the totality of visual and spatial phenomena to a limited set of primary elements – lines, planes, and colours – organised according to a particular combinatorial syntax grounded in clarity and order. This quest for essential form aimed to eliminate subjectivity and historical residue in favour of a universal, transdisciplinary language. Concurrently, the sculptural paradigm was characterised by the adoption of the straight line, right angles, and the use of primary colours, which were regarded not merely as formal devices but as symbols of an ideal, abstract harmony. The relationship between art and architecture – in particular between painting and architecture – and the possibility of a synthesis was to represent the defining conceptual problem of this experience and characterised its development. The key to understanding *De Stijl* lies, in fact, in the 'tendency' towards a final unity between the 'destructive character of painting' and the 'constructive character of architecture'.⁸³

According to Theo van Doesburg (at least initially) and Mondrian, if the arts were to remain truthful to the principles of *De Stijl*, then they would have to merge to create a unity. Art historian Yve-Alain Bois in *Painting as Model* summarises the development of these attempts into two distinct theoretical moments.⁸⁴ The first of these indicates the steps to be taken in order to establish a relational basis among different artistic forms, and a definition of the similarities that would determine the degree of a possible interrelation. The steps are the following: all art forms have to accomplish their absolute purification, define their inner limits, conquer their autonomy and discover their artistic specificity within a process of differentiation from other art forms.

⁸³ 'De moderne schilderkunst is destructie van het plastisch-natuurlijke tegenover het plastisch-natuurlijk constructieve van de bouwkunst'. See Bart van der Leck, 'De plaats van het moderne schilderen in de architectuur', in *De Stijl*, no. 1 (Delft: Technische boekhandel en drukkerij J. Waltman Jr, October 1917), 6.

⁸⁴ Yve-Alain Bois, *Painting as Model*, (New York: The MIT Press, 1993), 104.

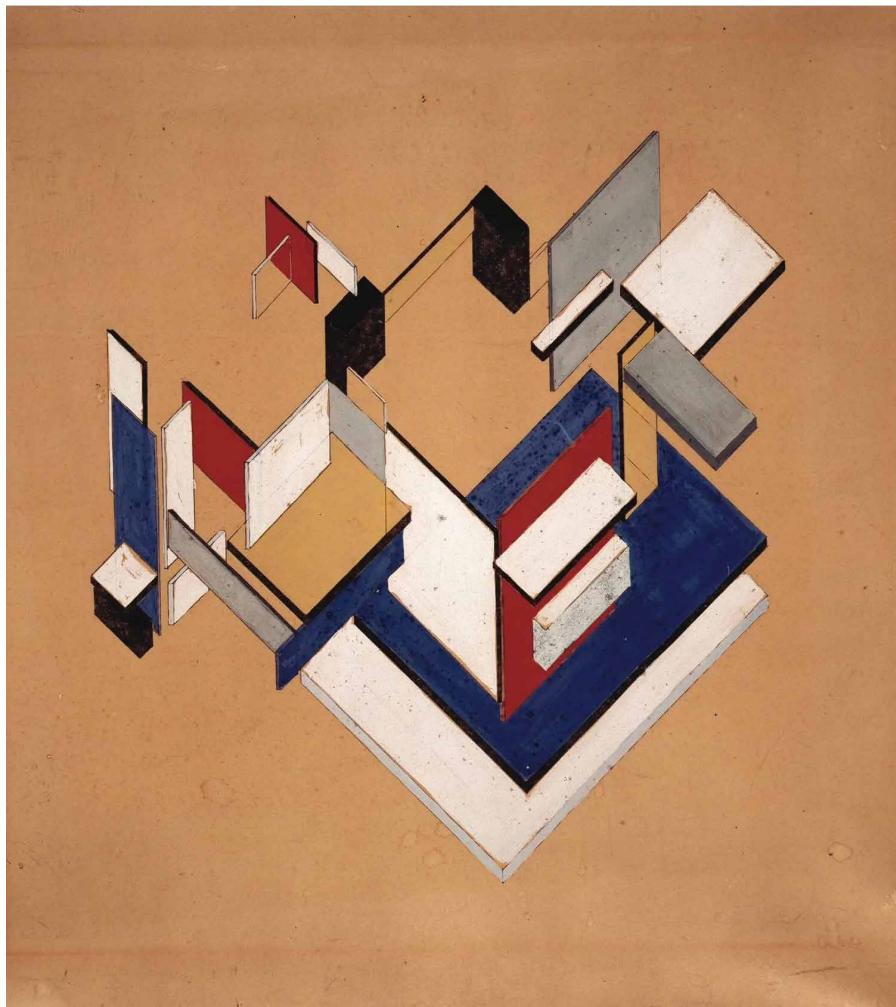


FIG. 1.2 Cornelis van Eesteren and Theo van Doesburg, Project for a *Maison Particulière* (1923). Axonometric projection.

The second theoretical moment developed as a direct consequence of the difficulties that emerged during the collaboration among the members of the group in the elaboration of the phases listed above. For instance, with the collaborative project between Theo van Doesburg and Cornelis van Eesteren for the 'Maison Particulière', the ideas of De Stijl reached their acme and the project proved decisive for the definition of an architectural language conceived of planes. Through a series of axonometric drawings, van Doesburg and van Eesteren developed a deconstructive process. In these 'counter-constructions', there is no longer a distinction between

interior and exterior, above and below, or exterior and interior façade. The idea of 'window', conventionally conceived as a wall opening, is dissolved and reformulated in the idea of a 'gap' between two surfaces.

Therefore, if drawings are essential for the conception and pursuit of an idea of form, they are equally crucial for the elaboration of its (conceptual) dissolution, as demonstrated by the works of Piranesi and the *De Stijl* experience. It is only through an awareness of these works and ideas that a contemporary analysis of the formative processes of architectural ideas becomes possible.

1.3.3 **The Drawing and the Analytical Line: Reading Filiberto Menna's *La Linea Analitica dell'Arte Moderna* [The Analytical Line of Modern Art]**

The question of the artistic dimension of drawing as it emerged in Zuccari, Fiedler, Piranesi and *De Stijl* is still a very generic one and requires expanding to include architectural drawing.

The drawing, above all the architectural drawing, notoriously retains an ambiguous character. Most commonly, the architectural drawing is regarded as a conventional system of notation that succeeds the idea of the architect. The drawing is seen as an instrument that illustrates an architectural thought, while its specific architectural character in relation to the motivations and the techniques of the creative process is left unquestioned, as is also left unquestioned the relationship between the development of an architectural thought and the creative process. Generally speaking, research into and the teaching of architectural ideas do not include an internal critical analysis; instead, any investigation into architectural creation is approached with an air of mysticism or a somewhat scientific perspective. In a context where the role of architectural project and practice was strongly motivated by ideology, drawing, as a moment of expression and development of architectural knowledge, became more limited to a more codified role, reflecting the increasing normativity of conventional representations. It was precisely by questioning its instrumentality and functionality that the possibility of an alternative understanding of drawing was able to emerge.

It is rather surprising that the cultural achievements of the historical avant-garde – so radical in their intentions and far-reaching in their critiques – have resulted in relatively few enduring additions to general knowledge or to the prevailing ways in which architecture is perceived and taught under the aegis of common sense.

Despite their profound theoretical ambitions and formal innovations, the avant-garde movements of the early twentieth century have largely failed to penetrate the pedagogical and professional structures that govern architectural education and practice. What is perhaps more troubling is the fact that their legacy is often treated superficially: reduced either to an aesthetic vocabulary or isolated historical episodes, rather than integrated as a fundamental rethinking of architectural foundations. Paradoxically, the historical avant-garde is presented simultaneously as a perpetual model of radical innovation – something to be revered endlessly – and as a kind of extravagant, fossilised cultural heritage. In both cases, it is effectively neutralised, rendered inert and incapable of generating alternative futures. This dual representation prevents any critical movement beyond it, suppressing the very potential for innovation that the avant-garde once embodied. The experimental and conceptually alternative dimensions of its creative work are still, misguidedly and misleadingly, regarded as marginal, eccentric, or utopian – symptoms of a romanticised deviation rather than a legitimate mode of architectural enquiry. In this way, the avant-garde is ensnared in a paradox: the aporia of a reactionary dimension hidden within what was originally a progressive, liberatory approach.

According to the renowned art critic Filiberto Menna, who thoroughly investigated the analytical approach of the arts, including architecture, in the twentieth century in *La linea analitica dell'arte moderna. Le figure e le icone* [The Analytical Line of Modern Art: The Figures and the Icons] (1975): 'Modern art was born from the theoretical and operative acquisition of the conventional nature of artistic language.'⁸⁵ For Menna, such an acquisition 'operated a real 'epistemological break' with traditionally fundamental questions concerning art, and, specifically, with a naturalist conception of language, by challenging the presupposition of a direct correspondence between language and reality.'⁸⁶

Menna traces the 'line' of the analytical approach in the arts from the end of the nineteenth century until the sixties. Among the extensive number of artists examined are Seurat, Cézanne, Picasso, Magritte, Theo van Doesburg, Mondrian, Duchamp, Ad Reinhardt, Josef Kosuth, Bernard Venet, Donald Judd, Sol LeWitt, Giulio Paolini, Francesco Ilo Savio and Ugo Mulas, as well as architects such as Peter Eisenman and

⁸⁵ Menna, *La linea analitica*, XI. (Writer's translation). The premise of Menna's formulation of an analytical approach to the arts is identified in the epistemological break produced by the work of Ferdinand de Saussure and Sigmund Freud. According to Menna: 'The epistemological break effected by these two authors in the field of human sciences takes the name of "theory" and, to be precise, consists in the shift in the use of terms from a current and conventional meaning to "scientific jargon", and "scientific" means formalised.' *Ibid.*, 8. (Writer's translation). Menna also presented analogous ideas in Filiberto Menna and Bruno D'Amore, eds., *De Mathematica* (Rome: Galleria dell'Obelisco, 1974). Exhibition catalogue.

⁸⁶ Menna, *La linea analitica*, XI. (Writer's translation).

Aldo Rossi.⁸⁷ Purini is not mentioned in this publication, even though Menna's ideas seem to be tailored to set Purini's elaborations on drawing within a wider critical field. Filiberto Menna's writings are, in fact, a recurring reference point for Purini, and he also contributed to other publications of Menna's work, in particular Menna's journal *Figure*.⁸⁸

In the *Analytical Line*, particularly regarding the experiences of the 1960s, a metalinguistic approach is applied to the arts. This approach corresponds to the dual process of creating art and simultaneously engaging in a discourse about art, thereby repositioning critical perspectives toward it. The shift from the artist's expression to a critical reflection on the work, alongside the effort to formalise a specific artistic language, implies the definition of logical operations and a scientific application of the artist's 'vocabulary'. To uncover the profound analogies that connect the two forms of materialisation of thought – the 'rational' and the 'artistic' – the artist's expressions are transformed into logical-mathematical propositions regarded as true or false and, therefore, analysable as a whole.⁸⁹

For Menna, the drawing became the conceptual *locus* for this analysis and formalisation. The renowned closeness between art and architecture led to an increasing interest in drawing, considered not only as a design act but also an 'intransitive experience that allows for the systematisation of a self-verified approach',⁹⁰ that is, the possibility for the artist to undertake autonomous and rigorous research without the need for external components or agencies.

⁸⁷ For an analytical reading of Aldo Rossi's work, see the fundamental essay by Ezio Bonfanti, 'Elementi e Costruzione. Note sull'architettura di Aldo Rossi', in *Controspazio*, no 10, (Bari: Edizioni Dedalo, 1970): 19-28. Also published in Marco Biraghi and Michelangelo Sabatino eds., *Ezio Bonfanti. Nuovo e Moderno in Architettura* (Milan: Bompiani, 2001). This publication also includes a letter by Aldo Rossi to Ezio Bonfanti in response to the essay. In the letter, Rossi clarifies the operative and programmatic choices of his research but essentially agrees on the validity of Bonfanti's argument. English translation 'Elements and construction. Notes on Aldo Rossi's architecture (1970)', in *OverHolland* nos. 18-19 (Amsterdam: Uitgeverij Vantilt, 2017), 198-2013. See also Stefano Milani, 'Re-descriptions', in *OverHolland* nos. 18-19 (Amsterdam: Uitgeverij Vantilt, 2017), 189-197.

⁸⁸ References to Menna's ideas in Purini's writings can be found in Franco Purini, 'Le spalle al muro', (2003) (unpublished essay), and 'Arte e architettura tra mistero ed eversione', in *Arte e Architettura*, ed. Giovanni Marucci (Milan: Di Baio Editore, 2006), 43-46. See also Purini's essay published in Menna's journal *Figure* 'Il frontespizio del "Saggio sull'Architettura" di Marc Antoine Laugier: La "cabane rustique" come "memoria" dell'architettura moderna', in *Figure. Teoria e critica dell'arte* no 8. *Archeologia del moderno* (Rome: Edizioni Kappa, 1984), 114-125. Reprinted in *Del Progetto. Scritti teorici di Franco Purini 1966-1991*, eds. Francesco Moschini and Gianfranco Neri (Rome: Edizioni Kappa, 1992), 79-85. Lastly, see Purini's contribution to the commemorative symposium for the twentieth anniversary of Filiberto Menna's death: Franco Purini, 'Un'attualità permanente', in *Filiberto Menna: Il progetto moderno dell'arte*, eds. Achille Bonito Oliva and Angelo Trimarco (Milan: Bruno Mondadori, 2010), 51-58.

⁸⁹ Menna and D'Amore, *De Mathematica*, 9.

⁹⁰ Menna, *La linea analitica*, XXV. (Writer's translation).

In the preface to the paperback edition of the book, Menna reflects on the specific role of drawing within an analytical approach, particularly in architecture. He argues that the question 'Who draws?' – paralleling the questions 'Who paints?' and 'Who writes?' – is especially fraught in architecture, where strong social and functional imperatives often marginalise the subjective dimension. This tension creates a kind of disciplinary guilt whenever architects assert their individual voice. Yet, Menna insists on the importance of shifting attention from dominant, objective categories (such as function or production) towards more recessive and neglected terms – namely, the subjective, disciplinary, and poietic dimensions of drawing – reclaiming it as a critical space where the personal and the collective, the project and the act of creation, may converge. The author further clarifies the relevance of drawing within this conceptualisation:

The drawing represents an important, decisive moment in this series of shifts and passages between the complementary terms of architecture's subject and object; important not because the drawing lies midway between these two polarities, but because it marks the place in which the subject encounters the primary socialisation of language – a historically determined language historically determined language.⁹¹

Menna continues by highlighting how architectural drawing reflects the dual nature traditionally attributed to the linguistic sign: one face turned toward the signifier, the other toward the signified – inseparable yet distinct. The drawing acts as a wedge driven into this thin yet conceptually dense surface, briefly separating the two to reveal their internal tension. In this sense, it becomes a tool for critically examining representational mechanisms. Architecture, like theatre, has followed the path of conceptual art, treating drawing less as a design step than as an autonomous experience – a mode of self-verification. This does not entail a full renunciation of transitivity, but rather a suspension of its functional imperative, akin to Duchamp's removal of objects from practical use. The common denominator of this new architectural drawing lies precisely in setting aside the content–signified function to explore the internal logics of language.⁹²

Out of this perspective, the content of Fiedler's warning concerning the autonomy of the artist's work in relation to the scientific approach is 'signified' and therefore, pushed to its extreme – an extreme that Tafuri already identified in Piranesi, and which the present research will evaluate in Purini's 'Una ipotesi di architettura'.

⁹¹ Menna, XXV (Writer's translation).

⁹² Menna, XXV.

1.3.4 **Architettura Disegnata and the Redefinition of the Idea of Construction within Representation**

In the sixties, architects began to rediscover in drawing a potent form of expression for formulating a series of alternatives to the dominant rigid functionalism of the International Style. Within a highly heterogeneous context that included the experiences of, amongst others, Archigram, Superstudio, Archizoom, The New York Five, Architecture Principe and La Tendenza, so-called 'paper architecture' emerged. Yet, as architectural historian Francesco Moschini points out, there is a clear break between the architectural drawing of the sixties and that of the seventies: 'If architectural drawing during the sixties was still, in essence, a critique of the existent and wished to be an utopian forerunner of a different future, full of planning and social promises, it was in the seventies that [drawing] acquired a specific theoretical dimension.'⁹³

Drawing, as Filiberto Menna's elaboration of the 'analytical line' makes clear, had returned to an investigation of its own specificity as an autonomous instrument of architectural knowledge. However, this operation revealed that such autonomy was actually a project as well. Moschini argues that some architects in the 1960s used drawings to deliberately reclaim and assimilate all the 'things' of architecture into their own specific field, any of which 'establishes the constitution of an autonomous theoretical unit within the complex system of the project'.⁹⁴

Of particular relevance in this respect is the phenomenon of *Architettura disegnata*, the Italian version of "paper architecture" that emerged at the beginning of the 1970s.

It should be emphasised that *Architettura disegnata* was not an association of architects, but rather a designated 'label' that acknowledged a general attitude towards a reformulation of architectural specificity within the field of drawing. The many architects associated with *Architettura disegnata* include Massimo Scolari, Costantino Dardi, Arduino Cantafora, Carlo Aymonino, Aldo Rossi and, of course, Franco Purini. Arguably, the exhibition that Franco Purini organised in 1967 together

⁹³ Francesco Moschini, 'Disegno, Teoria, Progetto/Drawing, Theory, Project', in *Domus*, no. 603, (Milan: Editrice Domus, 1980), 10 (Writer's translation).

⁹⁴ Ibid., 11.

with the student collective, *Studio Corso Vittorio* (later, *Gruppo Atrio Testaccio*), and which presented an intermediate stage of the research 'Una ipotesi di architettura', is considered as one of the antecedents of *Architettura disegnata*.⁹⁵

The contents of *Architettura disegnata* have been widely analysed – often very critically – by Franco Purini in numerous publications.⁹⁶ In the seminal essay 'Proclamandone l'isolamento', translatable as 'Announcing its Isolation' in the journal *XY – Dimensioni del disegno* in 1989, on *Architettura disegnata*, Purini immediately dismisses the common interpretation that sees architectural drawing as a tool – an interpretation he considers too reductive. Instead, he proposes that '[a more appropriate understanding] of "architectural drawing" be established as a critique of the conventions, and as a praxis of their "liminal condition", in the attempt to redefine in new terms, the entire disciplinary field'.⁹⁷

For Purini, the intrinsic theoretical character of drawing originates from this self-critical attitude. More specifically: if, conventionally, drawing concerns the description of architectural elements through a three-dimensional identification of bi-dimensional representations, it is, in its wider understanding it 'the very idea of construction that functions at the same time as content and as a [instrument] means of graphic expression'.⁹⁸

⁹⁵ See the rich summary of *Architettura disegnata* compiled by scholar Adriana Solletti. Adriana Solletti, 'Regesto dell'architettura disegnata in Italia', in *XY. Dimensioni del disegno*, no. 10. 1968-1988. *Vent'anni di architettura disegnata* (Rome: Edizioni Kappa, 1990), 105-130. According to the author, the other anticipatory event of *Architettura disegnata* was the 1966 exhibition at the Marlborough Gallery in Rome of a selected number of competition entries for the new Parliament offices. The exhibition included projects by Carlo Aymonino, Costantino Dardi, Vittorio De Feo, Mario Manieri Elia, Ugo Polesello, Ludovico Quaroni and Alberto e Giuseppe Samonà.

⁹⁶ See, in particular: *Assenza/Presenza: un'ipotesi di lettura per l'architettura*, ed. Fulvio Irace (Bologna – Ascoli Piceno: Galleria Comunale d'Arte Moderna and D'Auria Editrice, 1978) Exhibition catalogue, and *XY. Dimensioni del disegno*, no. 10 (Rome: Cedis Edizioni, 1989).

⁹⁷ Franco Purini. 'Proclamandone l'isolamento': 46. (Writer's translation). Additional references to Purini's writing on the subject of *Architettura disegnata* include: 'Per un'architettura "autodescritta", in *Assenza/Presenza: un'ipotesi di lettura per l'architettura*', ed. Fulvio Irace (Bologna – Ascoli Piceno: Galleria Comunale d'Arte Moderna and D'Auria Editrice, 1978) Exhibition catalogue. Reprinted in *Del Progetto*: 79-85; 'Per una centrale "marginalità", in *XY. Dimensioni del disegno*, no. 2 (Rome: Cedis Edizioni, 1986): 59-64; 'Tre obiettivi per XY'. In *XY. Dimensioni del disegno*, no. 5. (Rome: Cedis Edizioni, 1988) 41-44; 'Tre motivi/Three Reasons', in *Il disegno italiano*, ed. Francesco Moschini (Rome: Edizioni Centro Di, 2002), 18-19, 206-207.

⁹⁸ Ibid.

It is precisely in line with Purini's understanding of drawing that the fundamental decisions regarding the present research have been made: namely, the decision to investigate in his juvenilia research project, the relationship between a 'critique of conventions' and a 'theoretical construction though subsequent hypothetical stages' with the claim that this was what generated his ideas on drawing, rather than speculative writing applied to his research.

According to Purini, at the basis of the *Architettura disegnata* experience was the re-establishment of the idea of 'construction' not only due to its specific architectural value but also as a synthesis and emblem of edification as it is adopted by a 'culture of living'.⁹⁹ It is precisely by engaging this culture that Purini finds it possible to access a higher understanding of the meaning of construction: one that should be extended beyond the limits of architecture and projected into society as a whole. In this sense, I would argue that architecture is able to define its language only within the field of representation.¹⁰⁰

Purini states that he considers *Architettura disegnata* to be 'an imprecise concept but undoubtedly irreplaceable for its conciseness and intimate and providential contradiction, precisely due to its abstract nature and identity as an analogical model.' In the text he formulates a synthetic but highly lucid delineation of the conditions in which drawing and, in particular, the so-called phenomenon of *Architettura disegnata* emerged. Purini writes:

In recent years the 'Formulation of Italian architecture' [Disegno del architettura italiana]¹⁰¹ has above all been made visible through the architectural drawing. The transition towards the contents of the post-industrial era as far as habitation is concerned – in other words the reduction of architectural language to an 'immaterial' repertoire through reliance on a system of symbols compatible with mass communication methods – offers the conceptual oxymoron of a manufactured object reduced to its image, to its mere appearance, in the indirect and artificial universe of 'reproduction' and narrative, which has been made possible in our country directly through drawn architecture.¹⁰²

⁹⁹ Ibid.

¹⁰⁰ Ibid.

¹⁰¹ When Purini speaks of *Il Disegno dell'architettura italiana* he is referring primarily to a unifying cultural project for a specifically Italian architecture.

¹⁰² Purini, 'Proclamandone l'isolamento', 46. (Writer's translation)

Purini believes that this reduction should not be viewed negatively, as often occurs, or be seen as the dissolution of architecture's concreteness through its representation. On the contrary:

The duplication of the building in its physical reality and in its iconic dimension testifies to an irreversible maturity achieved by tendencies towards analysis and abstraction which, in abandoning the avant-garde where they originated, have become diffusely rooted within the interpretative methods of the languages of art.¹⁰³

Moreover, the architectural drawing defines with great exemplariness not only the idea of construction, but of construction as a representation of architecture more than its actual fabrication, unfolding at the same time the essence of a project, and the worldview of its author. Purini continues by saying:

This situation enables the restoration of the importance of the architectural image in thematic configurations where typological figures converge through the individual expression of the architectural form, finding a renewed identity of the building in theoretical landscapes inclined to unite architecture and nature within the simulacrum.¹⁰⁴

In the conclusion to his essay, Purini formulates a critique of *Architettura disegnata*, attributing the main reason for its decline on the betrayal of the theoretical purity that originally motivated its approach to architecture:

Architettura disegnata returns to the origins of the modern city. Its conceptual home is in fact the original and indigenous one. The city it represents is also intercepted in a moment of renaissance. This form appears in *Architettura disegnata* as a scene of separation, as the start of a distancing of variation from the norm, of expression from communication, and of uniqueness from repetition. But *Architettura disegnata* itself is the central city, the historic city, the opposite of its indigenous moment. By agreeing to represent its own opposite, *Architettura disegnata* renounces its potential theoretical purity in favour of the persuasiveness that led to the heart of the mid-eighties, when its first images were translated into stone, thus denying their own provenance, and in this way creating a vacuum that in time was to produce other drawing.¹⁰⁵

¹⁰³ Ibid., 48. (Writer's translation)

¹⁰⁴ Ibid., 48. (Writer's translation)

¹⁰⁵ Ibid., 50-51. (Writer's translation)

Purini's analysis and critique of *Architettura disegnata* summarises most of the themes under discussion in this research, namely:

- drawing as the genesis of an idea of architecture and, at the same time, a critique of the conventions in which it operates;
- drawing as the duplication and redefinition of the concept of construction within the field of representation in order to substantiate the idea of architecture;
- drawing as the acquisition and not only the re-proposition of the avant-garde experiences, leading to an analysis of the languages of art and architecture;
- drawing as the basis of a pure theoretical construction. As a consequence, the architectural content developed within representation will double: on the one hand through the series of conventional descriptions of the building, and on the other hand, through the parallel development of a figurative dimension of architecture, in which architecture is brought back to the image of an architectural scene, to a simulacrum, to a surface, to a drawing – to its drawing.

Moreover, Purini also indicates that from the considerations above arises the possibility of establishing a cultural project for architecture enriched by new conceptual values, which would necessarily uncover new kinds of controversies and contradictions. Consequently, this new condition would generate a theoretical vacuum that would subsequently become the basis for new research and a different kind of drawing.

In conclusion, it is also important to underline the fact that Purini's analysis can be also read as a general explanation and clarification of the motivations of his own research, thus allowing for a parallel, although not exclusive, contextualisation of his work.

1.4 Early Digital: Manfred Mohr's Drawings

1.4.1 Questioning the Bases of Artistic Creativity

This text examines the work of German artist Manfred Mohr, a pioneer of digital art, whose ideas resonate strikingly with Franco Purini's architectural research.¹⁰⁶

As contemporaries, Mohr and Purini developed parallel, yet distinct bodies of work grounded in fundamental investigations that have maintained their conceptual coherence over fifty years. Both treat drawing as a rigorous field of theoretical inquiry, constructing serial works around the generative potential of the cube.

Most importantly, Mohr's work also provides the opportunity to discuss some other themes that are more directly inherent in the specific content addressed in the present research – such as a new aesthetic dimension of the graphic sign, a redefinition of drawing as both a significant moment of knowledge and as a datum, and a concrete expression of 'artistic dignity' in line with Zuccari's earlier *disegno esterno*: the intellectual dignity of the artistic work.

These themes acquire further relevance when considered within the broader context of architecture's engagement with computation. For nearly fifty years, various thematic aspects of computer science – such as shape grammars, evolutionary algorithms, and parametric techniques – have influenced the architectural debate. In more recent years, this relationship has grown increasingly complex. Many computational techniques and highly elaborate organisational and generative models have become available in nearly every field of architectural production. Yet amidst this technological expansion, we often overlook the contributions of numerous artists who, from the outset – and even before the pervasive diffusion of digital tools – used computational means to conceive works of art.

It is in this lineage that Mohr's drawings occupy a unique position. His work offers a highly singular and consistent account of the theoretical themes that emerged in the 1960s from the convergence of mathematical logic and aesthetic research. The radical questioning of the artist's subjectivity, the disciplined and systematic articulation of a constructivist attitude towards art, and the challenge of integrating such work within traditional critical frameworks are all aspects that Mohr explores to their most rigorous conclusions.

¹⁰⁶ The following text is a revised version of my essay 'A New Ductus: A Reflection on Manfred Mohr's Drawings', in *Architecture as Craft*, Michiel Riedijk ed. (Amsterdam: Sun Uitgeverij, 2010), 141–157.

In synthesis, it could be argued that Mohr's drawings are theoretical landscapes – structured, precise, and internally coherent – within a world of two-dimensional mathematical forms.

1.4.2 The Algorithm as Artistic Expression

Manfred Mohr was one of the first artists (together with Frieder Nake, Michael Noll, Georg Nees, the legendary 3-Ns of digital art) to acknowledge the computer's potential for exploring the domain of abstract intelligence. As an artist, Mohr "draws" algorithms that are processed by a computer and printed by a plotter. The algorithms function as aesthetic filters that represent human behaviour in a given context. In this way, mathematics is used as a vehicle (and only as a vehicle) of the artist's expression. Mohr describes his work and the role of the computer with a striking terseness:

The computer became a physical and intellectual extension in the process of creating my art. I write computer algorithms, i.e. rules that calculate and then generate the work which could not be realised in any other way. My artistic goal is reached when a finished work can dissociate itself from its logical content and stand convincingly as an independent abstract entity.¹⁰⁷

Influenced in the mid-sixties by Max Bense's ideas on aesthetics, Manfred Mohr began both a radical questioning of his earlier informal approach to art and a rigorous formal analysis of his painting. He started to enquire into the possibility of rationalising the emotive sphere that inspires his work and explored the free nature of signs and their organisation on the white background. This phase led to the discovery of many regularities in these configurations, obviously determined by the personal aesthetic sense expressed in his early work.¹⁰⁸

¹⁰⁷ Manfred Mohr, *Manfred Mohr Computer Graphics. Une esthétique programme*. Exh. Cat. (Paris: A-R-C Musée d'Art Moderne de la ville de Paris, 1971), 38.

¹⁰⁸ Max Bense's aesthetics represents the conclusive moment of a long tradition of thought that sees the theory of the avant-garde as fertile ground for a synthesis of all technological ideology. Bense has been able to reach a complete aesthetic, ethic and cybernetic synthesis configured in a rigorous model of the behaviour of man fully involved within the capitalist universe. Regarding the work of art more specifically, Max Bense investigated the possibilities of formalising the aesthetic content of an artwork on the basis of 'aesthetic signs', aiming for a rational approach towards understanding and producing art. Reflecting on the influence of technology on society and people's awareness of it, he believed that the judgment and the production of art should leave the artist's emotive sphere in favour of a more logic-mathematical approach. Max Bense, *Aesthetica* (Berlin: Agis-Verlag, 1965). Italian translation *Estetica* (Milan: Bompiani, 1974).

The definition of a rough syntax of basic elements and recurrences determined the criteria for the development of the next phase. In this intermediate moment of analysis, the works *Subjective Geometry* (1966-1969) represented Mohr's first attempt to rationalise his imagination through the realisation of a catalogue of black geometric signs accurately arranged on a white background. The pictograms, conceived according to 'a subjective selection process'¹⁰⁹ and visually informed by technical symbols as well as mathematical formulas and electronic circuits, constituted the premise for the elaboration of a formal language of self-referential signs.

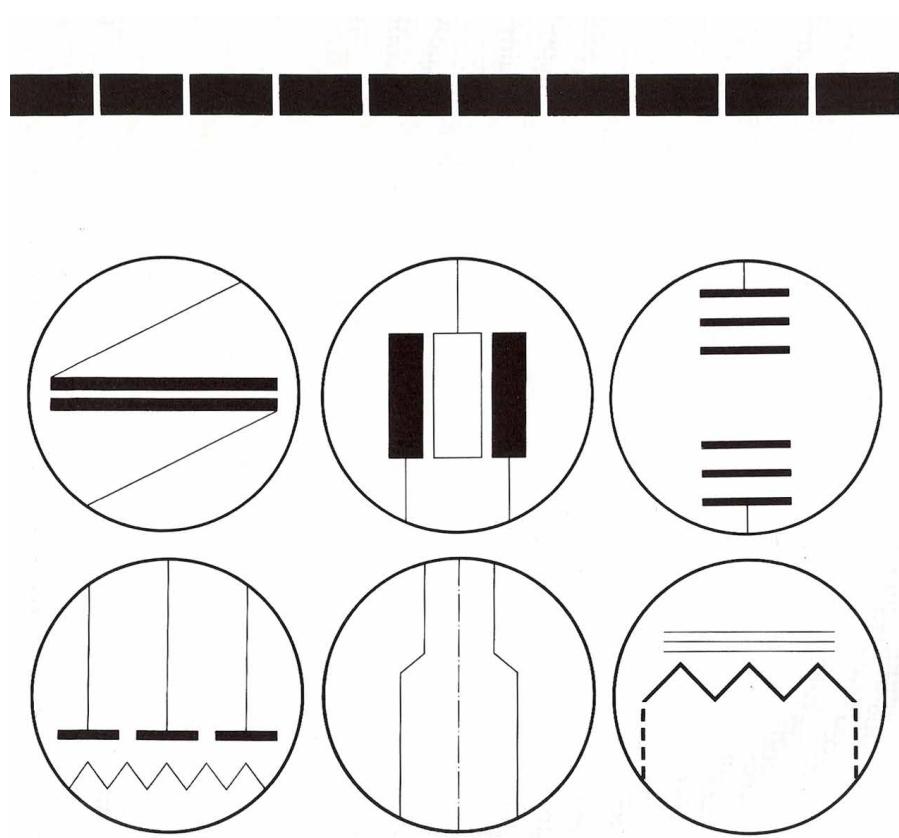


FIG. 1.3 Manfred Mohr, Bild 3/1267 777 MHz (1967). From the series *Subjective Geometry* (1966 -1969).

¹⁰⁹ Manfred Mohr, *Hard Edge* (1966-1969). A description of Mohr's work can be found on his website. Accessed 26 September 2015, http://www.emohr.com/ww4_out.html.

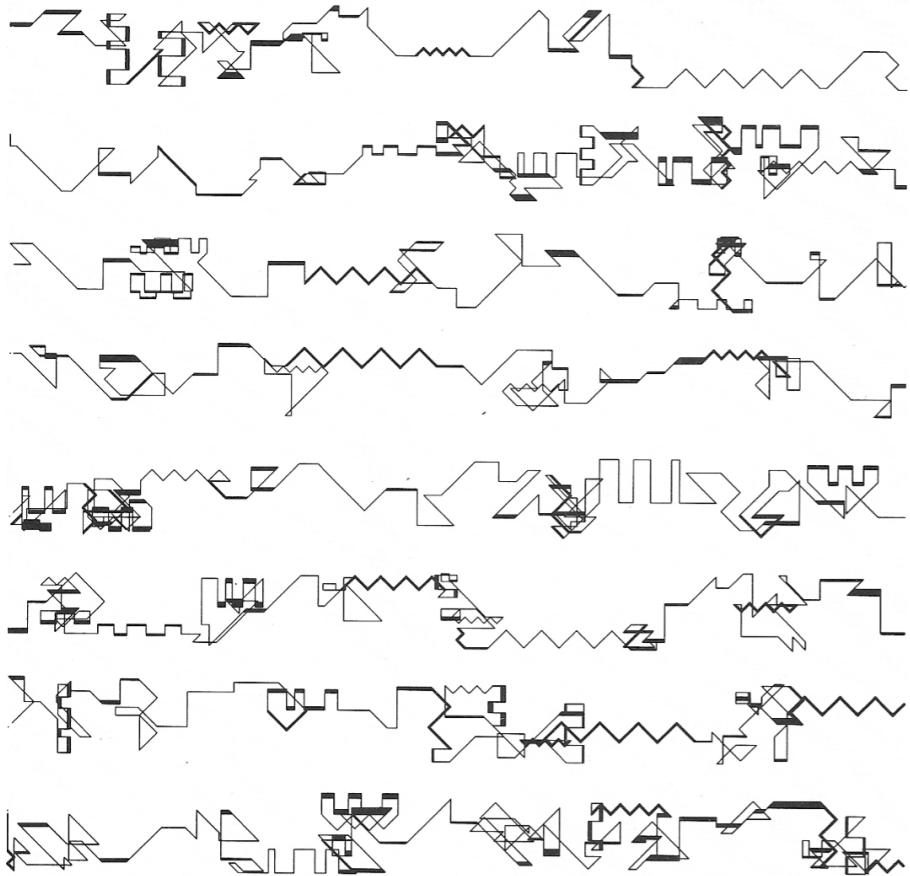


FIG. 1.4 Manfred Mohr, *Band Structures. Programme P-21* (1969). Early Algorithms. Work Phase 1969-1972.

In the next work phase between 1969 and 1972, Mohr introduced logic and mathematics in order to study and represent his production of signs. For the first time, algorithms were used to calculate the images he unified in a computer programme that allowed for all their possible combinatorial representations.

It was during this period that Mohr discovered the potential use of the computer in developing his research. In 1968, thanks to the influence of the composer Pierre Barbaud, one of the pioneers of computer music, he was given the opportunity to be hosted at the Institut Météorologique in Paris. There, he was able to use a CDC 6400 computer and a plotter for his experiments on the man-machine relationship, the testing ground for his visual ideas, while at the same time gaining the necessary knowledge to write the algorithms and the software that were required for the creative process.

This was a crucial moment in the development of his research: from that time on, the series of abstract forms (signs) that were produced no longer had a visual reference to the constructive logic expressed by the algorithm. This fact implies that the algorithmically produced signs were accurately defined as autonomous 'carriers of aesthetic information'. In fact, according to Mohr: 'The sign must be able to free itself visually from the logical content so as to appear as an abstract form. But at the very least an equilibrium between logical content (origin) and aesthetic information (goal) should be reached.'¹¹⁰

The series of works *Band Structure* (1969), *Continuous Lines* (1970), *Discontinuous Lines* (1970), *Formal Language* (1970) and *White Noise* (1971), are examples of this early algorithmic phase. Each title was always accompanied by a reference to the version of the programme that had generated the work. In *Band Structure*, a series of continuous script-like lines are generated according to Programme 21, which contains a number of aleatory instructions for establishing criteria for the appearance and behaviour of elementary lines according to parameters such as intervals, thickness, zigzags and directions, while a sub-programme parameterised the relationship between the lines according to similar instructions.

Even when seen at a general level, and without entering into the complexity and controversial meanders of a semantic analysis committed to revealing the potential meaning of Mohr's operations, these works allow a series of essential aspects to be singled out with sufficient clarity. Firstly, the artistic signs become truly self-referential; secondly, the precision of their systematic production provides a possibility for interpretation. The gap between their constructive logic and their visual equivalent defines the boundaries of an aesthetical territory that can be measured, improved, developed and redefined. And finally, the basis of Manfred Mohr's working process is the creation of rules and systems. In a second stage, with the visual realisation of the work, it is possible to determine if the system is adequate, and if it can function as the foundation for further development. This approach, based on a rigorous system of binary decisions, is associated with complete freedom and curiosity with regard to the contradictory, chaotic visual output of the series. The diversity of the results is stimulated by random choices during the execution of the programme, which, according to Max Bense's theory, represent the guarantee of 'the singularity of the mechanically generated aesthetic object'.¹¹¹

¹¹⁰ Manfred Mohr, *Algorithmus und Kunst: Die präzisen Vergnügen*, Exh Cat. (Hamburg: Sautter & Lackmann, 1993), 38.

¹¹¹ Max Bense as quoted in Lida von Mengden, 'Manfred Mohr. Research in the Aesthetic Universe of the Cube', in *Manfred Mohr – Broken Symmetry*, ed. Dr. Lida von Mengden ed., Exh. Cat., Kunsthalle Bremen, 2007. Accessed 13 September 2010, http://www.emohr.com/tx_lida_e.html

1.4.3 Complexity Through Reduction: The Basic Geometry Cube and the *Ars Classificatoria*

After this programmatic phase, during which, as in *Band Structure*, it is still possible to find an analogical relationship between the algorithmic scripting and its output, Mohr introduced the cube as a 'fixed system with which signs are generated'.¹¹²

The intelligibility of the cube, the fundamental three-dimensional Cartesian object, enables a further systematisation of the algorithmic approach. From this basic structure, Mohr elaborated a syntax of constructive and deconstructive algorithms that are able to supply an endless proliferation of aesthetic processes. Once again, the development of the work and its complexity and expansion into unforeseen territories was achieved through the rationalisation and precise systematisation of the work phase. The cube became the leitmotif Mohr used to develop the repertoire of signs in the later stages of his work.

Mohr's early phase of work on the cube already offers enough elements to formulate a series of considerations on drawing that are relevant to this text. First of all, there are sufficient characteristics (both formal and visual) to legitimise this work as 'drawing': the elementary nature of the images, the technical precision, the exclusive use of black and white, and linearity as the only determining element of form. However, drawing must also be understood in a broader sense that transcends the criteria of formal analysis.

This opens up the possibility of revisiting the concepts of *disegno interno* and *disegno esterno* (inner drawing and external drawing) that were introduced at the beginning of the chapter. As has been demonstrated, Zuccari was able to theorise a unifying concept of drawing that connects the notion of idea to that of representation. However, whereas for Zuccari the supremacy of drawing originates from the artist's idea and finds its external manifestation in the drawing itself, for Mohr the concept of origin becomes relative: idea and result are merely phases in a process. The functional correlation between the artist's individuality in conceiving an object is no longer pertinent. Mohr delegates the work of art to an ongoing exploration, incessantly oscillating between the two poles of *disegno interno* and *disegno esterno*.

In the work of Manfred Mohr, all constituent aspects are equally vital and necessary for an alternative understanding of the artwork: the conception of algorithms, the precision of the machine, and the plotted results. In his published materials and exhibition pieces, Mohr also included the algorithms as a conscious and programmatic operation. According to Lauren Sedofsky:

¹¹² Manfred Mohr, *Cubic Limit*, Exh. Cat. (Paris: Galerie Weiller, 1975) (Unnumbered).

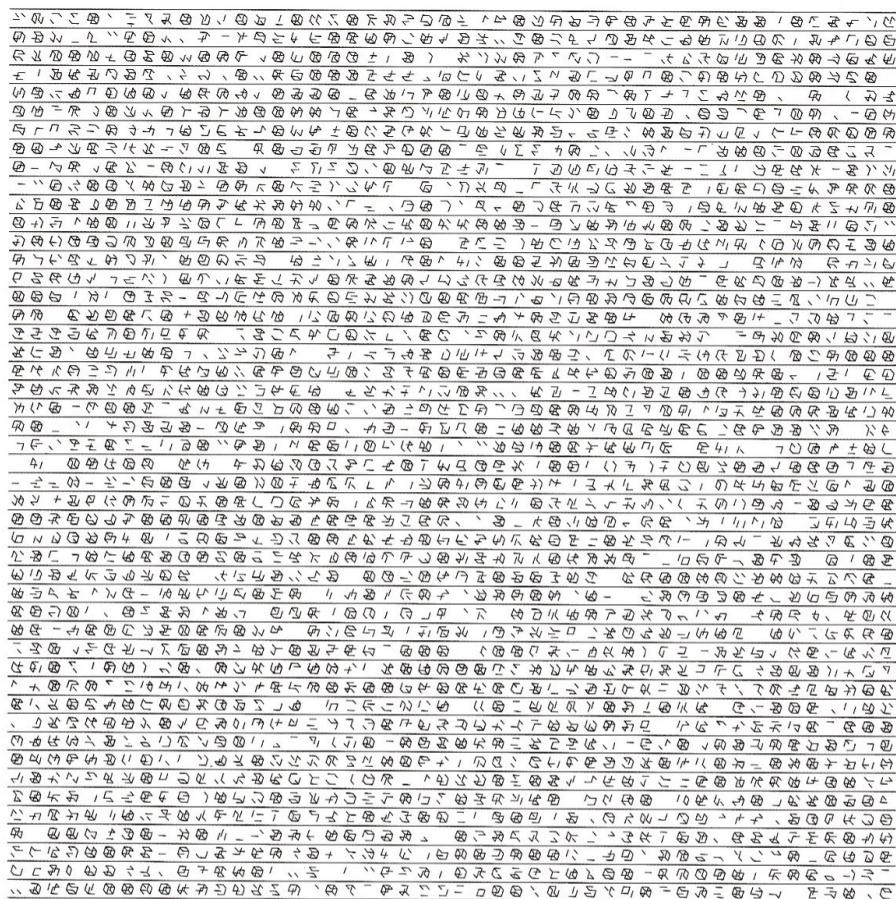


FIG. 1.5 Manfred Mohr, *Cubic Limits I, Programme P-155-C (1974)*. Work Phase 1973-1975.

Mohr's strictly heuristic use of the digital image occupies a territory mid-way between established artistic practice and the paradigm of computer simulation, understood as the visualization of theoretical systems, or even simply forms, evolving over time. Based on a priori rules (the transcription of relations, continuous variations and multi-dimensional structures), simulation creates the conditions of production for a microcosm, an autonomous formalized universe whose inherent possibilities become accessible to exhaustive exploration.¹¹³

¹¹³ Lauren Sedofsky, 'Linebreeder', in *Manfred Mohr*, Exh. Cat. (Bottrop: Josef Albers Museum, 1998). Accessed 13 September 2010, http://www.emohr.com/tx_laur_e.html.

Summing up the inherent implications of this modus operandi, Sedofsky states that 'where the particularity of the work of art was once a function of the artist's individuality, here form begets form'.¹¹⁴

It could be argued that if the loss of aura, as investigated by Walter Benjamin, is a necessary condition for the universe of art in technological society, then the inner contradiction revealed in the elaboration of the work becomes, for the artist, a crucial element in accelerating this demise – while simultaneously paving the way for a new, alternative understanding of both the artwork and the artist. As Sedofsky suggests, for this transformation to occur, the artist must become 'an operator, entering hypothetical laws of composition in an abstract notation, while passing alternately through moments of blindness and moments of insight'.¹¹⁵

In reality, the much-discussed loss of aura and the 'death' of the author leave no residue of sentimentalism in Mohr's work – nor in Purini's, even though his hand-drawn practice necessarily engages with the material tension and subjective resistance inherent to manual drawing. Instead, a new sort of author emerges: a kind of surgeon and magician who perpetuates Benjamin's comparison.¹¹⁶

As in the analytic experiences of the sixties discussed by Menna, the author operates within the logic of productive processes in order to 'socialise' the critical elaboration of the norms (rules) of the work. However, this integration is merely a simulation, just as the productive processes are simulations. The author tends to become an operator, a technician, yet simultaneously, this condition in the work of art, and – why not? – in architecture, is also just a simulation and, at best, a dissimulation.

But what are the characteristics of this new kind of work? And what is its relationship to drawing?

If, according to Mohr, the selection criteria for his drawings are aesthetically determined within a semantic field comprising not only a direct perceptual judgment but also a conceptual judgment (to be found within the logic of the algorithm that produces them), then the classification (displayed within a single drawing or through a series of drawings), as in Purini's case, is the instrument that imposes the ordering and the delineation of aesthetic judgment. The selection and evaluation generally

¹¹⁴ Ibid.

¹¹⁵ Ibid.

¹¹⁶ For distinctive passages in Benjamin's elaboration of the comparison between the painter-magician and the cameraman-surgeon, see Walter Benjamin, 'The Work of Art in Its Technological Reproducibility', in Walter Benjamin, *Illuminations* (New York, NJ: Schocken Books, 1969), 232–234.

occurring at the end of a work now becomes an integral part of the work itself: the work is open-ended. At the same time, the critical and aesthetic assessment is both incorporated within the praxis and establishes the praxis. Classification is not – or not only – an internal feedback loop, but a true expansion in understanding the work itself: conceptually, the work becomes an “open work”, whose validity can only be evaluated during its intermediate phases.¹¹⁷

Therefore, the classification, the ordering procedure, and the inherent descriptive character of the sign have to be considered primarily for their programmatic incompleteness. It is precisely this incompleteness that enables problems to be identified, whether they be conceptual/internal or perceptual/external. In this way, further developments take place within the loop *disegno interno*>*disegno esterno*>*disegno interno*>*disegno esterno*, where at each step an assessment can take place, or conceptual problems be discovered.

The approach delineated here also implies a reconsideration of the idea of freedom within the creative work, and a renewed value of expression, opening fresh ground for an investigation into the artist's new prerogatives.

The relevance of Manfred Mohr's work in the context of the present research lies essentially in the legible character of his *ars classificatoria* as a propelling device. Indeed, a similar argument could also be formulated by considering, for instance, the more canonical work of Sol Lewitt.¹¹⁸ In Sol Lewitt, Manfred Mohr and Franco Purini's work, the classifications develop and propagate through the identification of analytical accidents within a logical reasoning process, or, conversely, through conceptual gaps that emerge ex-post from the work. Furthermore, the authors share a predilection for the geometry of the cube, chosen for its intelligibility and for the possibility it offers in constructing complex configurations starting from the simplest geometrical and conceptual form. Complexity is achieved by reducing the cube into its constitutive elements, which are incremented by a series of conceptual operations.

¹¹⁷ For the idea of ‘open work’ see Umberto Eco, *Opera aperta* (Milan: Bompiani, 2000) (First published 1962). English translation, *The Open Work* (Cambridge, MA: Harvard University Press, 1989).

¹¹⁸ On Sol Lewitt, see in particular *Sol LeWitt: Incomplete Open Cubes*, ed. Nicholas Baume (Hartford, CT: Wadsworth Atheneum Museum of Art; Cambridge, MA: MIT Press, 2001). The essence of the authors' ideas on art can be found in Sol Lewitt, ‘Sentences in Conceptual Art’, *0 to 9*, no. 5 (January) (New York: Vito Hannibal Acconci and Bernadette Mayer, 1969): 3. Reprinted in Béatrice Gross ed., *Sol Lewitt* (Metz - Zurich: Éditions du Centre Pompidou Metz and JRP/Ringer, 2013), 214–215.

1.4.4 'Materialgerecht'

Manfred Mohr's radical approach to art prompts a series of arguments that legitimise a reflection on the field of architectural drawing. Beyond some evident affinities between Mohr's investigations and the architectural drawing (such as the constructivist approach and the necessity for a visual outcome), a further theme could also be singled out to reinvigorate the theoretical relevance of drawing in architecture. The implications of the conceptual shifts introduced by Manfred Mohr offered a theoretical framework for reformulating one of the most basic structural characteristics of drawing: the *ductus*. This concept, which conveys the singularity and individual qualities embedded in the act of tracing a sign, can be redefined through the formalisation of new *modi operandi* that enable the integration of the mental articulation of human thought with the precision of mechanical production.

According to Mohr:

Since the most important point in applying a computer to solve aesthetical problems is the MATERIALGERECHTE use of this instrument, the research should assume that old techniques of drawing and imagination are not to be imposed on the machine (although this would be possible), but should develop a priori a vocabulary which integrates the computer into the aesthetic system.¹¹⁹

Similarly to Mohr's apparatus, I assert that drawing can rediscover its necessity and universality within architecture, thereby opening new avenues for rethinking both its epistemological role and its value as an aesthetic experience under the conditions shaped by technological development. However, I also argue that this renewed purpose cannot be prescribed a priori, nor uncritically delegated to an instrument or technique - as Mohr's rational inquiry has shown - but must instead emerge from the freedom afforded by drawing's own internal legitimacy. As my analysis of Purini's work 'Classificazione, per sezioni, di situazioni spaziali' [Classification, by sections, of spatial situations] (1968) will illustrate, through the definition of this subjective norm and by examining the inner legalities of its praxis, drawing can become the privileged form of architectural thinking, perpetuating its inscription within architecture.

¹¹⁹ See Manfred Mohr, 'Untitled', in *Manfred Mohr Computer Graphics*, 36, 38. 'MATERIALGERECHT: German for working or using a material only in the way which is basic to the material.' Quote by Manfred Mohr as in the original version of the cited text.

1.5 On Dogma's Project: The Controversies of a Non-Figurative Hypothesis of Architecture

1.5.1 Introduction

Chapter 1 ends with a discussion of the architectural research carried out by Dogma, a Belgium-based practice founded in 2002.¹²⁰ Although not inherently concerned with drawing and the theory of representation, the work of Dogma's partners Pier Vittorio Aureli and Martino Tattara is of interest in this context because it has revitalised architectural research through its highly motivated critical investigation performed within the architectural project through and crystallised by compelling images. This section will firstly outline Dogma's critical position in architecture then highlight and debate some of what are considered controversial aspects of its research. Of specific interest in this context is Dogma's hypothesis of a 'non-figurative' architecture, elaborated in particular in the project 'Stop City' (2007). In fact, Dogma's hypothesis contains conceptual paradoxes that could overturn its very premises for an architecture liberated from the figurative dimension. The possibility or impossibility of a non-figurative architecture will not be argued here, nor will the motivation that led to Dogma's hypothetical elimination of figuration, but rather the ambiguities that emerge in the rhetorical articulation of such a hypothesis within the field of representation.

What distinguishes Dogma from other practices is its explicit challenge to the very field in which architecture is commonly conceived: namely, the master plan, its formal constitution and its relationship to an idea of the city. Dogma investigates architecture's political role within the contemporary city, where architecture is understood and investigated exclusively as a rational fact of delimiting space. The stripped bare formal language of Dogma's projects, a language that does not indulge in any sort of adjectival embellishment or syntactical compositional techniques, also tends towards a didactic role for architecture, and the definition of a very limited and precise number of architectural tools.

¹²⁰ The following text is a revised version of my paper 'Notes on Dogma's Project', in *OverHolland* nos. 14-15 (Amsterdam: Uitgeverij Vantilt, 2014), 73-91.

Dogma's redefinition of the relationship between architecture and the city centres on the concept of large scale. In this context, 'large scale' not only encompasses physical dimensions but also highlights the necessity to broaden the scope of architectural investigation. According to Dogma, the city is not a utopic or merely speculative category from which an idea of architecture can emerge, but a political project. Therefore, for them, the architect should re-appropriate this dimension by exploring the political dimension of the architectural form and the ways in which architecture accommodates urban life. Furthermore, the city is perceived as a concrete fact that becomes a project through the creation of finite architectural forms.

1.5.2 Critique of the Contemporary City

The context for this elaboration is the post-Fordist city, elected as a category within which it is possible to formulate a critique of the contemporary city, where technology and organisational criteria progressively annihilate the human productive role and the consciousness of its political determination. This critique is expressed through intense writing activity and projects, mostly research projects or competition entries. In some cases, the projects are only speculative, and their localisation is part of a critical or instrumental choice, as in the case of the lengthy project 'A Simple Heart' (2002-10) and 'Stop City' (2010). The two specific categories challenged by Dogma's critique both concern the dissolution of the idea of architectural form during the development of the modern city: firstly, the concept of urbanisation; secondly, the figurative dimension of architecture. Dogma sets in contraposition to the limitless and formless space of urbanisation, the limit imposed by the architectural form (the wall), which establishes the large scale of the city. Dogma's investigation of architectural form centres on the concept of archetype, understood as a foundational model wherein the notions of time, structural origin, paradigmatic values and theoretical principles intersect. In this context, Dogma's selected archetypes are the enclosure and the wall.

Dogma sees the architectural form as a condition or, it could be argued, as a precondition for any political, cultural or social engagement concerning the city. This perspective has led to a necessary critique of conventional instruments of urban analysis, such as typological studies, the very notion of urban composition, and the interpretation of historical traces and urban patterns. The large scale of Dogma's approach entails disrupting theoretical relationships that used to unite urban science and the idea of the architectural object.

1.5.3 Non-Figurative Architecture

Although Dogma elaborates extensively on the critique of urbanisation, the critique of architectural figuration remains largely unquestioned and unresolved in its most profound sense. However, I find it quite challenging to eliminate the problem of figuration in architecture, as doing so would also entail removing the question of drawing and, ultimately, the architect. This becomes particularly interesting when considering the work of Franco Purini, which, I believe, offers a more nuanced understanding of figuration and the acquisition of archetypal value.

While Dogma's investigation is wide-ranging, so is the problem of figuration. The authors do not seem to have explored all the inherent consequences of a non-figurative architecture, which they describe as an "*Arkitектur ohne Eigenschaft*" or architecture without qualities; in other words, an architecture freed from image, from style, from the obligation of extravagance, from the useless invention of new forms, and even from architecture's own history'.¹²¹ The very fact that Dogma often represents its buildings as white silhouettes, thus freeing architecture from its image, from a composition occurring inside the framework of the building's margins, and from stylistic attributes, proposes an interesting and destabilising critique of architectural figuration rather than a proposition that removes architectural figuration. And again, paradoxically, the very value of this explicit critique of the architectural image nonetheless relies on the simplified use of architectural images.

Figuration as a field of architectural thought that investigates the formation and decline of architectural ideas, architectural inventions and records of these, is left immune from their theoretical critique. Dogma's position seems limited to ascertaining the figurative degeneration of today's architectural production (which is considered a mere manifestation of the spectacle of capitalistic accumulation) and to polemically opposing any attempt to qualify this architectural condition within the theoretical debate.¹²² In Dogma's work, figurative aspects persist, albeit in a residual manner, serving as a premise for a new kind of figuration. Therefore, in Dogma's case, rather than non-figurative architecture, one should speak of a reduction of the semantic aspect of architecture to its 'zero degree'¹²³ in an attempt to reach, asymptotically, its neutrality.

¹²¹ Pier Vittorio Aureli and Martino Tattara, 'Stop City (2007)', in *Dogma: 11 Projects* (London: AA Publications, 2013): 10. With *Arkitектur ohne Eigenschaft* Aureli and Tattara paraphrase Robert Musil's *Der Mann ohne Eigenschaften* (Hamburg: Rowohlt Verlag, 1952) (1930). English translation: *The Man Without Qualities* (New York: Alfred A. Knopf, 1995).

¹²² Gabriele Mastrigli, 'Commanders of the Field: Notes on the Architecture of Dogma', in *Dogma: 11 Projects* (London: AA Publications, 2013), 116.

¹²³ Roland Barthes, *Degré zéro de l'écriture* (Paris: Seuil, 1953). English translation, *Writing Zero Degree* (New York: Hill & Wang, 1968).

Yet figuration, the object of Dogma's critique, has a precise role, by positioning the political dimension of the architectural form, as one of the main theoretical hypotheses on which its ideas are structured. This theme will emerge more clearly when considering the sources underpinning Dogma's critical project. Moreover, it could be argued that the hypothesis for non-figurative architecture is not developed but 'found'¹²⁴ in the project Stop City.

1.5.4 References: Hilberseimer and Archizoom

The references found in Dogma's work are numerous and carefully integrated into forming their intellectual foundation: from Walter Benjamin's writing on intellectual work to Manfredo Tafuri's scholarship during the IUAV years; from the early work of Aldo Rossi to the philosophical narrative that links the works of Machiavelli, Antonio Gramsci, and the philosopher of *Operaismo*, Mario Tronti, to the more recent writing of Paolo Virno. This text will particularly underline two other recurrent references that play a fundamental role in this research: Ludwig Hilberseimer and Archizoom.¹²⁵

Central to Dogma's approach is the assimilation of Ludwig Hilberseimer's ideas on the city. According to Hilberseimer, the architecture of the large city depends essentially on a solution based on two factors: the elementary cell and the urban organism as a whole.¹²⁶ Dogma's critical appropriation of Hilberseimer's statement entails interpreting the large city in terms of architectural form and as an enormous social machine. In addition to Hilberseimer's question of form, Dogma also explores the other aspect of the question of the large city, specifically, the living cell. In opposition to the 'current cliché of domesticity', viewed as a form of consumption and privatisation, Dogma investigates how the living cell is politically connected

¹²⁴ The word 'found' as used in this context has no specific relationship with the elaboration of this concept by Alison and Peter Smithson. However, the characteristic of the 'watchful eye' as prerequisite for the 'found', described by the Smithson is also valid here. See Alison and Peter Smithson, 'The "As Found" and the "Found"', in *The Independent Group: Postwar Britain and the Aesthetics of Plenty*, David Robbins ed. (Cambridge, MA; London: The MIT Press, 1990), 201-202.

¹²⁵ Gabriele Mastrigli's critical contribution to the catalogue published for the exhibition *Dogma: 11 Projects* offers a very good account of the evolution of Dogma's work and its references. However, my text aims to present a slightly different and more synthetic trajectory compared to that of Mastrigli. See Gabriele Mastrigli, 'Commanders of the Field: Notes on the Architecture of Dogma', in *Dogma: 11 Projects* (London: AA Publications, 2013), 108-19.

¹²⁶ Ludwig Hilberseimer, *Großstadtarchitektur* (Stuttgart: Julius Hoffmann Verlag, 1927). English translation: *Metropolisarchitecture*, (GSAPP Sourcebooks), ed. Richard Anderson (New York: Columbia Books on Architecture and the City, 2014).

to the production and reproduction of ways of living.¹²⁷ In elaborating Walter Benjamin's essay 'The Destructive Character', Dogma asserts the need to clear space – the urge for a *tabula rasa*.¹²⁸ Dogma literally identifies the bare wall as the sole element mediating life while encompassing all other technical and distributive aspects of the house. Consequently, the house becomes a single room with no programme other than space.¹²⁹

If the elaboration of Hilberseimer's ideas of the large scale and the housing unit represents Dogma's approach to the urban problem, their reaffirmative credo regarding architecture can be traced to ties with the work of the radical group Archizoom, in particular with the 1968-1971 developmental phase, when Archizoom's scope of interest extended to the urban and territorial scale and culminated in the elaboration of the project 'No-Stop City' (1970-71). It could be argued that Dogma established its research framework by appropriating this experience. Archizoom's thematic structure and research experience represent a solid conceptual ground for Dogma that gives consistency to its position, but at the same time also helps define an instrumental dialectic to orient its reflection on the contemporary condition.

A delineation of Archizoom's cultural influences can be found in Roberto Gargiani's monograph on Archizoom *Dall'onda pop alla superficie neutra. Archizoom Associati 1966-1974* [From Pop Art to the Neutral Surface: Archizoom Associates 1966-1974].¹³⁰ In the chapter 'Critica dell'ideologia e Discorsi per

¹²⁷ Pier Vittorio Aureli and Martino Tattara, 'Barbarism Begins at Home: Notes on Housing', in *Dogma: 11 Projects* (London: AA Publications, 2013), 42-45 and 86-90.

¹²⁸ Walter Benjamin, 'Der Destruktive Charakter', in *Gesammelte Schriften*, eds. Rolf Tiedermann and Hermann Schweppenhäuser vol. 4, no. 1, (Frankfurt am Main: Suhrkamp Verlag, 1972) (First published 1931), 396-401. English translation 'The Destructive Character', in *Walter Benjamin, Reflections: Essays, Aphorisms, Autobiographical Writings*, ed. Peter Demetz, trans. Edmund Jephcott (New York: Schocken Books, 1986), 301-303.

¹²⁹ 'The Architecture of the large city depends essentially on the solution given to two factors: the elementary cell and the urban organism as a whole. The single room as the constituent element of the habitation will determine the aspect of the habitation, and since the habitation in turn form blocks, the room will become a factor of urban configuration, which is architecture's true goal. Reciprocally, the planimetric structure of the copy will have a substantial influence on the design of the habitation and the room'. In: Manfredo Tafuri, *Architecture and Utopia* (Cambridge, MA and London: The MIT Press, 1976), 104. It is also important to note that the two essays for the catalogue jointly written by Aureli and Tattara address precisely the two factors indicated by Hilberseimer: the first, the question of the large scale; the second, housing and the so-called 'forms of life'. See Pier Vittorio Aureli and Martino Tattara, 'A Limit to the Urban: Notes on Large-Scale Design', and 'Barbarism Begins at Home: Notes on Housing', both in *Dogma: 11 Projects* (London: AA Publications, 2013), 42-45 and 86-90.

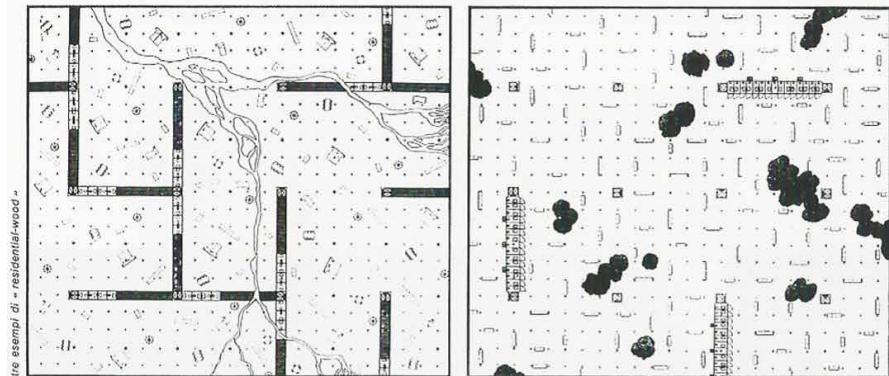
¹³⁰ Roberto Gargiani, *Dall'onda pop alla superficie neutra. Archizoom Associati 1966-1974* (Milan: Electa, 2007).

‘Immagini, 1969’, Gargiani illustrates the relevance of intellectuals such as Mario Tronti and Manfredo Tafuri in directing Archizoom’s research towards developing Hilberseimer’s ideas, which in turn led to the development of the project ‘No-Stop City’. The influence of Mario Tronti’s theses criticising any utopic attitude, and instead inviting intellectuals to focus on society’s present condition and to accept all that exists, directed Archizoom’s focus towards the capitalistic city and, initially, to a belief in the critical possibilities of the architectural form, intended as an ‘urban artefact’, and reduced to its “zero degree”.¹³¹ This initial certainty was swept away with the publication of Manfredo Tafuri’s ‘Per una critica dell’ideologia architettonica’ [Toward a Critique of Architectural Ideology] in *Contropiano*,¹³² and, in particular, by Tafuri’s reading of Piranesi’s ‘Campo Marzio’, which, critically questioned the role of the architectural object within the city. From here, Archizoom’s interest turned to Hilberseimer’s paradigm: the large city seen as an enormous social machine, and the elementary living cell as the component that would conceptually replace the role of the architectural object. These two categories became the premises for the development of the ideas that culminated in the projects ‘Discorsi per Immagini’ and ‘No-Stop City’.

The connection between the arguments put forth by Dogma and the experience of Archizoom is undeniably substantial, thus giving rise to several contentious questions. For instance, one might debate whether Dogma’s critical analysis should be viewed as a genuinely innovative position, considering its ties to the historical period of the sixties and early seventies. However, a deeper exploration of this aspect would require a separate study focused differently than the one chosen for this text. Nevertheless, these issues cannot be completely overlooked, and a discussion of the project ‘Stop City’ (2010) may assist in elucidating this argument, which otherwise risks being shaped solely by an ideological stance. Dogma has taken a pivotal step that could effectively address the challenge of legitimising the ideological position of its cultural project. Whereas Archizoom’s experience in the context of the capitalistic city led to the renunciation of belief in architecture and its replacement with the notion of the generic quality of urban space, Dogma, within the framework of the post-Fordist city, reinterpreted Archizoom’s project by reversing its conclusion and transforming it into a hypothesis for its own research. With the *contro-progetto* (counter-project) ‘Stop City’, Dogma executed a critical move that encapsulates and sublimates all its intentions into the unified field of an architectural proposition.

¹³¹ Ibid., 132.

¹³² Manfredo Tafuri, ‘Per una critica dell’ideologia architettonica’, in *Contropiano*, no. 1 (Florence: La Nuova Italia, 1969): 131-200. English Translation ‘Toward a Critique of Architectural Ideology’, in K. Michael Hays, ed., *Architecture Theory since 1968* (Cambridge, MA; London, England: The MIT Press, 1998), 6-35.



In the bourgeois ideology ecological balance and social justice become part of the same battle: the appearance of the city gives a formal verification of this equilibrium. In Town Planning, therefore, an attempt is made to achieve a not impossible harmony between the Public Interest and the Private Interest: these two categories,

however, are always taken as antithetical, contrasting, and unreconcilable phenomena. The problem therefore becomes that of finding a two-dimensional net, to guarantee the fitting together of such components as are unreconcilable. The traffic can be taken as the most general link of communication between the two, as it becomes

the objective and figurative schema of the functioning of urban life. In fact roads do not merely serve the compact fabric of what is private, but they also dissect it and make it communicating, making place for the emergence of architeconic language. The skyline becomes a diagram of the natural accumulation which has taken place of

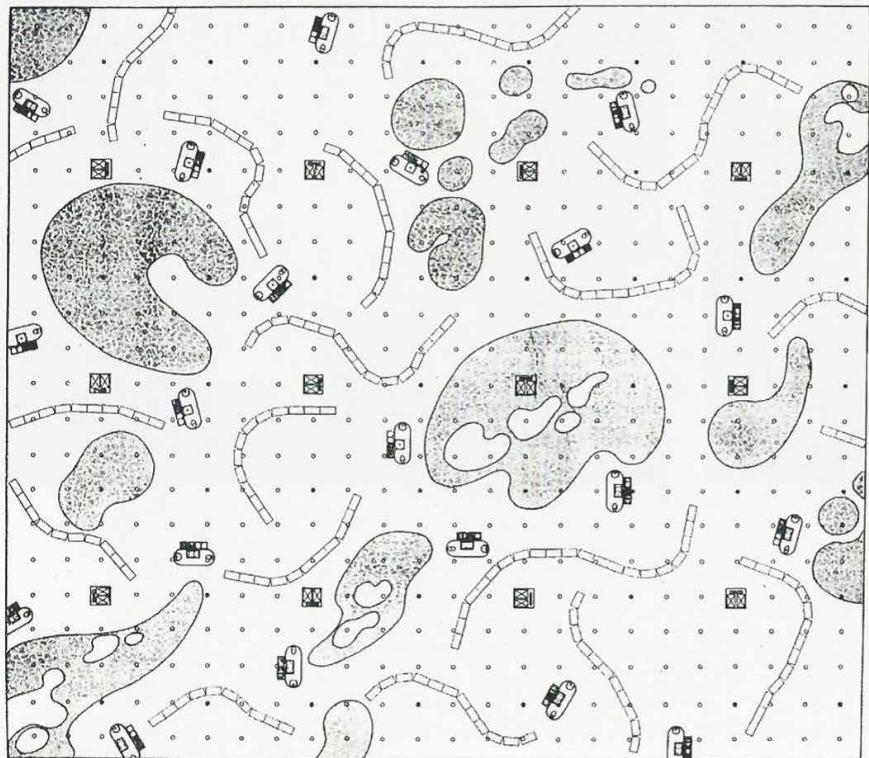


FIG. 1.6 Archizoom Associati, *No-Stop City* (1971). Three examples of 'residential wood'. CSAC Università di Parma

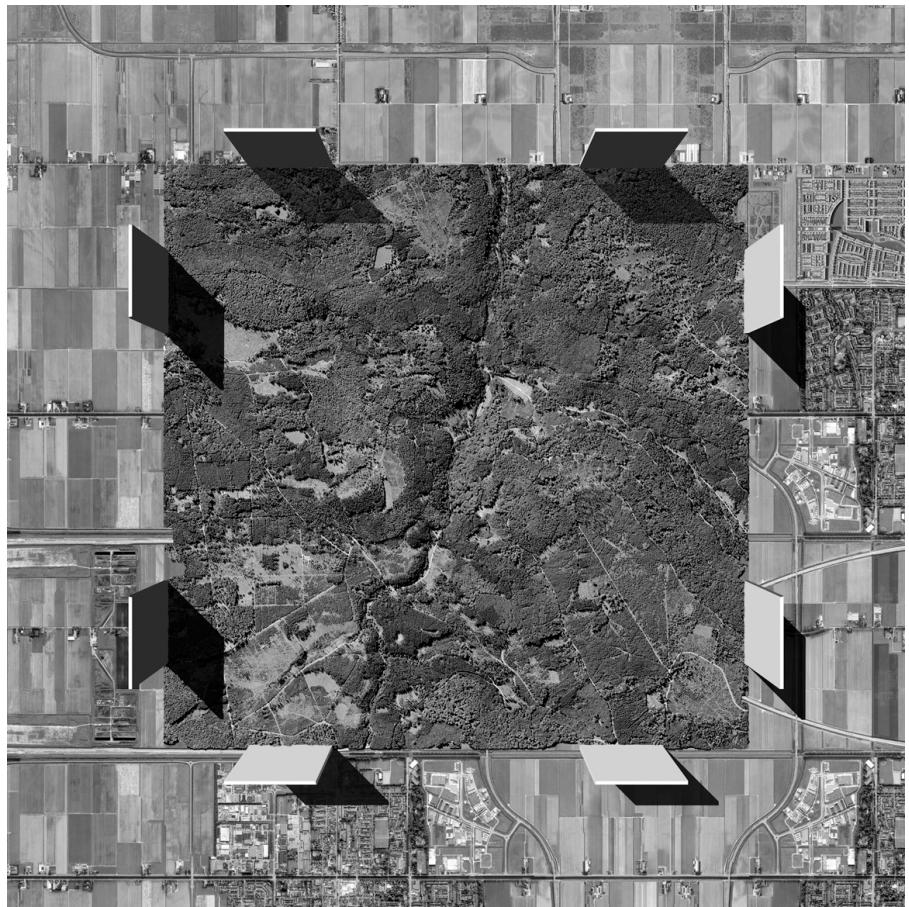


FIG. 1.7 Dogma, Stop City (2007). Top view.

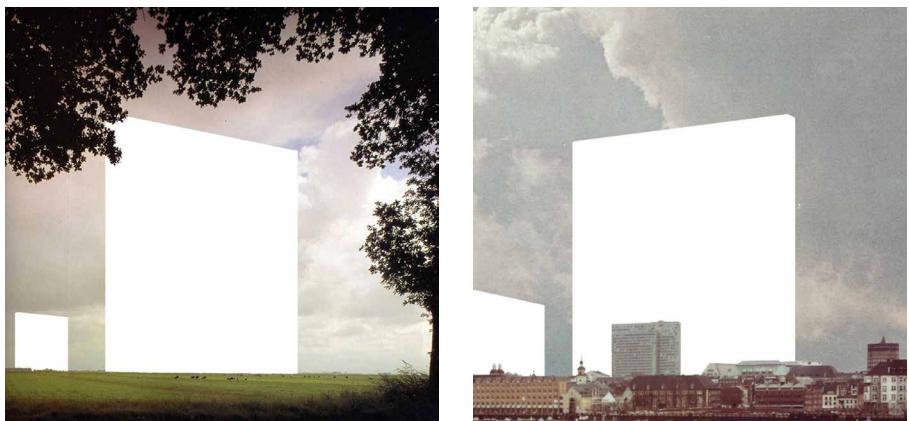


FIG. 1.8 Dogma, Stop City (2007). Views.

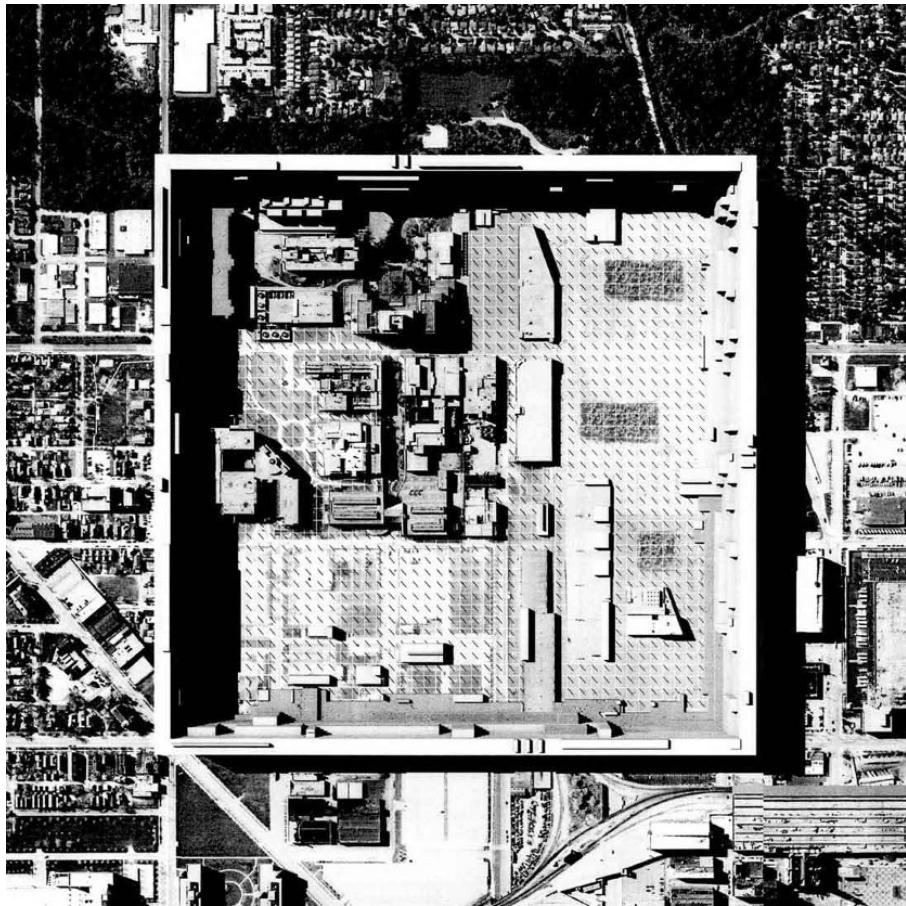


FIG. 1.9 Dogma, A Simple Heart (2002–2010). Duisburg. Top view.

The 'Stop City' project develops a critique of informal urbanism by proposing eight large 25-metre-thick vertical slabs, each measuring 500 x 500 m. These mega-forms, which in my view recall Rino Levi's competition entry for Brasilia, are set in pairs across 3 x 3 km of virgin forest. According to Dogma, each slab represents a self-sufficient city within the city. Dogma's critical leap – and, it could be argued, theoretical shift in relation to 'No-Stop City' – is executed in the simple operation of monumentalising the neutral, horizontal field proposed in No-Stop City by rotating it 90° into the vertical position of a building, in this way giving it dimensions and limits. As a result, the non-figurative neutral field of the Archizoom city is translated and transformed into the non-figurative language of Dogma's architectural façade. The knight's move! By operating this conceptual shift in 'Stop City', Dogma literally

and theoretically clears the space and the context of the critical debate, and in so doing defines a rhetorical field for the elaboration of its hypothesis. Hence, the non-figurative becomes a direct emanation of the refined trick operated by 'Stop City'.

In addition to 'Stop City', other speculative projects by Dogma include 'A Simple Heart' (2002-10), which was a similar attempt to Stop City based on Cedric Price's 'Potteries Thinkbelt Project' (1964-66), and 'A Field of Walls' (2012), a project by Dogma inspired by a thought-provoking hypothesis that challenged Piranesi's project for 'Campo Marzio', where the archetype of the wall is presented in the form of a series of aqueduct-like structures superimposed on Piranesi's proliferation of urban types. Moreover, 'A Field of Walls' also references Archizoom, particularly 'Quartieri paralleli' [Parallel Districts] per Berlino, part of the 'Discorsi per immagini' [Conversations by Images] series. Certainly, in my opinion, there is no better context for engaging in a critique of figuration than Piranesi's 'Campo Marzio'. In 'A Field of Walls', Dogma formulates a critique of the excess of figuration by measuring the site through the superimposition of a regular system of walls. But if at first sight the visible impact of Dogma's structures is clearly recognisable in plan as a series of straight parallel lines as opposed to a typological heterogeneity proposed by Piranesi, the specific architectural critique enabled by the rhetorical and speculative choice of intervening in Piranesi's 'Campo Marzio' should be evaluated in terms of the vertical profiles and sections.

It is here again, in fact, that Dogma's alternative approach to architecture can be recognised: the neutrality of the walls serves as a neutral background structure onto which the proliferation of architectural forms of the 'Campo Marzio' is either projected or incorporated. When projected, the 'field of walls' emphasises the individuality of Piranesi's architectural forms; whereas when incorporated, the same architectural forms lose their autonomy and formal recognisability, becoming a sequence of qualified internal spaces carved into Dogma's walls. However, while it is clear how, at a superficial level, 'A Field of Walls' presents a critique of the excess of figuration in Piranesi's proposal, it is also evident that a figurative dimension is nevertheless maintained in the project, specifically by the resulting incidental forms and fragments of forms that mediate between Piranesi's and Dogma's overlapping propositions. Hence, it is precisely this figurative character that Dogma's proposal ultimately establishes.

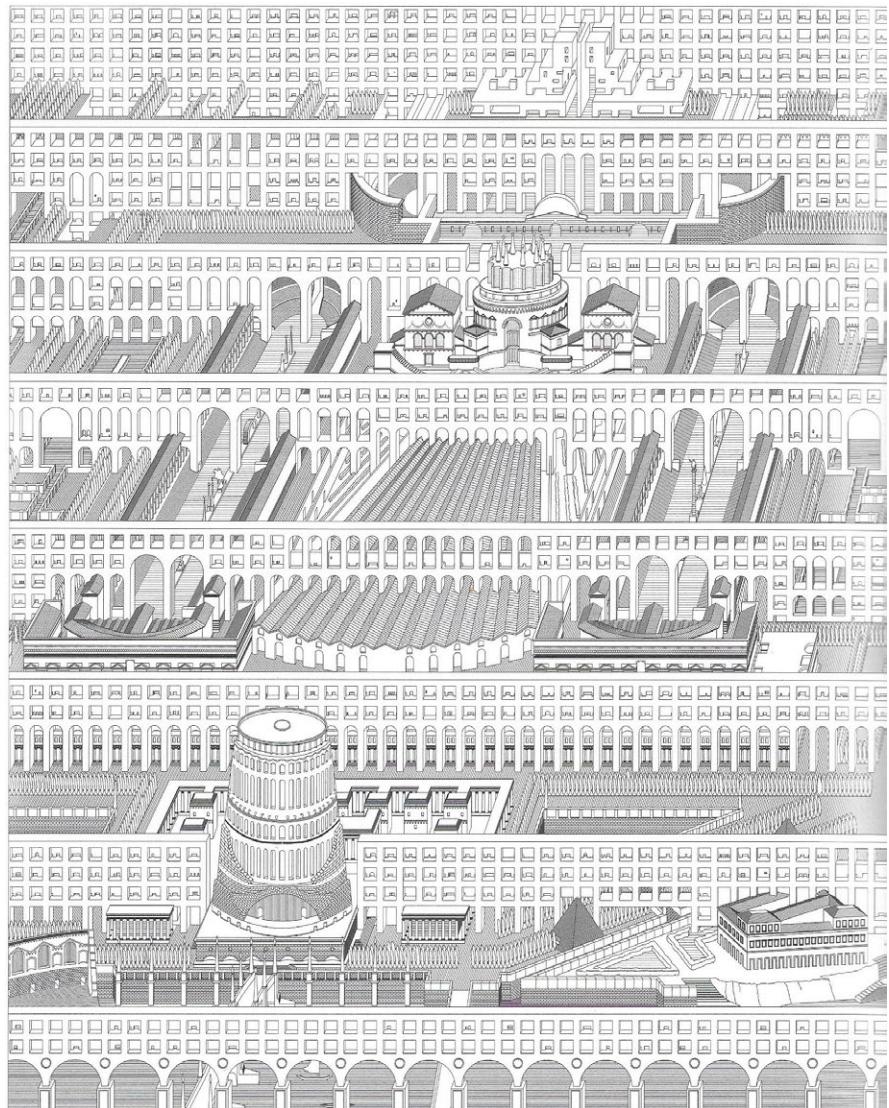


FIG. 1.10 Dogma, *A Field of Walls* (2012). Bird's eye view.

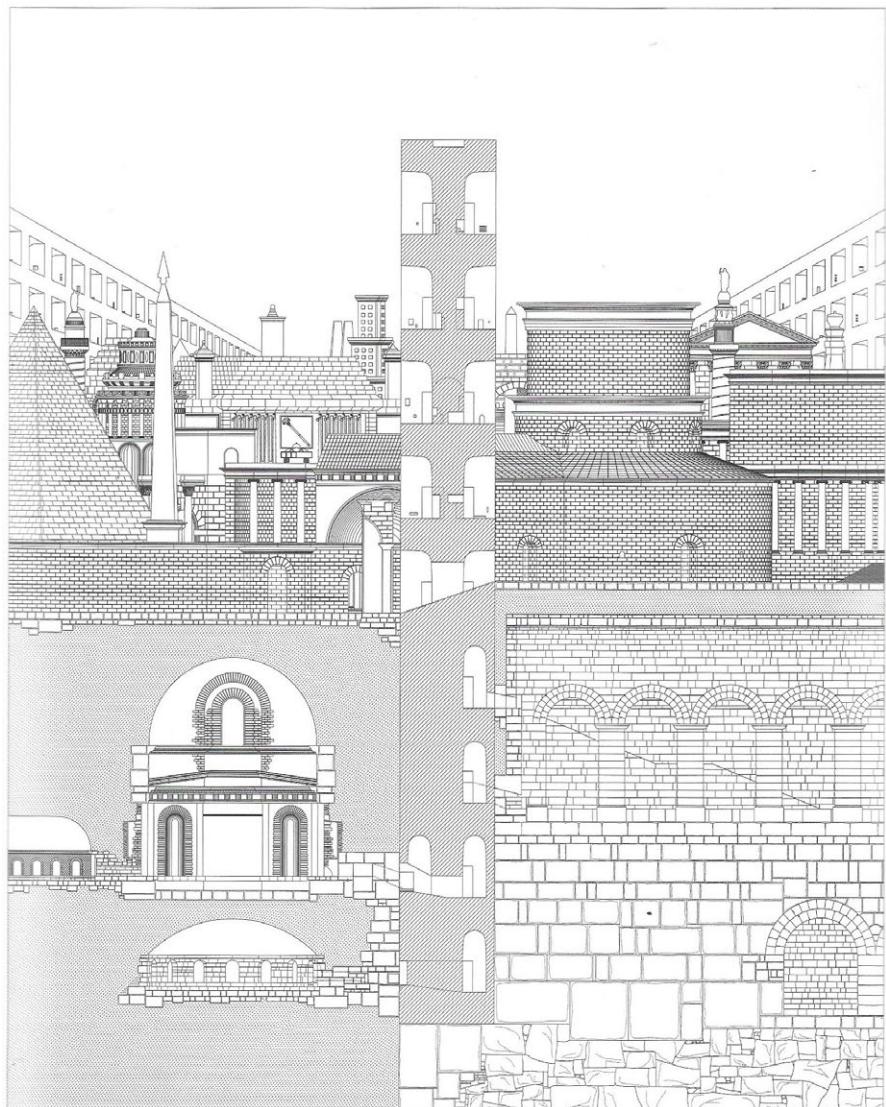


FIG. 1.11 Dogma, *A Field of Walls* (2012). Cross section.

1.5.5 Architecture and the City

It is essential to acknowledge that Dogma has recognised that within the contemporary city, the set of operative instruments, such as the master planning that provides the functional and morphological field for the buildings, may not be the place where architecture originates. Instead, it is architecture itself that assumes a decisive urban role without any mediation, neither with the master plan nor through urban typology. It could be argued that this analysis could also be generalised beyond the strict field of selected references that Dogma proposes in opposition to the discipline of urbanism. In the essay 'Novità attese da qualche tempo' [News Awaited for Some Time] (2000), written for the magazine *Lotus International*, Franco Purini claims that architectural language has appropriated the totality of the urban dimension in its broader extension to become a language integrally urban and capable of simulating, on the one hand, the urban continuum and, on the other, the specificity of the urban intervention.¹³³ For Purini, this fact gives rise to a vital and clear contradiction: if architecture is tending towards becoming a simulacrum of the city, what then is the city, and what is architecture? Both the terms 'architecture' and 'city' appear to be open to redefinition. Dogma's work refuses to confront this paradox, aiming instead to establish the conflict anew (which it sees as the basic condition for prompting the emergence of a political question, and for the possibility of political action) between the idea of the city as a form versus a naturalistic vision of the city, which it regards as the ultimate myth of urban planning. Yet the conflict remains within the rhetoric of the project, and it is precisely there that it expresses all its strength and sophistication. Recalling the two moments presented in this chapter that characterised the critical attention that drawing received in the sixties and seventies, namely as a critique of the existing, and as a theoretical construction and discourse, Dogma seems to occupy both levels simultaneously. However, when considering the specific level of theoretical construction, it is noticeable that Dogma's theoretical argument is often concealed beneath the prevailing rhetoric of the ideological critique.

¹³³ Franco Purini, 'Novità attese da qualche tempo', in *Lotus International* no. 104 (Milan: Electa, 2000), 60-68.

1.5.6 Architectural Representation as a Project

Beyond the possible ambiguities highlighted in Dogma's projects, it is important to note that Dogma also engages in fascinating research into architectural representation. This research is at least as significant as Dogma's extensive written body of work. The representational poignancy of Dogma's images, generally linked to the power conveyed in its statements, deserves more detailed examination. This text will limit itself to offering a few considerations that are deemed inherently relevant to the broader context of this research.

It is reasonable to assert that Dogma's drawings and projects strongly influence its theses and writings, yet the manner in which this occurs is not immediately evident.¹³⁴ A simple reading of the drawings cannot adequately convey their true complexity and relevance. Furthermore, it should be noted that Dogma does not adhere to a traditional notion of either architectural expression or the development of architectural form through a standard design process. As has been repeatedly stated, for Dogma, the architectural form is a *parti pris* – indeed, I would argue a precondition – that leaves no room for the unpredictable phenomenology of the design trajectory. Dogma has radicalised the concept of architectural expression, essentially dividing it into two parts: on one hand, it is significantly compressed into the moment of the formal statement, while on the other hand, the project of representation constructs the form for this expressive synthesis. These represent two parallel projects. Dogma's drawings are realised using conventional techniques, with no apparent technical innovation. Rather, what is distinctive in Dogma's drawing and in its project of representation is the same meticulous attitude towards the selection of sources that is evident in its written body of work.

The design drawings embody a dual representation: firstly, they are presented as a set of drawings of plans, sections, and elevations; then, the same set is rendered as a depiction that conveys the specific aesthetic reality of the project. In some cases, the images aspire to the elaborate realism of photographic work; in others, the reality of the image is of a more complex nature and pursues a fine painterly realism within a controlled dissimulation of mixed media montage. The composition of the images generally comprises classically arranged central perspectives, with the architecture often positioned on the horizon, where it connects the earth and sky in various atmospheres. In other instances, the architecture is staged as the background image, where the large scale of the project generates an intense and timeless feeling. These images never refer to a graspable reality; instead, they remain suspended between a hypothetical recent past and a hypothetical near future.

¹³⁴ It could be argued that this is often the case with architects who are also engaged in the specific problems of the theory of architectural design.

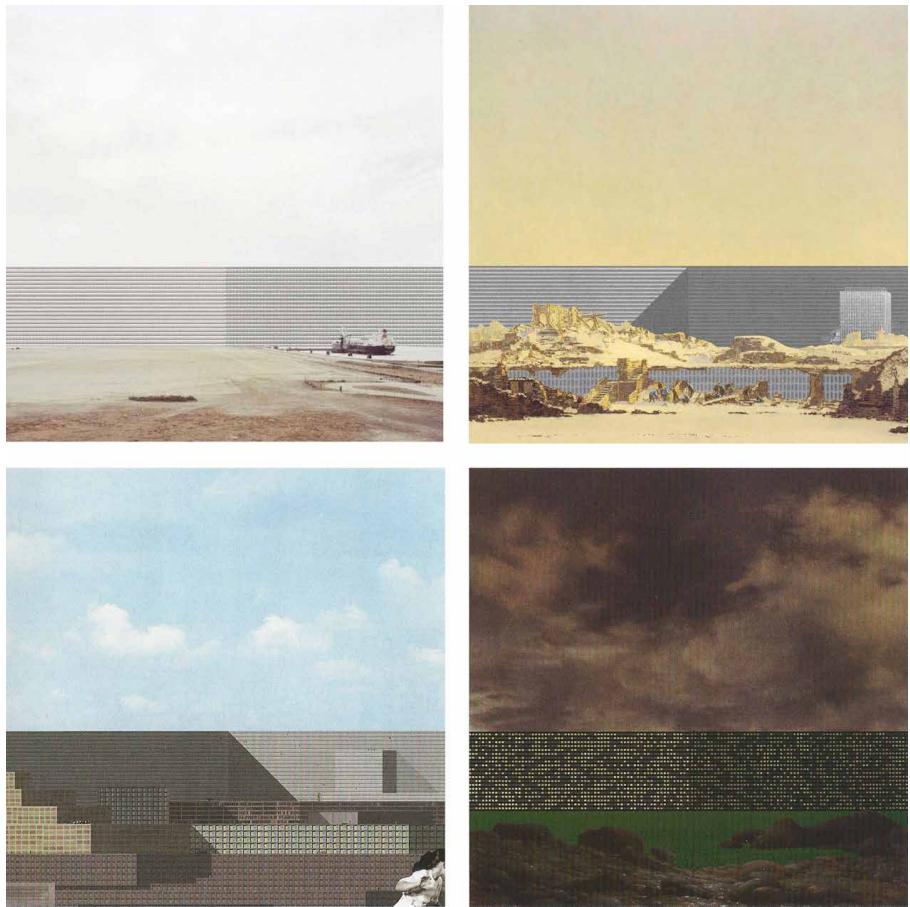


FIG. 1.12 Dogma, *A Simple Heart* (2002-2010). Views.

A final point concerns the drawings, particularly the site plans, where the delineation of the large form, its rootedness within the specific context, and the elementary cell are graphically resolved and exist together in the same plane. These site plans also create a separation between the contents presented and the observer, either through the close-up view necessitated by the small scale of the housing cell or the distance required by the large forms.

Dogma presents a sophisticated project of linguistic destruction through a systematic critique of contemporary architectural production, the modern city, and the 'system' of architectural culture, which encompasses current architectural design research and its academic teaching. This teaching often views the architectural project as a platform for technical and scientific application, neglecting to recognise

it as the principal moment for producing architectural knowledge - a perspective that may not align with its preconditions and expectations. However, the very sophistication of Dogma's two Italian architects appears to have entrapped them in the very scheme they have devised. This can be attributed not only to an overreliance on ideological components that are detached from the reality of the architectural project but also to the justificatory approach of their project, which amalgamates historical and ideologically driven references. Taken to its logical conclusion, the project reaches a fatal dimension: the totalising nature of Dogma's conception ultimately results in the negation of the (architectural) project itself, reducing architecture to an institutional and semipiternal form of political (but also ontological-metaphysical) inquiry.

Dogma's architectural form is epitomised by archetypes such as the enclosure and the wall; or, to be more precise (since these forms can only be represented), it is more accurate to assert that they are represented by the figure of the square and by the line. Within this framework, architecture would become an entity (literally), in search (a search that can only be dissimulated) of its 'characters', in order to be materially institutionalised (to overturn Pirandello's *Six Characters in Search of an Author*¹³⁵ and all of its thematisations). At the same time, their projects conflict with everything else. Paradoxically, Dogma's architecture appears to realise itself as an image (since it is constructed within the representation), establishing itself precisely in the clash, in the literal physical opposition to Dogma's alterity, thus confronting exactly what it rejects and clearly despises: the bad city and bad architecture. As both these terms are framed within a strong rhetorical dialectic, they are destined for self-perpetuation, while the dream of a revolution is postponed. Given that Dogma's architectural project has no operative existence beyond the content of the images expressed in its design investigation, along with its extensive writings and educational activities, the challenge of evaluating its work lies specifically in the fact that an alternative can be constructed within a logic intrinsic to its procedures, and therefore, to the architectural representation itself. However, by underestimating the essential truth that such logic is and can only be fictional - an intermediate and tentative state that also necessitates a critical examination of its own contradictions to reveal new research grounds - Dogma's project is condemned to self-annihilation or to an incessant, yet (in this case) merely instrumental new source of motivation within historical-rhetorical references.

¹³⁵ See: Luigi Pirandello, *Sei personaggi in cerca d'autore* (Florence: R. Bemporad & Figlio, Editori, 1921). English translation *Six Characters in Search of an Author and Other Plays* (London: Penguin Classics, 1996).

The peremptory rejection of a self-critical attitude intrinsic to the project confines them to making mere 'critiques of the existent' that lack projective development and are overshadowed by a regressive use of history: the paradox of research that would become 'history through design and design through history'. In this sense, the daring ideological project deviates to access its proper realm: the realm of the image, of architectural figuration, and of the bachelor machines... *malgré soi*. Within this context, which contradicts Dogma's declared motivations, this project stands out as it enables one to observe, even in a theoretically comprehensive project, the effects of the disruptive and irresolvable ambiguity of architectural representation.

2 Descriptions

A Hypothesis of Architecture and a Hypothesis of Architectural Drawing



FIG. 2.1 Franco Purini, *Classificazione, per sezioni, di situazioni spaziali* [Classification, by sections, of spatial situations] (1968)

2.1 Chapter Overview

Chapter 2 develops the case study by providing a description of Purini's research in 'Una ipotesi di architettura', and an analysis of the emergence and progressive construction of what this research claims is a hypothesis of architectural drawing. A preliminary section introduces the main direction of Purini's architectural ideas, with a particular focus on the theme of drawing; the chapter then proceeds to develop the thesis components that were stated in the introduction and discussed with a relatively broad degree of freedom in the previous chapter. The components can be summarised as follows:

- the identification of architectural representation as the privileged field in which an idea of architectural drawing can be researched;
- the identification within architectural representation of the premises that are further developed in 'Una ipotesi di architettura';
- a critique of the conventions by which the architectural project is conceived, and the simultaneous 'destructive' and 'constructive' role the drawing plays in the formulation of this critique;
- the resulting conceptual abandonment of a conventional understanding of drawing in its relation to architecture, which itself awaits a redefinition;
- scrutiny of the grammatical experiment on architectural language through which the characteristics of 'Una ipotesi di architettura' and, in the present context, the hypothesis of architectural drawing can be clarified;
- an investigation of the emergence and progressive identification (through a series of projects related to the grammatical study) of a new figurative autonomy of the architectural drawing that establishes the architect's subjectivity;
- the ensuing redefinition of the theoretical and instrumental facets that govern the relationship between drawing and architecture.

The chapter outlines, discusses and clarifies the main characteristics of Purini's drawing in relation to a series of architectural projects, laboratory-like research, and a selected number of essays composed between 1966 and 1976, a moment when the first phase of this research engages a larger framework of architectural themes. In fact, the analysis of the 'Padiglione in cemento e vetro' [Concrete and glass pavilion] (1976) at the end of the chapter provides an opportunity to summarise the core of ideas on architectural drawing that emerge from 'Una ipotesi di architettura', and to outline the criteria whereby from 1976 onward, the drawing became an autonomous discursive architectural system in the context of Purini's notorious drawing series.

Lastly and significantly, the argument presented here and the choices that inspired it imply the need to update the existing scholarship on Purini. The study of Purini's drawing is commonly associated with the drawing series, which began in 1976 with the three drawings entitled 'Angoli' [Corners]. In the present research, however, the focus on drawing falls instead on Purini's motivations and foundational research between 1966 and 1968. Without investigating the juvenilia and examining the tight logic of its development, Purini's most prolific and famous work on drawing (discussed here only tangentially) and his theoretical writings on the subject are only partially understandable.

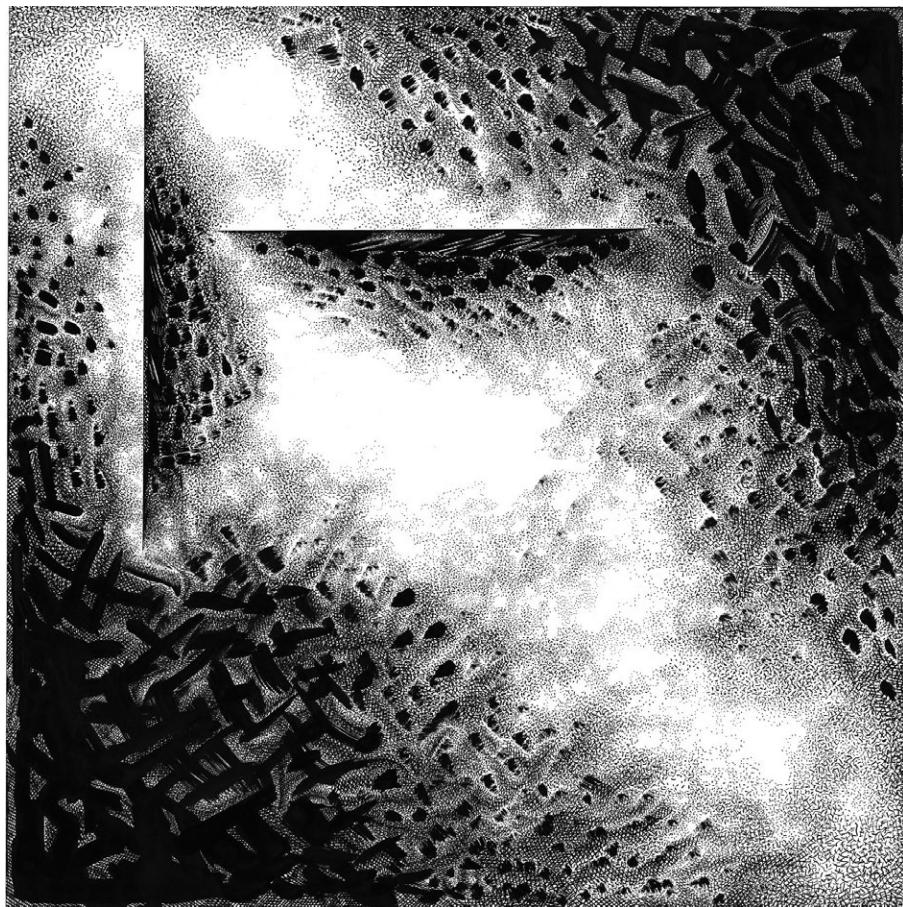


FIG. 2.2 Franco Purini, *Prima dell'architettura* [Before architecture], from the drawing series 'Inizi' [Beginnings] (2005)

2.2 Main Directions of Franco Purini's Work in Relation to Drawing

2.2.1 Franco Purini's Drawings: An Expressive Totality

Emphasising the necessity of recognising the significance of drawing within the extensive and varied body of work by Franco Purini necessitates a preliminary consideration. It should be noted that in Purini's oeuvre, drawing serves distinct and diverse purposes. Indeed, Purini's drawings are not solely tied to theoretical reflection as this research might imply, nor are they limited to the architect's solitary contemplation of architecture; rather, they encompass every facet of the architectural realm and life in general. Purini draws incessantly: in a conversation with the irreverent fashion journalist and illustrator Maddalena Sisto (also known as MAD) for the magazine *Casa Vogue*, he admits to being affected by what he defines as 'an innocent form of graphomania'.¹³⁶ Purini offers many autobiographical accounts of his relationship with drawing. For instance, he reveals that he draws most of all at night, in a small room no one is allowed to enter. The room has a permanently covered window to avoid the disturbing influence of the outside view, a detail that might be seen as a sign of his disagreement with Leon Battista Alberti's advice to artists that the correct approach to representation was to consider 'the frame of the painting as an open window' beyond the actual content of what is framed.¹³⁷ Purini also confesses that he cannot stand the presence of his drawings at home; they are statements he finds intolerable. However, he does have one hanging in his office: 'Classificazione, per sezioni, di situazioni spaziali' (1968), the drawing that establishes and contains – it is argued here – all the others. In the conversation with Maddalena Sisto, Purini also relates that he developed his drawing skills by complementing the education he received at university with consistent *en plein air* drawing practice in the city of Rome.¹³⁸

¹³⁶ See Maddalena Sisto, 'Franco Purini, o la razionalità febbricitante. Intervista a Franco Purini', in *Casa Vogue*, (Milan: Vogue Italia, 1980), 197.

¹³⁷ Leon Battista Alberti, *Della Pittura* (1435) (Milan: Società Tipografica dei Classici Italiani, 1804), 28.

¹³⁸ Maddalena Sisto, 'Franco Purini, o la razionalità febbricitante. Intervista a Franco Purini', in *Casa Vogue*, (Milan: Vogue Italia, 1980), 197.

However, aside from its informative value, this biographical account holds no particular relevance in this research context.¹³⁹ Delving into the 'life of the author' could result in a misguided understanding of the very concept of authorship and creativity that Purini represents, which is established first through research into his architectural language, and second through the subsequent development of specific design experiments. Purini views himself as an agency for drawing, rather than vice versa. This presents a more complex approach than the traditional and often romantic investigations into 'how the architect draws'. Nonetheless, there exists a romantic dimension to Purini's relationship with drawing, encompassing the expression of desire that is inherent in any drawing; however, in this context, it will not be investigated in depth.

Purini literally embodies the motto that Pliny the Elder in *Historia Naturalis* attributes to Apelle: '*Nulla dies sine linea*' [Not a day without a line].¹⁴⁰ From his relationship with his inseparable notebook, where thoughts, ideas and sketches are recorded to dense and refined representations of the projects, foreshortened perspectives of monuments, large-scale studies of landscapes, urban and topographical analyses, and from designs for ideal cities to classifications of architectural elements and studies of ephemeral architectures, a circle is completed that elevates drawing to the heights of an expressive totality. In addition to Purini's direct involvement in theoretical research and his office practice, it is worth mentioning his equally intense activity as an educator and critic, deeply engaged in the contemporary architectural debate, particularly in the Italian context.¹⁴¹ Overall, Purini's work presents complex stratifications, each of which would require a separate investigation beyond the scope of this present research. Instead, the next sections of this chapter aim to delineate the most important characteristics that link Purini's main architectural ideas to drawing and to a number of conceptual instruments and techniques developed in the course of 'Una ipotesi di architettura'. In particular, the text will examine Purini's drawing in relationship to the role of expression as a human faculty,

¹³⁹ For anyone interested in Purini's biography, he published a very curious and puzzling book, a sort of memoir in which he enumerates, literally one by one, all the events and relationships in his public and private life from childhood to the present day. See Carlo Berizzi and Enrico Valeriani eds., *A colloquio con Franco Purini* (Rome: Gangemi Editore, 2014).

¹⁴⁰ Pliny the Elder, *Natural History*, 331-334.

¹⁴¹ Franco Purini has led research and has taught architectural design studios and disegno e rilievo [drawing and survey] at the architecture faculties of Reggio Calabria, Rome, Venice, and is now an emeritus professor at La Sapienza. Purini actively participates in seminars and conferences and is a member of some of Italy's most prestigious cultural institutions, such as the Accademia di San Luca and UID – Unione Italiana del Disegno (Italian Association of Drawing). Over the past sixty years, he has played a significant role in key moments of Italian architectural culture, including *Belice 80* for the reconstruction of Gibellina after the 1968 earthquake, the *Estate Romana* [Roman Summer] initiative promoted by Renato Nicolini in the mid-1970s, and the *Strada Novissima* exhibition curated by Paolo Portoghesi for the 1980 Venice Biennale.

which Purini considers to be architecture's ultimate goal; the associated concept of 'apparition' as the propelling force of expression; his attitude towards serialism and a classificatory method; and, last but not least, creative techniques: namely the 'rules of the game' of design procedures.

Furthermore, as mentioned in the introduction, analysing the characteristics of Franco Purini's work enables a more specific evaluation of various research sources that would not otherwise be possible. This is because those sources would require different assumptions beyond the scope of drawing. In this section, I will specifically contextualise Purini's early work in relation to the work of Ludovico Quaroni, Maurizio Sacripanti, Achille Perilli, and Gastone Novelli. Additionally, in Chapter 2, Section 4, I will explore the more specific connection with the theories of Noam Chomsky and, proposed here for the first time, that of Arnold Schönberg.

Purini's works express a vigorous dialectic between an analysis of architectural themes and the *poiesis* (poetics) of their representation. Like Piranesi, Purini captures the impetus for never-ending creative and theoretical architectural research in the space between these two polarities. His assiduous engagement in the practice of both design and writing – the two forms of architectural reflection – leads to constant conceptual accidents that are dealt with, or, vice versa, instigated by autonomous investigations on drawing, which represent the distinctive character of his work. However, how these confrontations occur between professional projects, writings, and autonomous drawing investigations is not always immediately evident. For instance, it is easy to observe in Purini's professional work that the architectural forms he proposes are, in most cases, relatively simple, and the *terribilità* of the drawing series is largely attenuated and can only be identified in the parts or architectural detail of the building most suited to receiving particular creative effort.

In the 'Complesso parrocchiale San Giovanni Battista' [San Giovanni Battista Parish Centre] project in Lecce (1999-2006), the architectural expression is recognisable in the twist of the four connected pillars defining the *aula ecclesiae* and, by extension, the whole building.¹⁴² Certainly there are also other cases where the exchange between the emphasis on drawing and the expressive character of the building appears more direct, such as in the controversial 'Casa del Farmacista' [Pharmacist's House] in Gibellina (1980-1982), where the figurative profusion is present in

¹⁴² For an overview of the 'Complesso parrocchiale San Giovanni Battista' in Lecce, see Maurizio Oddo, 'Complesso parrocchiale San Giovanni Battista, Lecce, 1999-2006', in *Purini/Thermes* (Rome: Edilstampa, 2009), 60-71.

the different design for each of the four façades of the house.¹⁴³ Nonetheless, the richness of architectural expression in this case was primarily justified by the specificity of the site and the functional requirements of the brief. Although the house is situated at the end of a row of dwellings, it is isolated due to a service road that separates the last two plots. This means that the site presented a specific urban condition where the house has four façades facing public roads. At the same time, the public function of the pharmacy had to be integrated with the privacy the house required.¹⁴⁴ In synthesis, this house represented the perfect occasion for developing the character of a building and distinguishing an anonymous urban fragment in the re-founded town of Gibellina Nuova. More generally, it is essential to point out that the expressive register of each project or realised building is always evaluated within the specificity of its situation.

If the relationship between Purini's drawings and writings is considered in terms of their autonomy and relative 'truth', they constitute aggregates of analogous concepts that never overlap entirely. These two modes of architectural enquiry generate imperfect correspondences that constantly produce conceptual gaps, which become raw material for future investigation. If every work, whether a design, a text or drawing, can be said to be in some way a portrait of its author, then, in Purini's case, the relationship between the ideas and their final representations – in this case, between the *disegno interno* and the *disegno esterno* – is so singular as to become the centre and engine from which all his work commences. Purini's drawings are always double representations: on the one hand they appear to be faithful depictions of rational thinking (although this is always deceptive), while on the other, they are open and discursive because they engage in rhetorical relationships with sources external to their inherent premises, such as a drawing from another context, the content of an essay, or the work of other architects or from other architecture. It is due to this duality that the impenetrable and often enigmatic nature of his work becomes evident. In short, the drawing series, the design projects, and the writings all share a general character that proposes very complex configurations through the use of a few simple means. These are described fully in this section and consist of an elementary architectural language adopted for its didactic qualities, together with a series of conceptual tools and creative techniques.

¹⁴³ For the Casa del Farmacista, see Franco Purini and Laura Thermes, 'La casa del Farmacista a Gibellina', in *Controspazio*, nos. 3-4, July-December (Bari: Edizioni Dedalo, 1981), 97-98; and Franco Purini and Laura Thermes, *Aforismi Architettonici* (Milan: Giancarlo Politi Editore, 1995). Unnumbered.

¹⁴⁴ Ibid.

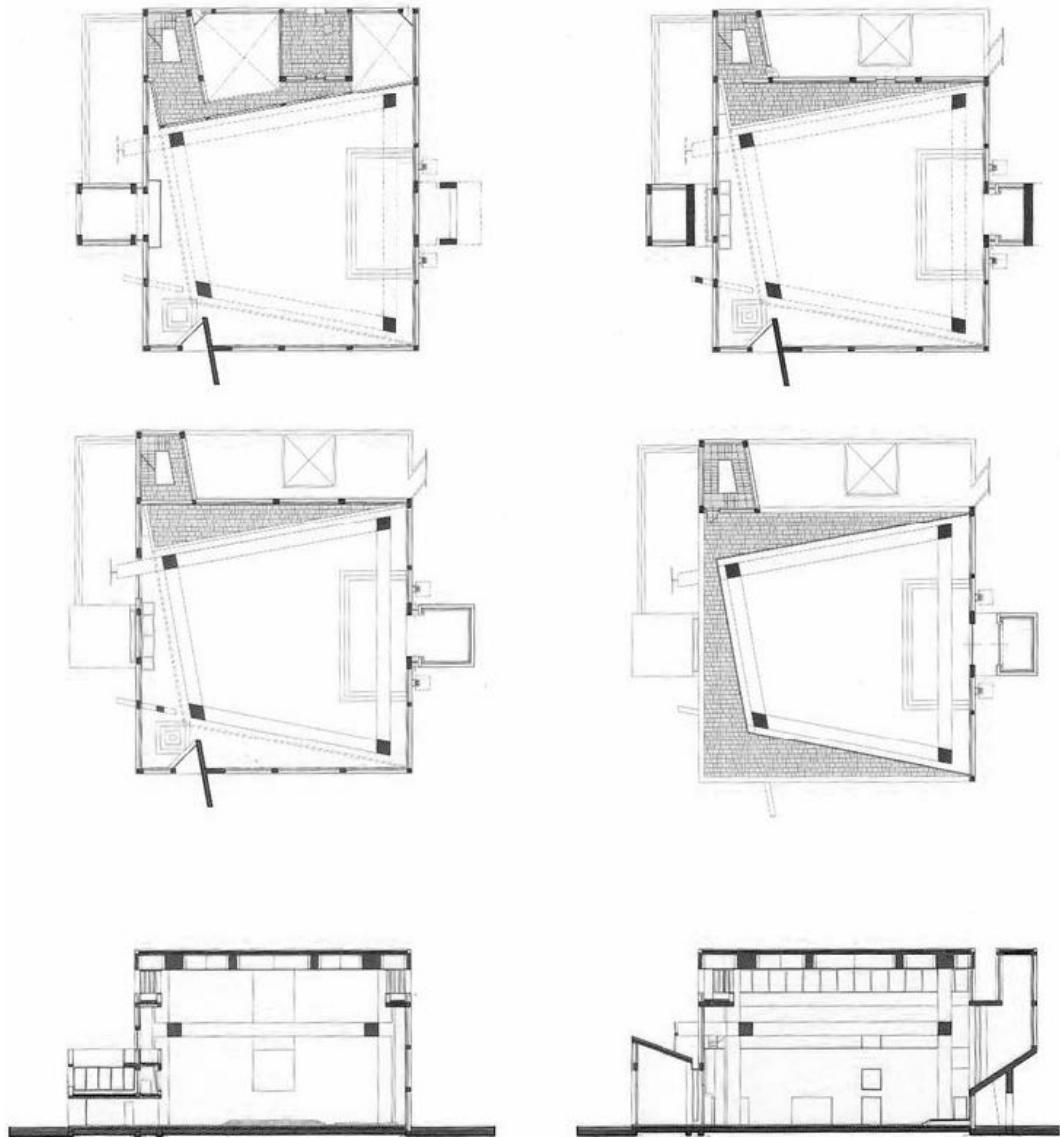


FIG. 2.3 Franco Purini, and Laura Thermes, 'Complesso parrocchiale San Giovanni Battista' [San Giovanni Battista parish centre], Lecce (1999-2006). Plans and cross-sections of the *aula ecclesiae*.

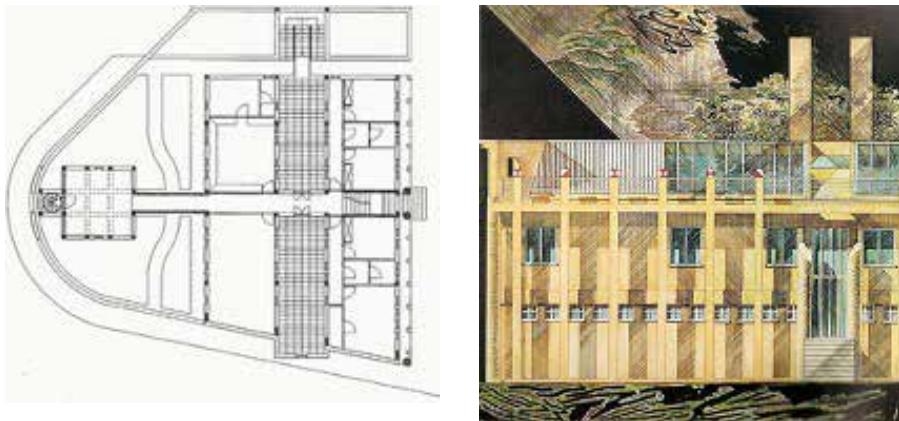


FIG. 2.4 Franco Purini and Laura Thermes, 'Casa del Farmacista' [Pharmacist's House], Gibellina (1980-1983). Plan and façade detail.

In numerous writings, Purini has repeatedly clarified the components of his architectural research: its motivations, content, the ideological context in which it has been developed, and the conceptual instruments used.¹⁴⁵ Yet for all this, his many descriptions never fully correspond.¹⁴⁶ Purini constantly re-examines this highly structured body of work and continually questions the foundation he laid in 'Una ipotesi di architettura'. Purini engages in a singular, lateral form of communication that is perpetually deflected. To paraphrase Viktor Shklovsky (whom Purini often cites), the author is conscious that he is not free, and that for him, 'it is forbidden to take the straight road', in other words, the straight road of direct communication.

¹⁴⁵ See: Franco Purini (with Gruppo Atrio Testaccio). 'I motivi di fondo - Sulla tecnologia - I problemi della città. (1966)', in *Grammatica* no. 3, Gastone Novelli and Achille Perilli eds. (Rome: Edizioni Libreria Feltrinelli, 1969), 64-68; Franco Purini, and Laura Thermes, 'Modern + Modern + History as a History of Themes: Anatomy of a Divided Work', in *AA files*, no. 8 (London, Architectural Association School of Architecture, January 1985), 57-63; Franco Purini, *Scrivere Architettura. Alcuni temi sui quali abbiamo dovuto cambiare idea* (Rome: Prospective Edizioni, 2012). See also, Laura Thermes, 'Appunti su alcune tecniche d'invenzione', in *Controspazio*, no. 3 (Bari: Edizioni Dedalo, 1975), 82-85.

¹⁴⁶ This claim is a direct response to the struggle this researcher has encountered in understanding, analysing and presenting Purini's work anew from the vantage point of drawing. This task could not be based solely on the information provided by Purini, which does not always quite coincide, nor is not exhaustive enough to completely convey the content of the research. Moreover, it was precisely this struggle that more than any prior motivation has informed the research content and structure. During my research I was confronted with an extensive amount of material that led to the development of Appendix 1, which were essential to organising, comparing, dissecting and recomposing the imperfect correspondence of the research material.

For Shklovsky, it is precisely this consciousness that grants any author the label of being contemporary and produces a continuous and permanent innovative stimulus.¹⁴⁷ It is this same consciousness that orients the reading of 'Una ipotesi di architettura' through the lens of drawing.

2.2.2 The 'Apparition'

In the opening essay of *L'architettura didattica* [Didactic architecture] (1980), a compilation of the writings and lectures Purini developed while teaching in the Faculty of Architecture at the University of Reggio Calabria from 1977 to 1980, he presents his theses on architecture and what he considers architecture's ultimate goals. It is sufficient here to recall the first of the nine proposed, which is also a synthesis of the positions expressed in the book itself. Purini writes:

The primary goal of architecture is to express by means of its second goal, that of building, the meaning of human habitation on earth.
Considering architecture as expression establishes its foundation as art, and as the elevation towards a particular and specific complexity of its technical contents, which have to transcend the material substance of building to arrive at the most profound meanings of human life enunciated in poetic form.
However, if this is the primary goal of architecture, then its institution as a discipline should concern the ways through which this expression can be constructed: the functionality, stability and economy of buildings must not be considered as goals in themselves but as simple means for achieving *beauty*, understood as the highest contribution that architecture can make to society.¹⁴⁸

¹⁴⁷ 'There are many reasons for the strangeness of the knight's move, the main one being the conventionality of art, about which I am writing. The second reason lies in the fact that the knight is not free: it moves in an L-shaped manner because it is forbidden to take the straight road.' Shklovsky concludes: 'One more word – don't think that the knight's move is the coward's move. I am no coward. Our tortuous road is the road of the brave, but what are we to do if we see with our two eyes more than honest pawns and dutiful kings?' Viktor Shklovsky, *Knight's Move* (Champaign IL: Dalkey Archive Press, 2005), 3-4. First published as *Khod Konya* (Moscow-Berlin: Helikon, 1923). See also footnote no. 30 of Manfredo Tafuri's 'Introduction: The Historical "Project"', in *The Sphere and the Labyrinth: Avant-Gardes and Architecture from Piranesi to the 1970s* (Cambridge, MA: The MIT Press, 1987), 308.

¹⁴⁸ Franco Purini, 'Nove tesi', in *L'architettura didattica* (Rome: Gangemi Editore, 2002) (1980), 13. This passage also offers another opportunity to clarify the legitimacy of the present research. My dissertation does not question what Purini considers expression as the primary goal of architecture but with the construction of the expression, which is a derive goal, according to Purini. More precisely, what is under investigation is how to develop architecture's primary goal within the discipline. The focus on drawing indicates the tendentious point of view through which I will develop the content presented in Purini's passage. Furthermore, the present research is also validated by the very specificity of the case study, which hypothesises the possibility of 'describing' – whose meaning, as it has already been discussed, should be understood critically – the expression.

According to Purini, architecture should discover a contemporary interpretation of the notion of 'classic' and, in doing so, attempt to reaffirm its beauty. Beauty is 'a promise of happiness', states Purini, paraphrasing Stendhal, but it is also only a promise, and therefore it should be seen as the ideal moment for the convergence of form and meaning; an improbable convergence, as has been shown in the previous chapter.¹⁴⁹ Thus, for Purini the reconciliation between form and content cannot constitute an objective for an architectural work or research; on the contrary, he believes it is necessary to emphasise their dissociation, because only in this way is it possible to develop an authentic awareness of our contemporary condition.¹⁵⁰ The role of architectural representation is to further this separation by investigating the inner contradictions of the conventions of the architectural language. The hope of a recomposition between the two can emerge only through the author's experience, wherein he is confronted with an 'apparition'. This experience could also be called the 'situation', and it is precisely in this way that the spatial situation of the drawing 'Classificazione, per sezioni, di situazioni spaziali' (1968) should be understood.¹⁵¹ For Purini, the drawing, first and foremost, is where this experience occurs.

To clarify the role of drawing in Purini's research, the relationship between drawing as a radical experience and as an apparition requires examination. Purini discusses the notion of apparition in his seminal work *Luogo e Progetto*, where he states that the 'apparition' could be defined as a sudden revelation, a perceptual state between 'vision' and 'oneiric illumination'.¹⁵² By transcending rationality and conventional perceptions, the apparition reaches consciousness directly, so that the individual

¹⁴⁹ 'La beauté n'est que la promesse du Bonheur.' See Stendhal, *De l'Amour* (Paris: Michel Lévy Frères, Libraires éditeurs, 1857) (1822), 34, footnote 2. [English translation *Love* (London: Penguin, 2002)] (1830), 66. It is also important to underline that in this book, Stendhal elaborated the phases through which the unattractive characteristics of a 'new love' crystallise into 'real love'. To explain the process of this so-called crystallisation of love, Stendhal uses the analogy of an ideal trip from the city of Bologna (which in the analogy represents indifference) to the city of Rome, (representing perfect love). Interestingly enough, Stendhal also illustrated the process with a drawing. Although there is no evidence of Purini's specific elaboration of this concept, it is plausible to assume that he also selected this literary reference precisely because it included an architectural metaphor. The circular correspondence established between architecture and literature could, in fact, very well express Purini's idea of a poetical meaning of inhabitation as architecture's primary goal articulated in the first thesis. Furthermore, one could argue that Stendhal's concept of crystallisation influenced Purini's elaboration of the idea of 'apparition', which will be presented in this section. Purini, 'Nove tesì', 13.

¹⁵⁰ Franco Purini presented these contents (later discussed on other occasions) during a lecture held in 2005 at the Faculty of Architecture, University of Rome.

¹⁵¹ See Chapter 2, Section 5.

¹⁵² Purini, *Luogo e Progetto*, 17. See also Franco Purini, 'Per un'architettura "autodescritta"', in *Assenza/Presenza: un'ipotesi di lettura per l'architettura*, ed. Fulvio Irace, exh. cat. (Bologna – Ascoli Piceno: Galleria Comunale d'Arte Moderna – D'Auria Editrice, 1978), 92. Reprinted in Moschini and Neri, *Del Progetto. Scritti teorici di Franco Purini 1966-1991*, 41-42, and Franco Purini, 'Per una architettura dell' "apparizione"', in Franco Purini and Laura Thermes, *Architetture degli Anni Ottanta*, (Padua: 1987). Note that Purini's description of the concept of apparition is analogous to Zuccari's 'formation of the Idea' discussed in Chapter 1.

immediately recognises feelings; for instance, fear or love. The act of recognising the apparition occurs through an instantaneous nominative and descriptive impulse by the individual *poiēsis*.¹⁵³ Furthermore, by observing how the theme is evoked in the works of symbolist painters such as Gustave Moreau, Odilon Redon, Camille Corot and Arnold Böcklin, Purini identifies the 'frontal view' as the iconographic structure of the apparition, which has also become a canonical component in his work. The frontal view and its orthogonal complement (the plan) are the iconographic structures of Purini's architectural research. Through this operation, architecture becomes an integral part of representation. It is established in the correspondence between the drawing experience and the resulting *datum* by which that experience can be immediately recognised.¹⁵⁴

In my view, the concept of apparition regarding the relationship between the frontal view and the plan is of utmost importance. To be more precise, this notion acquires a preliminary definition in the development of 'Una ipotesi di architettura', in the development of (in particular) 'Ricerche di transizione' [Transitional research] (1967), in the drawing 'Progetto di biblioteca a Roma' [Project for a library in Rome] (1968), in the drawing 'Classificazione, per sezioni, di situazioni spaziali' (1968), and, most importantly, in the 'description' formulated in the context of this present research.

More generally, the apparition is clearly recognisable in Purini's drawings through his use of the iconographic structure of the frontal view. The simple comparison between the iconographic structure of Böcklin's *Die Toteninsel* [Isle of the Dead] (1880) and, for example, Purini's drawing for the requalification of Monte Ricco's quarries in Monselice, provides immediate evidence of the analogy between the striking mass of the island and that of the colossal retaining wall in Purini's design. But if the frontal view is the standard representational canon for Purini, it is essential to specify that his drawings are always arranged asymmetrically and always contain spatial depth, generally achieved either through the rotation of the figure to reveal other parts of the object represented, or by removing the figure from the centre of the composition and hence dialoguing with the surrounding background. In the case of the drawing for the Monselice quarries, the exchange between figure and background is subtler. The relationship between the architecture and the landscape produces a semantic indeterminacy since it is impossible to establish what the figure and background are from the picture. In addition, the theme of symmetry is inverted: the architectural setting (established by the proposed wall structure) transforms the irregularity of the hill into a nearly symmetrical composition, which is also accentuated by drawing the entrance gate at the centre of the composition.

¹⁵³ Purini, *Luogo e Progetto*, 17.

¹⁵⁴ Purini, *Luogo e Progetto*, 17-18.

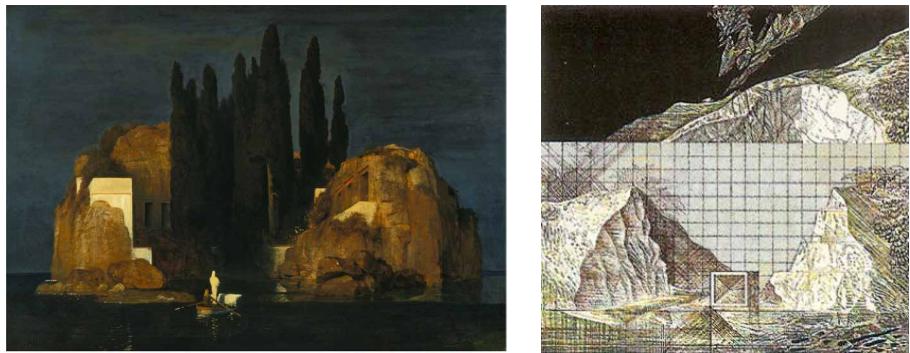


FIG. 2.5 Comparison between the iconographic structure of Böcklin's Isle of the Dead and a Purini drawing.
 Left: Arnold Böcklin, *Die Toteninsel* [Isle of the Dead] (1880). First version, also called the Basel version.
 Right: Franco Purini (with Susanna Menichini, Andrea Silipo, Duccio Staderini, Laura Thermes), drawing entitled *Concorso per la sistemazione delle cave di Monte Ricco a Monselice, Padova* [Competition entry for the requalification of Monte Ricco's quarries at Monselice, Padua] (1973). Frontal view. Detail.

Another example of how the iconographic structure of the frontal view influences the drawing's content can be ascertained by comparing three Purini drawings. An early drawing from 1986 ('Drawing A') entitled 'Progetto di padiglione nel Parco di Pratolino' [Project for a pavilion in Pratolino Park] illustrates a proposal for a pavilion in Florence. The frontal view shows a hollow cubic structure populated by vertical elements resembling columns and located in what could be interpreted as a natural setting. The volumetric description of the cube is rendered through a slight rotation of the figure through the vertical axis and by shading. This graphic theme is also clearly identifiable in 'Drawing B', *Limitare* [Limiting], from the series 'Come si agisce. Dentro l'architettura' [How to act. Inside architecture] (1993). Whereas Drawing A denotes a form that can be recognised as a pavilion and therefore establishes a direct correspondence between the figure represented and the subject matter of the representation, Drawing B describes an action that cannot be given a direct denotation; thus, the correspondence between name and representation requires deeper examination. It is clear that the two drawings have the same iconographic structure, and that the figure in Drawing B could be interpreted as a pavilion (i.e. a simple architectural structure), since it is analogous to the structure presented by Drawing A, which is certainly a pavilion. From this, one can begin to hypothesise how the action of limiting is represented in the pavilion structure. In addition, there is a difference in the second drawing that could help the interpretative approach. At various points, three oblique elements cross one of the vertical structures in the proximity of the right border of the composition. Even so, these elements do not convey much about the action of 'limiting', and could be interpreted as graphic expedients to recentralise the composition. The 'limit' indicated by the title of the drawing is still hardly recognisable in the drawing, which might well be of a pavilion.



FIG. 2.6 Comparison of Drawing A, B, and C. Drawing A: Franco Purini, 'Progetto di padiglione nel Parco di Pratolino' [Project for a pavilion in Pratolino Park], Florence (1986). Front view. Drawing B: Franco Purini, *Limitare* [Limiting]. From the series 'Come si agisce. Dentro l'architettura' [How to act. Inside architecture] (1993). Drawing C: Franco Purini, 'Padiglione in cemento e vetro' [Concrete and glass pavilion] (1976). Side view detail.

A third representation of a pavilion (Drawing C) adds to the grounds for this interpretation. This is a drawing for the project 'Padiglione in cemento e vetro' [Concrete and glass pavilion] (1976). Here, the relationship with the drawing from 1993 is made even more evident by the theme of the interrupted vertical elements, which in this case resemble pillars. One might wonder if the act of limiting refers to the interruption of the structural elements of the pavilion, given that the interruption of the pillars in the concrete and glass pavilion is one of the project's main characteristics. However, this hypothesis is not relevant to identifying the idea of a pavilion. Further light can be shed on this iconographic analysis by considering Purini's own description of the drawing content: 'Limiting implies the concept of a sequence interrupted by an obstacle.'¹⁵⁵ This definition corresponds precisely to the mathematical action of limiting, defined as: 'the point or value that a sequence, function, or sum of a series can be made to approach progressively, until it is as close to the point or value as desired (i.e. the obstacle).'¹⁵⁶

Thus, the figure in Drawing A and C that directly denotes the subject matter of the representation (in this case a pavilion), becomes in Drawing B the iconographic structure or scene supporting the subject matter; namely, the sequence of vertical elements. This continual drifting of the compositional elements between the signified and the signifier is a characteristic of Purini's drawing series. But what is the purpose of this interplay between the composition's elements? 'Una ipotesi di architettura' and, more precisely, its research section 'Ricerche di transizione' (1967) help clarify the fundamental role of these operations, as they enable us to question the conventional codification of architectural representation and, consequently, legitimise research aimed at overcoming them.

¹⁵⁵ Purini, *Una lezione sul disegno* (Rome: Gangemi Editore, 1996), 76. (Writer's translation).

¹⁵⁶ See 'limit', *Apple Dictionary of British English*. Version 2.3.0, 2005-2025 Apple Inc. (30 September 2025).

This research will not undertake a thorough examination of Purini's drawing series because such a task would require a separate study. Moreover, considering them with regard to the present research, whose concern is to identify an idea of drawing within the development of a hypothesis of architecture, would create a source of ambiguity. Nonetheless, since the drawing series is one of the best-known features of Purini's work, its main characteristics are outlined below.

Purini's drawing series has no direct relationship with the sphere of architectural design, or at least they do not aim to solve practical design problems, neither do the drawings have the ambition to elaborate design methodologies, despite being a direct consequence of the complex construction of 'Una ipotesi di architettura'; instead, they belong to a more conceptual sphere of Purini's reflection on architecture. They represent a form of *scrittura privata* [private writing], where the author explores numerous significant variations on a theme, while at the same time trying to reach 'an abstraction and a visionary projection'.¹⁵⁷ The thematic variations include the entire spectrum and all the relations imaginable contained within the architectural phenomenon: its theory, history, methods of representation, form, language and the composition and elements it may assume, but also landscapes, gardens, houses, cities, the urban fabric, ephemeral constructions, gates, windows and more besides.¹⁵⁸

The relationship between the rigour of abstraction and visionary projection establishes another relationship: the one between drawing and the design project. In the introductory essay to 'Alcune forme della casa' [Some forms for houses] the catalogue of the homonymous exhibition held in 1979 at the A.A.M Gallery in Rome, Purini writes: 'The architectural drawing that swings like a pendulum between reality and the imaginary, between detail and "measureless scale", between the classification of the world and the overturning of this classification in the name of fantastic "deformity", is nothing other than the project – which is, in fact, double.'¹⁵⁹

¹⁵⁷ Franco Purini, *Le opere, gli scritti, la critica*, Gianfranco Neri, ed. (Milan: Electa, 2000), 39.

¹⁵⁸ There is no emphasis here on the claim that the field of investigation of the drawing series comprises the entire architectural spectrum.

¹⁵⁹ Franco Purini, *Alcune forme della casa*, exh. cat. (Rome: Edizioni Kappa, 1979), 5. This concept will be later expanded in Franco Purini, 'Dodici frammenti per disegnare il disegno... lettera romana a Margherita De Simone.' *La Collana di Pietra* no. 2, Palermo. *Le parole e i segni* (Palermo: Flaccovio, 1983). Reprinted in Francesco Moschini and Gianfranco Neri, eds., *Del Progetto. Scritti teorici di Franco Purini 1966-1991* (Rome: Edizioni Kappa, 1992), 342, and in a more detailed form in 'Il disegno e il rilievo', in *Guida alla Facoltà di Architettura*, Giorgio Ciucci ed. (Bologna: 1983). Reprinted in Francesco Moschini and Gianfranco Neri eds., *Del Progetto. Scritti teorici di Franco Purini 1966-1991* (Rome: Edizioni Kappa, 1992), 346.

For Purini, the experience of drawing – defined by the tension between the need for abstraction and moments of visionary projection – encapsulates the full spectrum of values inherent in the built environment. In this sense, the drawing and the experience it conveys, its ‘situation’, correspond to the definition of the architectural project.

The graphic language of the drawing series comprises a grammar of elementary forms (the square, the grid, the plane) that is elaborated through an interplay between established compositional rules and their transgression (or sublimation) in sudden apparitions that are capable of absorbing the conflicts and the accidents of the creative process and achieving an intense figurative complexity.

A further characteristic of these works is the exploration of light as an architectural medium. Henry Focillon in his *Esthétique des visionnaires* pointed out that ‘light is a dear theme to all visionaries’. ¹⁶⁰ Just as Focillon describes Piranesi’s and Rembrandt’s use of light, so too does Purini employ it as an ordering device to achieve an ‘unlimited evocative power’. Light cuts, distributes, unites, and shapes the solid forms within representational space. The effects of light and dark are constructed in arrangements of lines that erode the eloquence and simplicity of the figure, which, as a result, acquires detail and reality. This process contributes to activating an illusory exchange between figure and background and between the architecture and its landscape, as was mentioned earlier in the analysis of the drawing for the Monselice quarries. In the placeless context of the drawing series, the landscape theme often appearing in the background is an abstract commentary on the typical morphology of the Roman landscape.

To sum up, what makes Purini’s drawing series particularly compelling is their ability to induce a constant state of anticipation. Much like in Piranesi’s work, the observer is drawn into the drawing to uncover its internal logic, while simultaneously being prompted to look beyond its frame, toward its cultural context, its peripheral references, and its connections to other drawings, writings, and architectural works. The viewer is invited to engage with the author’s creative process, tracing the genesis and elaboration of ideas. Yet, this engagement remains necessarily partial: the multiple stratifications that compose and recompose the iconographic field imbue the drawing with a distinct aura that resists full disclosure. Beyond their narrative qualities, these drawings attain a universal dimension as vital images – they construct and organise a world while simultaneously exposing its limits and inherent contradictions. ¹⁶¹

¹⁶⁰ Henri Focillon, *Estetica dei visionari. Daumier, Rembrandt, Piranesi, Turner, El Greco* (Milan: Abscondita, 2006), 18. Originally published as ‘Esthétique des visionnaires’, in *Journal de psychologie normale et pathologique*, no. 25 (Paris: Société De Psychologie, 1926), 275–289. (Writer’s translation),

¹⁶¹ ‘Universal’ is meant here as a general rule, endowed with adaptations and appropriated for different purposes.

Giorgio Agamben, in the essay *Ninfe* [Nymphs], explains that ‘to be truly alive, images need the subject they acquire to unite with them’.¹⁶² However, the author warns that this process hides ‘mortal risk (...). Images would transform into phantasms that men become slaves to, and always need to be liberated from.’¹⁶³ Purini is certainly conscious of taking this mortal risk, and the drawing series can be considered the manifestation of a continuous need to research the meaning of architecture through its image, while at the same time attempting to free itself from the image. The way in which Purini orients himself through the drawing leads to ever-new circumnavigations within an archipelago of thematic islands, which is the original place of the struggle he engaged in with architectural representation, and which is also the place of his origin and birth as an architect, namely ‘*Una ipotesi di architettura*’. A retrospective look at this “nativity” scene of the architect can also be recognised in the late drawing series ‘*Inizi*’ [Beginnings] (2005). Through a concentration of signs in the sixteen drawings of the series, Purini attempts to recompose all the architecture he has drawn, dismissed or unconsciously removed in the course of his experience as an architect. It is a map that only achieves partial, momentary completion. In his desire to lead his work back to its various points of departure, Purini repeatedly postpones the question of its completion, continually renewing the possibility of foreseeing an apposition between the idea and the work it produces, between the language and content of architecture.¹⁶⁴

2.2.3 The Contextualisation of ‘*Una Ipotesi di Architettura*’

Having presented a propaedeutic critical introduction of Franco Purini’s ideas, this research segment will now turn to the specificities of ‘*Una ipotesi di architettura*’. The first step will be to examine the cultural context and influence of the exchange between experimentation in art and architecture in relation to the conceptual definition of the research ‘*Una ipotesi di architettura*’.

¹⁶² Giorgio Agamben, *Ninfe* (Turin: Bollati Boringhieri, 1987), 54. (Writer’s translation)

¹⁶³ Ibid.

¹⁶⁴ The series *Inizi* was originally exhibited at the AAM Gallery in Rome in 2005, conceived to celebrate the fortieth anniversary of Purini’s architectural activity. In 2006, with the support of Professor Umberto Barbieri, head of the Chair of Public Building, I curated a repeat of the exhibition at the Faculty of Architecture at the Delft University of Technology. The exhibition led to the publication of the book: Stefano Milani, ed., *Franco Purini. Drawing Architectures*, (Bologna: Editrice Compositori, 2007). *Inizi* marked the start of the present research.

Chapter 1 introduced the relationship between art and architecture to present drawing as a general concept; here, however, the focus is directed towards the discussion of a number of structural components taken from Purini's research, 'situations'. This further refinement will start to examine 'Una ipotesi di architettura' through the lens of drawing. I will introduce the significance of Purini's concept of classification and the role of creative techniques within the structure of his research and in relation to drawing. For although these instruments already have broad and established meanings in architecture, the ways in which Purini treats them differ from generally accepted precedents. Furthermore, 'Una ipotesi di architettura' researches an integral alternative to a conventional understanding of architecture and entails a radical redefinition of *all* its component parts.

As was true of many other cities, in the 1960s Rome witnessed a period of extraordinary creativity and renewal in every aspect of urban life: economic, social, political and cultural. The decade was also notoriously influenced by strong ideological tensions. In 'Roma e l'età dell'oro' [Rome and the golden age], an essay written for the exhibition *La Grande Svolta – Anni '60. Viaggio negli anni Sessanta in Italia*, held at the Palazzo della Ragione in Padua in 2003,¹⁶⁵ Purini retrospectively provides a meticulous account of the Roman cultural context. The essay describes a city that has become the laboratory of cultural movements and artistic tendencies. These influences rapidly came into conflict with a cultural background that was essentially split in two: the section of the populace still entrenched in the philosophical idealism of the philosopher Benedetto Croce, and, on the political left, those influenced by the radical thought of political theorist and activist Antonio Gramsci and the Italian Communist Party. In Rome, the impact of avant-garde Formalism, Structuralism and the phenomenology of the *École du Regard* began to breach the established cultural context through experimentation that quickly permeated all disciplines, giving rise to an ideal climate for research and the exchange of ideas in every artistic field.¹⁶⁶

At that time, in the mid-sixties, Purini was a student and collaborator of both Ludovico Quaroni and Maurizio Sacripanti, two of the most vital figures animating the Roman and Italian architectural debate. Their work and cultural background provided the basis for 'Una ipotesi di architettura', within which ideas concerning architectural language, classification and creative techniques are clarified.

¹⁶⁵ Franco Purini, 'Roma e l'età dell'oro', in *La grande svolta – Anni '60. Viaggio negli anni Sessanta in Italia*, Virginia Baradel, Ennio Ludovoco Chiggio and Roberto Masiero eds. (Geneva and Milan: Skira, 2003), 17–183. It should be emphasised that Purini not only played an active part in the Roman scene of the sixties, but is also a highly regarded authority on its historiography.

¹⁶⁶ Purini, 'Roma e l'età dell'oro', 172.

Maurizio Sacripanti was one of the most radical innovators on the architectural scene of the period and the author of visionary projects, such as the proposal for the Peugeot skyscraper in Buenos Aires, Argentina (1961), and the proposal for the 'Teatro Lirico di Cagliari' [Cagliari Opera House, Italy] (1964–65), two seminal projects characterised by highly advanced technological solutions. However, Sacripanti did not consider technology as a utopic dimension in itself, but as a consequence of radical research into the utopic dimension of creativity – the real motivation for design work.¹⁶⁷ In this sense, Sacripanti also became the link between experimentation in architecture and the broader context of the arts. Purini was greatly influenced by the frequent gatherings of artists and writers who populated the cafés and restaurants of *via di Ripetta* and of *Piazza del Popolo*, where Sacripanti had his office. Of crucial importance was Purini's acquaintance with the painters Achille Perilli and Gastone Novelli.¹⁶⁸ From their work, the theoretical, operative and didactical convergence of dynamic painting-architecture can be outlined within the general problematics of the language of drawing, and hence a specific role can be assigned to classification and creative techniques.

In 1967, the two artists participated in the Architectural Composition course led by Sacripanti at the Faculty of Architecture in Rome. The idea of cooperation was first conceived in terms of a course in visual design and later narrowed down to a series of lectures that joined the debate on architectural design and, in particular, architectural drawing.¹⁶⁹

Perilli and Novelli's collaboration with Sacripanti has been commented on by Purini himself on various occasions, such as in the aforementioned essay 'Roma e l'età dell'oro'. However, its full relevance has never been thoroughly explained. Precious indications for orienting the present investigation are found instead in Francesco Moschini's essay 'Progettualità dell'arte e immaginario architettonico'.¹⁷⁰ In it,

¹⁶⁷ A comprehensive publication of Sacripanti's utopic ideas investigating also the future of the metropolis can be found in Maurizio Sacripanti, *Città di Frontier/Frontier City*, (Rome: Bulzoni Editore, 1973). See also the portrait of Sacripanti's complex figure written by Purini in Franco Purini, 'Un coraggio pari al timore', in *Bollettino della Biblioteca della Facoltà di Architettura dell'Università degli studi di Roma 'La Sapienza'*, nos. 58–59 in Maurizio Sacripanti. *Maestro di Architettura 1916–1996*, Maria Luisa Neri and Laura Thermes eds. (Rome: Gangemi Editore, 1998), 18–23.

¹⁶⁸ Achille Perilli (1922) and Gastone Novelli (1925–1968) were two of the most prominent painters of the Italian experimental artistic scene during the 1950s and 1960s. Their work and ideas are marked by strong political involvement, seen as an integral component uniting the work of art to life.

¹⁶⁹ As explained in the earlier discussion of Filiberto Menna's 'analytical line', the architectural drawing also became an interesting subject for artists due to the intrinsic social component of the architectural work.

¹⁷⁰ Francesco Moschini, 'Progettualità dell'arte e immaginario architettonico', in Achille Perilli. *Opere dal 1947 ad oggi*, Pia Vivarelli ed., exh. cat., (Milan – Rome: Arnoldo Mondadori Editore/De Luca Edizioni d'Arte, 1988), 29–30.

Moschini explains that in a context still highly influenced by art historian Carlo Giulio Argan's theories on the programmability of art identifying the shift of the artist work towards a more systemic and collective approach (a context also contained in Menna's 'analytical line' discussed in Chapter 1, Section 3), Perilli's and Novelli's contribution to the sphere of architectural design consisted in 'the introduction of the ludic and irrational component, which posits the impossibility of objective communication as the *sine qua non* of its very existence. However – and here lies the real provocation – there is at the same time an ostentatious attempt to rationalise and classify the irrational (...).'¹⁷¹

Moschini's essay is of particular interest because it also enables us to retrace the thoughts of the two artists in publications that appeared after 1967. In Perilli's case, this applies to his essay 'Indagine sulla prospettiva' [An Enquiry into Perspective], published in his journal *Grammatica* in 1969.¹⁷² In this text, Perilli radically questions how the work of art is made within the context (and general optimism) of technological development. Perilli also argues that, faced with this situation, the discomfort of the architect is similar to that of the artist, concluding that both could be represented by the image of the 'labyrinth'.¹⁷³ Again, the question always seems to be essentially the same: the evaluation of the creative work *vis à vis* the homologations and conventions dictated by the processes of production and epitomised by the debate at the inaugural session of the *Deutscher Werkbund*, in 1914, between Hermann Muthesius and Henry Van de Velde.¹⁷⁴ In an updated 1960s version, this could be translated as the tension between the acceptance and rejection of rules dictated by the consumer society. Perilli proposes non-communication, lengthy communication or ambiguous communication instead of clarity of information or direct communication; in short, he reduces visual information to the image of the labyrinth. For him, the labyrinth represents a stable form, and even if the paths are tortuous within it, there is only one exit. Perilli suggests a way forward for this 'difficult' communication: 'If language is its own universe (every universe is a universe in the first place because it is an actual morphology and is subjected to all the rigour and all the arbitrariness of that morphology); and if painting is a language that is established at times by the existential presence of the painter and the sequential phases of his work (and not

¹⁷¹ Moschini, 'Progettualità dell'arte e immaginario architettonico', 29.

¹⁷² Achille Perilli, 'Indagine sulla prospettiva', in *Grammatica*, no. 3, Gastone Novelli and Achille Perilli eds. (Rome: Edizioni Libreria Feltrinelli, 1969), 30-33. Also published in the same issue is a selection of Purini's early projects and texts.

¹⁷³ Ibid., 31.

¹⁷⁴ See: Bruno Zevi, *Storia dell'architettura moderna* (Turin: Einaudi, 1961), 82, and Franco Purini, *L'architettura didattica* (Rome: Gangemi Editore, 2002), 27.

by a single artwork) which determine the condition of its existence, then the test of its linguistic validity is only possible according to the rules that govern the language from within its own contradictions, which create movement and development [inside the labyrinth].¹⁷⁵

In this passage Perilli introduces two connected themes: the first is to place art within the field of language, both of which share a rational and an irrational constitutive component; the second is the qualifying presence of a subject/artist within this relationship. Perilli continues within the tight logic of his formulation by introducing systematic research within the field of artistic language, enabling the regeneration of the figure of the author: 'The sequence eliminates the specific value of intuition and introduces the concept of research as opposed to that of creation. The work of the imagination is therefore no longer accomplished through isolated gestures but by creating a structure that elaborates data, which, as it proceeds, is able to analyse new, emerging materials and organise them into new, expressive forms'.¹⁷⁶

Subsequently, Perilli identifies the actual goal of this research by clarifying its operative field: 'Such a task aims to produce a new linguistic situation that requires more or less long periods of implementation, which include the creation of the work and its interpretation. Nowadays, this type of visual research is only possible if carried out on the primary and derivative structures of the language, on its organisation and its autonomy, beyond any conditioned reflex'.¹⁷⁷

Hence, for Perilli, artistic and architectural research should venture into the labyrinthine spaces resulting from the relationship between primary languages and the individuality of devised languages – in this sense, the research becomes the

¹⁷⁵ Ibid.

¹⁷⁶ Ibid.

¹⁷⁷ Ibid., 31–32. In cognitive sciences there is a clear distinction between primary sign language and derivative sign language. According to scholars Newport and Supalla, 'Natural sign languages are those that have arisen spontaneously through time by unrestricted interactions among people who use them as a primary communication system. These are signs languages on which most linguistic research has focused, because they offer the clearest evidence about the natural tendencies of humans to develop communicative structure in the visual-gesture mode. (...) In contrast, devised or derivative sign languages (perhaps more properly termed "sign systems") are those that have been intentionally invented by some particular individuals (e.g. educators of deaf children), typically not the primary users of the language, and whose structures are often based directly on spoken language.' Transferred to and interpreted within the context of Perilli's rationale, one can infer that by associating rationally describable and highly individualised devised languages, the uniqueness of the creator is preserved, while the power traditionally granted to inspiration (for Perilli a characteristic of the work of art that should be dismissed) ceases to be relevant. See Elissa L. Newport and Ted Supalla, 'Sign languages', in *The MIT Encyclopaedia of the Cognitive Sciences*, Robert A. Wilson and Frank Keil eds. (Cambridge, MA & London, EN: The MIT Press, 1999), 758.

actual experience of the author inside his labyrinth. The section under investigation here ends with the identification of the renowned descriptive role of drawing and classification within Perilli's research/artistic programme:

If language, or better, if painting is the organisation and only the organisation of itself, then only inside its way of being is it possible to be revolutionary or conservative.

In other words, only by working on how the internal image can come into being (the mental picture is the picture described when someone describes what he imagines), Ludwig Wittgenstein, *Philosophical Investigations*, no 367). ¹⁷⁸

And here representations stand for signs, aggregations of signs, or the cataloguing of signs.

Therefore the most interesting linguistic coagulations are concentrated on a series of problems that involve the catalogue, the sequence, 'bricolage', spatial ambiguity, the relationship between sign and ideology, the concept of Wabi, asymmetry, syntactic complexity, and, above all, in a fundamental way, the rejection of communication, the impossibility of consumption, every possible real and concrete obstacle to accepting the dominant ideology, the one that regulates the creation and consumption of the current, modest, artistic product.

The rejection of communication is therefore proposed as direct action, as a possibility for research and as a productive act.¹⁷⁹

Perilli's reflections clearly resonate with the thematic excursus of the previous chapter, particularly in their emphasis on the need for an analytical approach to the creative process, the reconstitution of the artwork's fundamental elements, and the conception of the work as the product of an extended individual inquiry. His claims – concerning the aggregation of signs, the organisation of the work, and the principle of seriality – are consistent with Zuccari's distinction between *disegno interno* and *disegno esterno*, align with Piranesi's systematic research, and echo Menna's theoretical formulations on the artwork as a sign system and the increasingly critical relationship between artist and work. In extracting the ideological content of Perilli's programmatic text, it is important to emphasise the primary role assigned to representation and to signs (drawing) linked to the classificatory aspect.

¹⁷⁸ Ludwig Wittgenstein, 'Philosophical Investigation no. 367', in *Philosophical Investigations*, (Oxford: Basil Blackwell Ltd, 1986) (1953), 115.

¹⁷⁹ Perilli, 'Indagine sulla prospettiva', 31-32.

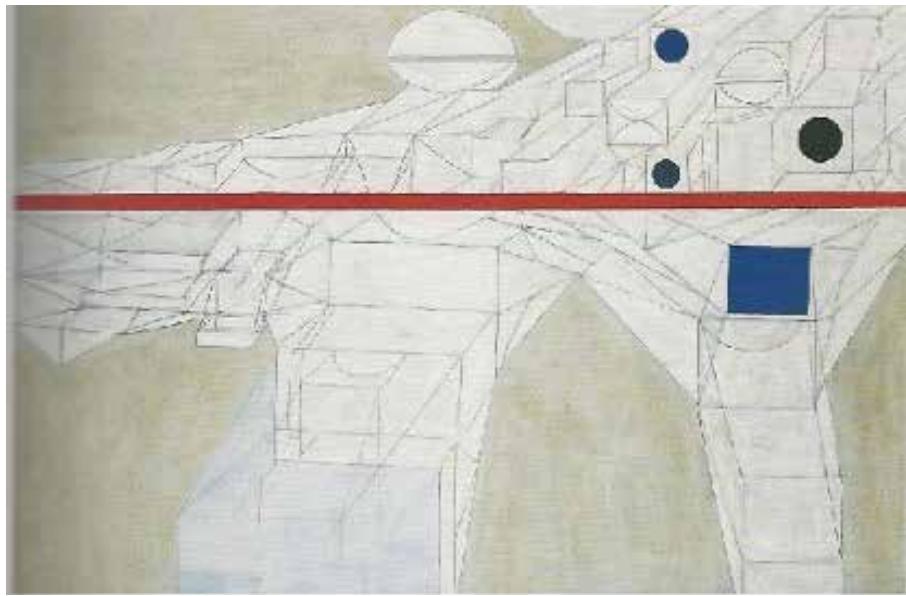


FIG. 2.7 Achille Perilli, *Ordinatio, dispositio, eurythmia, symmetria, decor, caos* (1968). Archivio Achille Perilli

Within a formulation that sees representation as existing in the relationship between drawing and subsequent series of classifications, description attributed to drawing acquires the status of verification, orienting the author inside his labyrinth. Furthermore, it should be emphasised that within this theoretical programme, specific problems concerning classificatory methods, the sequence (or series), collage and composition in general, are derivatives of the main interrogatives concerning the relationship between representation and drawing. This is a fundamental aspect that is essential for understanding the structure of Purini's research and the hypothesis of drawing that this present research sees contained in it.

The ideas expounded in Perilli's essay can be considerably extended when evaluating Novelli's contribution. After Novelli's premature death in 1968, his writings were collected in 1976 in a special issue of the journal *Grammatica*. Edited by Achille Perilli, this publication also includes work from the time of Novelli's collaboration with Sacripanti. The documents include the central essays that set forth his revolutionary ideas on art. Significant with regard to the present research are 'Pittura procedente da segni' [Painting Proceeding From Signs] (1964), 'I cubi' [Cubes]

(1967-68?), and 'Sul linguaggio' [On Language] (1967). Also published was the description of the composition course that Novelli held in 1954 in São Paulo, Brasil, and six of the seven lectures prepared for Sacripanti's course in 1967.¹⁸⁰

In 'Pittura procedente da segni', Novelli (like Perilli) raises the question of the universality of artistic language beyond its historical determination, the organisation of the artistic sign, the evolution of the artistic process by means of progressive classifications, and, leading from this, the definition of a grammar of pictorial signs that enables artistic language to develop. In one of the most controversial passages of the text, Novelli writes: 'Any universe is a possible language, and here I mean "magic language" and not "academic language", the difference being that while the latter uses (the proceeds from) pre-existent systems in order to define its own, the magic language develops a structured system by using residues and fragments, "fossils, witnesses of the history of an individual or of society", in a completely a-historical way.'¹⁸¹ Here Novelli seems to encourage the pursuit of research into artistic language to its most radical consequences, and from outside the continuity of an historical understanding. If history is excluded, the artist is left with only the irreducible fragments of reality and, without alternatives, is obliged to seek a rationale that can only be governed through the arbitrary classifications of signs. Consistent with the profound value that Purini attributes to the contradiction (which was previously discussed in relation to Sklovskij), the nucleus of Novelli's ideas, especially those relevant to the present investigation, could be also expounded from a number of his distinctive drawing/writings.

In the unaccredited work in Fig. 2.8, found on page 1 of the 1976 special issue of *Grammatica*, the following sequence of sentences can be read:

Language has a reality independent of circumstances. First, the operation is to classify and deconstruct the instruments. From the big to the small. From the uncultivated to the cultivated. From the confused to the significant. From ABB BAB BA A to a BABABA grammatical operation. The positioning and the form [of the signs] have nothing to do with historical circumstances. The fundamental moment: the execution.¹⁸²

¹⁸⁰ All these writings and documents can be found in *Grammatica* no. 5, *Gli Scritti di Gastone Novelli*, Achille Perilli ed. (Rome: La Nuova Foglio Editrice, 1976).

¹⁸¹ Novelli, 'Pittura procedente da segni (1964)', 34-35.

¹⁸² Author's translation.

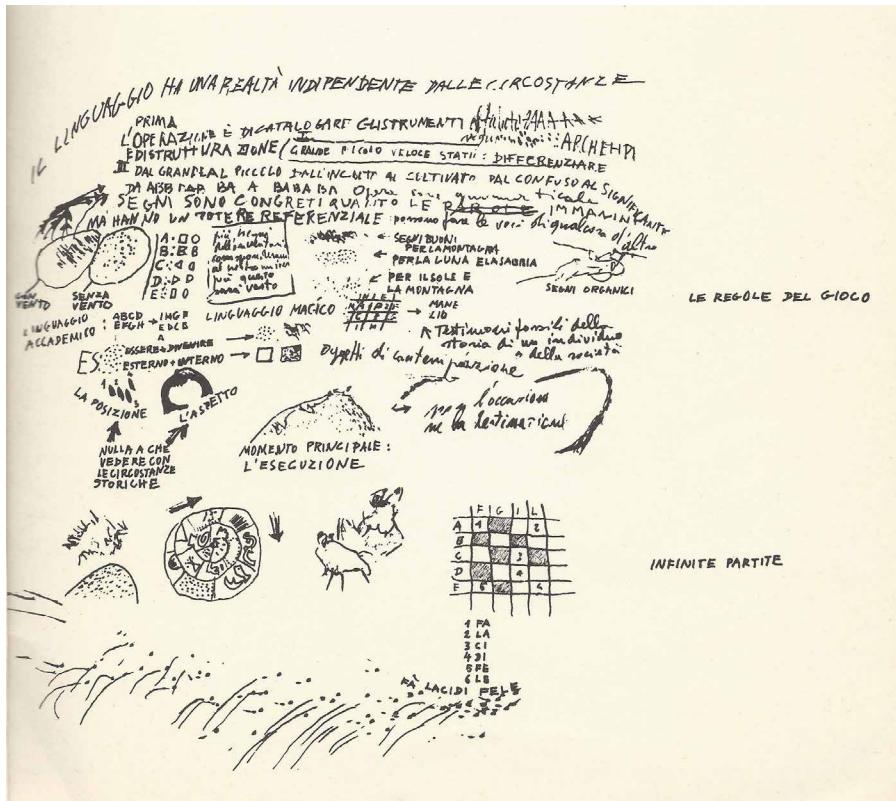


FIG. 2.8 Gastone Novelli (title and date unknown). *Grammatica*, no. 5 (1975). Archivio Gastone Novelli.

In addition to the jumbled assortment of words and signs, a crossword puzzle and graphic analyses of alphabet notation, on the right-hand side we read: 'The rules of the game' and, just below, next to a chessboard-like graph, 'infinite games'. From this we can infer that the definition of the instruments comes before the definition of the object, the didactic of infinite games is to be played with the signs once the rule of the game (i.e., the rules of composition) are seen separately from the historical determination of their meaning.

Presented in a scattered form, which is typical of Novelli's drawing/writing, these sentences of his could also be seen as abstract slogans for the research on architectural language contained in 'Una ipotesi di architettura'. These programmatic intentions are also evident in other works. *Geometria Fantastica* (1966) closely resembles Perilli's 'crazy images'¹⁸³ and indicates research to be carried out on the structures of artistic

¹⁸³ Achille Perilli, 'Manifesto della Folla Immagine nello Spazio Immaginario/Manifesto of the Crazy Image in Imaginary Space (1971)' in *Continuum 1947/1982* (Milan: Electa, 1982), 106-107.

language, whereas *Forme che danno origine ad alter forme* [Forms that Generate Other Forms] (1967), *Differenti fiori ed i loro possibili ibridi ed incroci* [Various flowers and their possible hybrids and crossbreeds] (1967), and *1^a Lezione di disegno* [First drawing lesson] (1968) address the classificatory and serial development of the research.

From an examination of *1^a Lezione di disegno*, it appears that Novelli believes the first drawing lesson should consist of drawing anything in any way. Content and skills seem to be of no importance. Instead, what is important and recognisable is a transformational rule between the upper and lower sequence of drawings. Thus, the first drawing lesson could be interpreted as the casual drawing of a series of figures without any (or only a very weak) denotation of the object represented. The figures are then redrawn with the emphasis on their outlines – precisely as in Diboutades' case. In other words, no conventional meaning is attributed to the figures; instead, the form itself is established through the internal relationship between the series of figures, thus generating new potential meanings for the figures.

Although one can trace the intellectual artistic structure for 'Una ipotesi di architettura' to Perilli's and Novelli's programmatic texts, the link between their research premises and research structure and those of Purini broadens when Purini's relationship with Ludovico Quaroni and his work is considered.¹⁸⁴ It is beyond the scope of this research to outline the complexity of an intellectual figure such as Quaroni and his role in the Roman and Italian cultural debate, or to reconstruct the full extent of his influence and relationship with Purini, who was one of his students and assistants at the University of Rome. The relationship between Purini and Quaroni was complex and characterised by the influence of Quaroni's ideas on Purini during the university years and by points of critical distance that are a direct consequence of that very association. It should be noted that Purini considers Quaroni's main importance, not much for his architectural work, but above all as an educator.¹⁸⁵

¹⁸⁴ The main references for Ludovico Quaroni (1911-1987), architect, urban planner, educator, urban historian, and polemist, includes: Ludovico Quaroni, 'Il paese dei barocchi' in *Casabella Continuità*, no. 215 (Milan: Edizioni di Comunità, 1957), 15; *La Torre di Babele* (Padua: Marsilio, 1966), and *Progettare un Edificio. Otto lezioni di architettura* (Milan: Mazzotta, 1977).

¹⁸⁵ Even if only tangentially addressed an evaluation of Quaroni's work can be found in: Franco Purini, 'Osservazioni sul complesso dell'Opera di Roma di Ludovico Quaroni', in *Lotus International*, no. 40 (Milan: Electa, 1983), 29-32; and in Franco Purini, 'Il dubbio sistematico contro la vocazione all'autorità. Note su una interpretazione della didattica quaroniana a Roma', introduction to Antonio Riondino, *Ludovico Quaroni e la didattica dell'architettura nella Facoltà di Roma tra gli anni '60 e '70. Il progetto della Città e l'ampliamento dei confini disciplinari* (Rome: Gangemi Editore, 2013), XXV-XXXII. Quaroni wrote the introduction to the catalogue for the Purini Exhibition at In-arch, Istituto Nazionale di Architettura [National Institute of Architecture], held at Palazzo Taverna, Rome, in 1977: Ludovico Quaroni, 'Presentazione', in *Franco Purini, Exh. Cat.* (Rome and Florence: In-Arch Istituto Nazionale di Architettura - Centro Di, 1977), unnumbered.

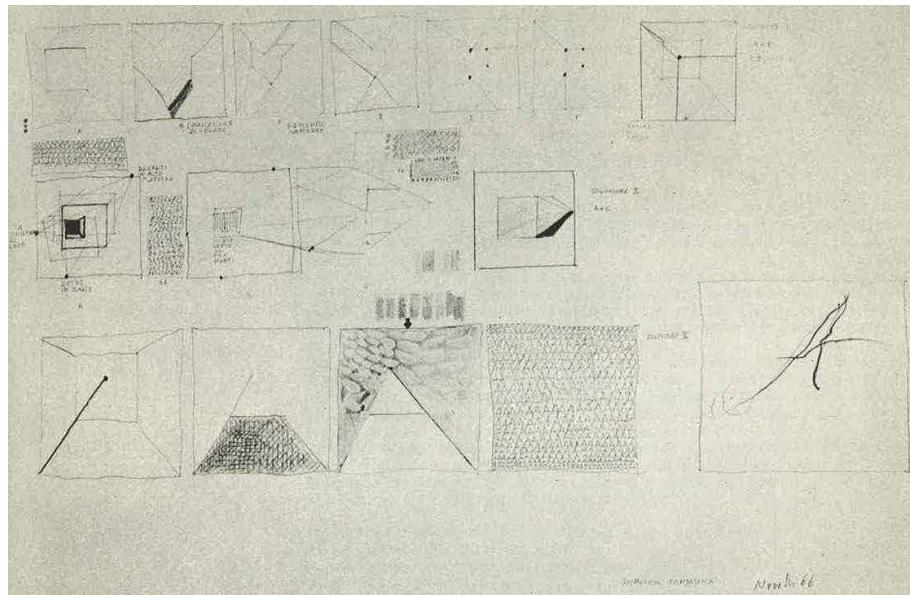


FIG. 2.9 Gastone Novelli, *Geometria fantastica* (1966). Archivio Gastone Novelli.

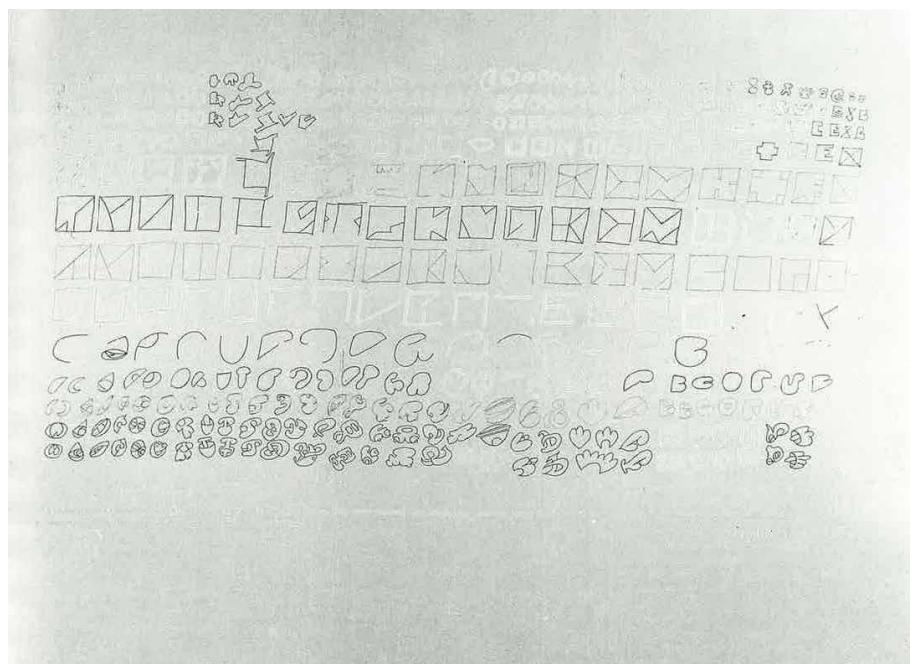


FIG. 2.10 Gastone Novelli, *Forme che danno origine ad altre forme* [Forms that generate other forms] (1967). Archivio Gastone Novelli.

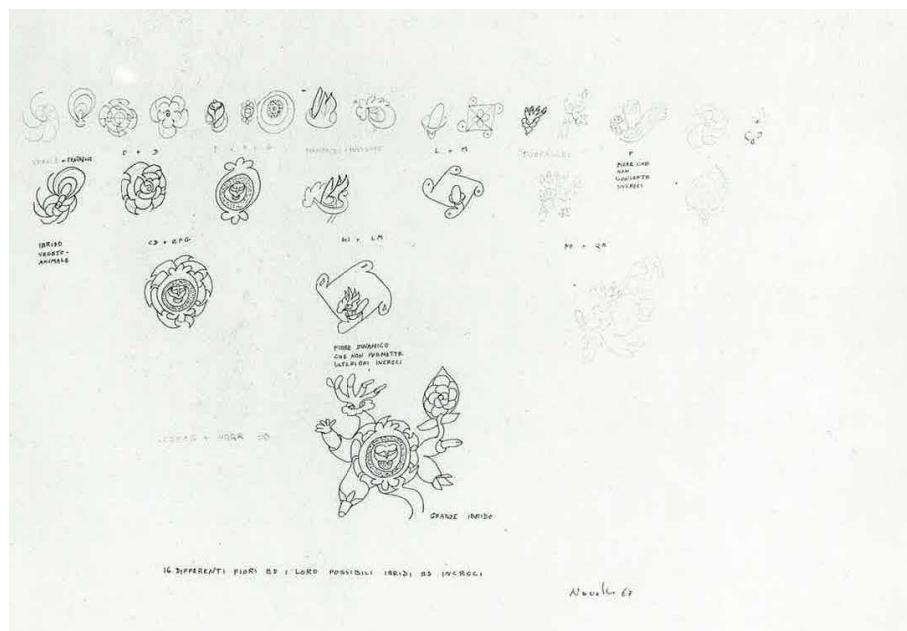


FIG. 2.11 Gastone Novelli, *Differenti fiori ed i loro possibili ibridi ed incroci* [Various flowers and their possible hybrids and crossbreeds] (1967). Archivio Gastone Novelli

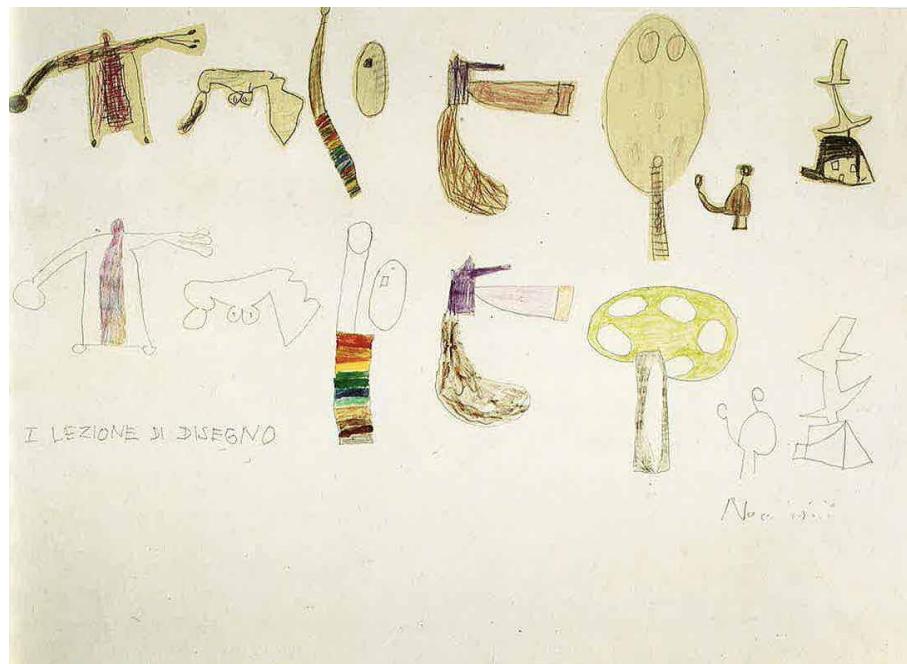


FIG. 2.12 Gastone Novelli, *1a Lezione di disegno* [1st Drawing lesson] (1968). Archivio Gastone Novelli

This investigation would require a separate study addressing the many intertwining components of the Italian architectural debate during the second half of the twentieth century, and a discussion of the dense contextualisation and scholarship of Quaroni's work.¹⁸⁶ Instead, in this context, one particularly relevant aspect regarding Purini's research concerns Quaroni's role in redesigning university architectural courses during the sixties (1963-1973), when the most cogent theoretical and methodological questions of the architectural and urban debate converged. At that time, Quaroni's work at the University of Rome was dedicated to developing new approaches to design in an attempt to resolve the cultural crisis that was fragmenting architecture as a discipline within the new interdisciplinary forms, and to rethink the traditional roles of the project and the architect. Quaroni fostered this change of direction by initiating new research trajectories that led to the development of new design methodologies based on new scales of intervention, and also new socio-physical phenomena, since changing urban and territorial dynamics also necessitated the rehousing and relocation of sections of the population.¹⁸⁷ Most significant was Quaroni's idea of a systematic and integral revision of the architectural project, conceived as a complex and inquisitive practice characterised by a critical and cultural process that engages with human life without seeking reassurance.¹⁸⁸ It is within this 'difficult whole'¹⁸⁹ that Purini's motivation for and research into a new systematisation of architecture can be understood: the rigorous investigation of a new system of relationships for architecture, investing both the internal, autonomous sphere and the relationship with the city and landscape. Starting from a redefinition of the notion of the architectural element, Purini developed a theory of architectural composition centred on the possibility of describing within the project a new relationship between architectural elements, building, city and territory by reducing all of these components to a hypothetical level.

¹⁸⁶ On the role of Quaroni in the architectural debate see Manfredo Tafuri, *Ludovico Quaroni e lo sviluppo dell'architettura moderna in Italia* (Milan, Edizioni di Comunità, 1964), and the recent Antonio Riondino, *Ludovico Quaroni e la didattica dell'architettura nella Facoltà di Roma tra gli anni '60 e '70. Il progetto della Città e l'ampliamento dei confini disciplinari* (Rome: Gangemi Editore, 2013). The origin of the debate on the new dimension can be traced back to Giuseppe Samonà, *L'urbanistica e l'avvenire della città negli stati europei*, (Bari: Laterza, 1959).

¹⁸⁷ The reference here is to the discourse on the so-called *nuova dimensione* [new dimension]. See Giorgio Piccinato, Vieri Quilici and Manfredo Tafuri, 'La città territorio – verso una nuova dimensione', in *Casabella Continuità*, no. 270 (Milan: Editoriale Domus, 1962), 16-25.

¹⁸⁸ The unitary character of Quaroni's cultural project is the main theme developed by Aldo Rossi in his introduction to *La torre di Babele*. Aldo Rossi, 'La torre di Babele', in *Scritti scelti sull'architettura e la città 1956-1972* (Milan: Clup, 1975), 340-345.

¹⁸⁹ Robert Venturi, *Complexity and Contradiction in Architecture* (New York: The Museum of Modern Art Papers on Architecture, 1966), 88.

It is this radical premise that underpins the particular relevance of Purini's notion of architectural order, classification, and techniques of invention, which I will assess after introducing the main themes of 'Una ipotesi di architettura' in relation to the theme of drawing.

2.2.4 The Fundamental Principles and Content of 'Una Ipotesi di Architettura'

In the collective manifesto-like essay 'I motivi di fondo – Sulla tecnologia – I problemi della città' [The fundamental principles – On technology – The problems of the city] (1966),¹⁹⁰ coeval to Purini's research, the urgent reasons for delineating a research programme for the field of architectural representation are already clearly laid out. The essay, written by Purini in collaboration with *Gruppo Atrio Testaccio*, shares many similarities with the framework provided by Achille Perilli's 'Indagine sulla prospettiva'. Purini begins by critiquing how architecture, as an integral component of the 'productive system', is commonly 'known' and rapidly 'consumed' through its mediatisation and the widespread diffusion of information technologies – a topic that was already steering the architectural debate at that time. Having established his perspective, Purini proceeds by proposing a series of programmatic themes for an alternative way of conceiving architecture, thus directing his focus to representation. In the article, Purini presents a critique of the traditional conventions of architectural representation and urges engagement with the new problems of representation techniques: 'The need to control the [architectural] object in all its complexity leads us to hypothesise the possibility of "representing it" even before defining certain particular limitations, such as the plan, the section, etc.'¹⁹¹

He continues:

What is of interest to us with regard to an architectural object is not so much the possibility of an immediate perception of certain geometrical forms, but the legibility of a certain constructive process of the complex, global image of the space precisely because the allusive reduction of the complexity of the architectural space into elementary forms means that the perceivable values of an [architectural] object are situated outside the architectural logic that establishes its matrix.

¹⁹⁰ Franco Purini, (with Gruppo Atrio Testaccio), 'I motivi di fondo – Sulla tecnologia – I problemi della città', in *Grammatica* no. 3 (Rome: Editrice Feltrinelli, 1969), 64–65. English translation 'Fundamental Principles – On Technology – The Problems of the City, (1966)'. (Writer's translation in Appendix 1)

¹⁹¹ Ibid.

As a consequence, we believe it is essential to imagine the possibility of representing and thus immediately verifying a 'figurative programme', even at an intermediate level, which can then be further clarified through a subsequent focus on specific design phases through the use of 'signs'. These signs could be as conventional as those traditionally used, with the difference that they would no longer be based on a naturalistic code (i.e., perspective, Euclidean geometry). Instead, they would refer to specific constructive processes within the architectural space and could be analysed and disassembled in typical situations.¹⁹²

The link between a hypothesis of architecture and research in the field of representation proposed in the above extract highlights the assumption that a hypothesis of architecture can be formulated and, at the same time, verified in the course of drawing architecture implies the autonomous epistemological status of drawing in relation to architecture. Moreover, the systematic nature of Purini's research also assists in linking the experimental research, 'Una ipotesi di architettura', to specific writings on the subject of drawing that Purini began to write from 1976 onwards. Indeed, the theme of drawing and, more generally, the theme of architectural representation occupies a large part of the fundamental 1976 essay, 'Luogo e progetto' [Place and project], which in the same year became the subject matter of a brief article for the architectural journal *Casabella*.¹⁹³

¹⁹² Ibid. This passage gives an indication of the relevance attributed to architectural representation in the text. The above-mentioned correspondence between the texts of Purini and Perilli are substantial: the analogous critique of the ways in which things are made and rapidly consumed, and the proposal for research aimed at new compositional procedures – new rules of the game – a position Gastone Novelli also expressed. Furthermore, both essays are published in the same issue of *Grammatica*, and both were written between 1966 and 1967. Purini's text is credited in 1966, and arguably, Perilli developed his in the same period as one of the educational contributions to Maurizio Sacripanti's course. However, this is only a supposition, since there are no precise indications about when it was written. Moreover, both essays are evidence of the correspondence between artistic and architectural research.

¹⁹³ Franco Purini, *Luogo e progetto* (Rome: Kappa Edizioni, 1981) (1976), 15-36. In this essay, the theme of drawing is elaborated in the relationship between architecture and nature, discussing the work of architects such as Schinkel, Mendelson, Le Corbusier, Wright, Bruno Taut and Bruce Goff. The author further argues the urgent need for serious iconological studies on architects' drawing, since it could reveal precious information about their creative techniques, as Purini discusses in the essay conclusion, and which will be discussed here in an autonomous section. The theme of drawing in the relationship between architecture and nature is analysed instead with reference to Purini's own work. Franco Purini, 'Il disegno e il disegnare', in *Casabella* no. 414, June (Milan: Industrie Grafiche Editoriali, 1976), 34-41. Purini also designed the cover drawing for the issue.

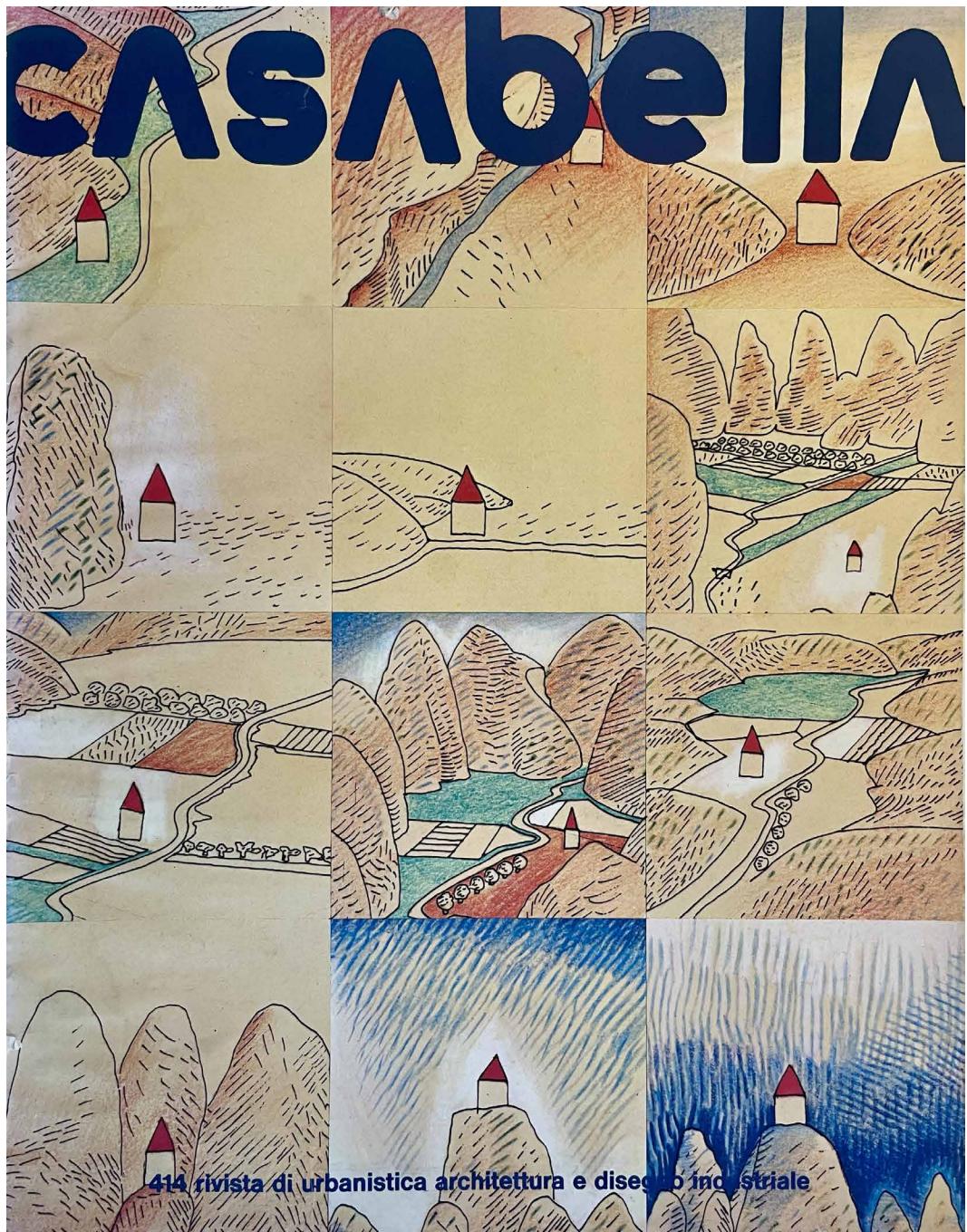


FIG. 2.13 Franco Purini, Cover for *Casabella* no. 414 (1976).

Another source that substantiates the theoretical relevance of drawing in this early phase of Purini's career is Francesco Moschini's seminal contribution to the first edition of *Luogo e progetto*.¹⁹⁴ In presenting Purini's first decade of projects, Moschini speaks of *disegni di invenzione* [imaginary drawings] tracing a direct and, at the same time, sophisticated analogy between Giovanni Battista Piranesi's 'Carceri d'invenzione' [Imaginary Prisons]. In order to give an account of the development of Purini's projects and ideas, at the beginning of the text Moschini traces Purini's architectural approach to the 'pre-Enlightenment' Roman period of imaginary architectural inventions in drawings – of which Piranesi is notoriously the main protagonist – and to the 'systematic critique of the concept of space',¹⁹⁵ where the moment of theoretical elaboration is privileged and distanced from what is considered as the reductive character of a functionalistic understanding of the design praxis. Moschini writes:

Just as Piranesi's *Imaginary Prisons* become 'a systematic critique of the concept of space' [Tafuri, 'The Wicked Architect'], which through an excess of annotations culminates in its characteristic distorted appearance, so Purini's *disegni d'invenzione* [imaginary drawings] with their deliberate realism and aspiration towards an all-encompassing precision and definition of the smallest detail, do not leave any margin for interpretation. They do nothing more than accept their distance from a conventional design system conceived of separated parts [achieved] by means of a continuous subdivision of labour and propose instead a totalising vision in which each part already identifies the whole.'¹⁹⁶

Thus, Moschini's contribution furthers the analysis presented in the previous chapter, in which the characteristics of a relationship between Purini and Piranesi (via Tafuri) were already identified. Moreover, in the analysis of the drawing 'Classificazione, per sezioni, di situazioni spaziali' (1968) undertaken later in this chapter, the notion of a 'systematic critique of the concept of space' is very precisely delineated and defined within Purini's actual system of architectural ideas rather than by means of any general reference to Piranesi.¹⁹⁷

¹⁹⁴ Francesco Moschini, "Disegni d'invenzione": Progetti di Franco Purini 1966-1976', in Franco Purini, *Luogo e progetto*, 7-13.

¹⁹⁵ Moschini, "Disegni d'invenzione", 7. Moschini's citation refers to the famous sentence formulated by Tafuri in the analysis of Piranesi's work in *La sfera e il labirinto*.

¹⁹⁶ Ibid., 7.

¹⁹⁷ Ibid., 7 (Writer's translation).

If the motivation for Purini's research can be identified in his critique of the ways in which architectural form is conceived, perceived, and consumed – an approach which is based on the direct relationship between the idea of an object and its actualisation –, the theoretical innovation of Purini's research is his advancement of an architectural grammar; i.e. a set of relational rules, that is explored before making any proposal for an architectural object or form. In other words, the emphasis shifts from architecture's formal definition to the definition of the *poiēsis* of the project.¹⁹⁸ In Purini's own words:

I believe the meaning of the work (...) consists in the research of an [idea of] architecture built upon reasoned propositions and developed through a subsequent confrontation with a series of problems, such as the relationship between form and image, structure and process, the typological and 'extensive' definition of the architectural element; between the form of the contextual relationships and the limit of the clarity of the forms that these oppose within the notion of 'urban place', a notion considered pre-eminent.¹⁹⁹

Additionally, these themes are examined in an effort to recreate the grammar and syntax of architectural language by reducing all the main established notions of architecture to their "zero degree". The definition of architecture, the architectural project, architectural form, architectural figuration, architectural order, architectural composition, architectural techniques, architectural language, architectural representation, architectural typology, architectural elements, ornaments and details, the house, the place, the city, the landscape, and architectural drawing all require reformulation. Drawing serves as the overarching concept and specific area of research for achieving this redefinition. From "zero", the research embarks on the unceasing construction of a treatise on 'total-architecture', where at each step Purini investigates theoretical problems according to their delineation, description, and, therefore, capacity to be drawn. In this ongoing process, the status of drawing is gradually enhanced to become, simultaneously, the moment of formulation and the preliminary internal verification of an architectural hypothesis: a hypothesis which, later, can be proposed and evaluated on a larger scale.

¹⁹⁸ In this distinctive aspect there is a substantial similarity between the research of Franco Purini and Peter Eisenman. Peter Eisenman, 'Dall'oggetto alla relazionalità: la casa del Fascio/From object to relationship: Terragni's 'Casa del Fascio', in *Casabella* no. 344, (January) (Milan: Editrice Casabella, 1970), 38-41; and 'From Object to Relationship II: Giuseppe Terragni Casa Giuliani Frigerio', in *Perspecta. The Yale Architectural Journal* nos. 13-14 (New Haven, CN: The MIT Press, 1971), 35-65.

¹⁹⁹ Franco Purini, 'Ricerche di progettazione', in *Controspazio* nos. 11-12, Nov./Dec. (Bari: Dedalo, 1972), 18.

'Una ipotesi di architettura' consists of a sequence of what can be described as architectural drawings that progressively develop a comprehensive approach towards architecture. Yet 'Una ipotesi di architettura' is also the reconstruction of this experience: it is a subsequent tentative 'description' of all the aspects inherent in a design process, accomplished through the selection of relatively finite compositional propositions.²⁰⁰ In fact, it is during this tentative 're-description' that the internal verification of an architectural proposition occurs. Note that first of all, if the verification is internal to the field of representation, an architectural proposition can already find a preliminary evaluation in the project itself; and second, within the systematic character of Purini's research, the verification corresponds to an intermediate hypothetical level that inherently produces further investigation and verification.

Purini's definition of architectural composition has not only been fuelled by the sources I investigated in this research section, it extends to many experimental references in the field of art, linguistics and music, including, for instance, Donald Judd's 'Specific Objects',²⁰¹ Noam Chomsky's theory of transformational grammar,²⁰² and Arnold Schöenberg's 'Composition with Twelve Tones',²⁰³ in which the Austrian composer develops the theory of the dodecaphonic compositional method.

²⁰⁰ See Chapter 2, Sections 4 and 5.

²⁰¹ Donald Judd, 'Specific Objects', in *Arts Yearbook* no. 8, *Contemporary Sculpture* (New York: The Art Digest Inc., 1965), 74-82. Reprinted in *Donald Judd: Complete Writings 1959-1975* (Halifax and New York: The Press of the Nova Scotia College of Art and Design/New York University Press, 2005), 181-189.

²⁰² Noam Chomsky, *Syntactic Structures* (The Hague: Munton, 1957).

²⁰³ Arnold Schöenberg, 'Composition with Twelve Tones', in *Style and Idea* (New York: Philosophical Library, Inc., 1950), 102-143. A clue to the relation between the dodecaphonic theory and Purini's research is the recent contribution to the conference *Musica & Architettura*, organised by the Faculty of Architecture of the University of Rome, La Sapienza, and by the Conservatory of Rome, Santa Cecilia, in which Purini indicates the influence of Arnold Schöenberg's theory on his early research into architectural composition, a theme that will be expanded in Section 4 of this chapter. Franco Purini, 'Il segno grafico tra architettura e musica', in *Musica & Architettura*, eds. Alessandra Capanna, Fabio Cifarielli Ciardi, Anna Irene Del Monaco, Maurizio Gabrieli, Luca Ribichini and Gianni Trovalusci, Conference Proceedings (Rome: Edizioni Nuova Cultura, 2012), DOI: 10.4458/8813-15.

Purini elaborated his own ideas on composition in the short but dense 1967 essay, 'Note sulla composizione architettonica' [Notes on Architectural Composition].²⁰⁴ This essay, together with a series of experimental works relating to the present research, will be thoroughly examined since they constitute the most analytical part of 'Una ipotesi di architettura'.

In 'Una ipotesi di architettura', the conflict between the need for a reductive approach required by the theoretical ambition of the research, and its expansion due to successive investigations, generates a continuous field for examination, which in turn broadens the context of the research to include, for example, the grammar of architectural language. According to Purini, two parallel lines of investigation are followed in his research. In some cases, their results converge and produce compatible results; in others, they diverge, thus giving rise to further experimentation. I will specifically investigate these moments of convergence and divergence that occur in the project and during the drawing, as well as the path to confront the thematic richness of Purini's projects. Indeed, as Francesco Moschini warns in the above-mentioned essay: 'Each drawing, from the sketch to the technological detail, in its rigour and need for the maximum degree of description, reaches such a level of complexity, made of inextricable interconnections, that only a careful and accurate reading enables this 'montage of various attractions'.²⁰⁵

In fact, any attempt to describe the progression of Purini's research outside the actual situation that generated it (for instance, by directing the focus to one of its components, as in this present work) creates by definition a different narrative and

²⁰⁴ Franco Purini, 'Note sulla composizione architettonica (1967)', in *Grammatica* no. 3 (Rome: Editrice Feltrinelli, 1969), 69. English translation: 'Notes on Architectural Composition', in Appendix 1. In addition to this short programmatic essay (which is one of the main references discussed in Chapter 2, Section 4 since it is coeval to 'Una ipotesi di architettura') Purini also discusses architectural composition in numerous other essays and books. (See the documentation presented in Appendix 2.) For the arguments proposed in the present research it is sufficient to mention the following sources: 'Il Problema della composizione architettonica', and 'La composizione architettonica nel suo rapporto con alcune "tecniche di invenzione"', both in Franco Purini, *L'Architettura Didattica* (Reggio Calabria: Casa del Libro Editrice, 1980), 43-48 and 49-58; the essay 'Allontanarsi dai luoghi. Disegno come nucleo genetico della composizione architettonica', in *Proposta per l'istituzione del Dottorato di ricerca in Rappresentazione dell'Ambiente. Artefatto/Naturale. Principi costruttivi dell'architettura*, (Reggio Calabria: Facoltà di Architettura di Reggio Calabria, 1984) (also published in *Rappresentazioni/intenzioni di progetto, Atti del Primo Seminario di Primavera* (Palermo: Flaccovio, 1984), 215-216; Franco Purini, *Una lezione sul disegno* (Rome: Gangemi Editore, 1996); Franco Purini, *Comporre l'architettura* (Bari: Laterza, 2000); and Franco Purini, *Attualità di Giovanni Battista Piranesi* (Melfi: Libria, 2008).

²⁰⁵ Moschini continues: 'Added to the difficulty of a drawing that simultaneously contains many levels of interpretation, and in which a type of "horror vacui" weights almost every element with its own material identity, there is also the author's own kind of self-censorship that favours small labyrinthine drawings, where instead of groups of separate signs, the lines or marks tend to form a fabric, a sort of compact woven image that becomes dense even in its material sense.' Moschini, 'Disegni d'invenzione', 7. (Writer's translation).

essentially different research. For example, if in this PhD the focus of drawing were to shift to composition, considered here as a derivative of an already organised approach to drawing, then ‘Una ipotesi di architettura’ would most certainly require not only a different interpretation but also an alternative research structure.

Purini’s first research direction sees the architectural project as the “re-description” of canonical architecture and architectural fragments mediated by memory alone. Here, the notion of typology acquires its value proper in its role of mediation between formal resources related to elementary spatial organisations (i.e. the hypostyle hall, the square, the gallery, etc.) and the precise reference to an archetype or to building types. The re-description – which in Purini’s rationale would correspond to the project – is set in a continuous relationship with external references to other architecture, which echo in it and generate a field of analogies and correspondences.²⁰⁶ According to Purini, this conception changes the way that architecture is traditionally conceived and imagined – the question that was raised in the essay ‘I motivi di fondo - Sulla tecnologia - I problemi della città, (1966)’. The idea of architecture as a continuous re-elaboration of historical precedents is ultimately negated here. Instead, architecture’s formal definition is seen as a confrontation that includes all the aspects that characterise its concreteness and individuality.²⁰⁷

Crucial in understanding this particular aspect of Purini’s research is the text ‘Ricerche di transizione’ (1967), the temple design in ‘Programma di fondazione grammaticale del linguaggio architettonico’ (1968), and last but not least the ‘Padiglione in cemento e vetro’ (1976), the last project discussed in the present research.

The second research direction consists of research on the field of architectural language. According to Purini, these the two aspects emerged in the first research direction, namely the concrete dimension of architecture as an assembly of physical architectural elements, and, secondly, the classification of both typological and primary elements, establish the possibility of simultaneously describing and

²⁰⁶ Purini, ‘I motivi di fondo’ (1966), 64–65.

²⁰⁷ On Purini’s interpretation of the notion of architectural typology, another recurrent theme in his writings, see in particular Franco Purini, ‘Alcune considerazioni relative alla nozione di tipologia edilizia’, in *L’architettura didattica*, 59–64. In this text Purini revisits the most relevant cultural approaches towards the concept of building types, focusing in particular on Giulio Carlo Argan’s essay ‘Sul concetto di tipologia edilizia’ and Rudolph Wittkower’s ‘Architectural Principles in the Age of Humanism’. In Argan’s essay in particular, Purini recognises the inclusion of the notion of ‘type’ within the broader notion of ‘creation’. It is this understanding that is primarily developed in the present context, alongside the concepts of composition and techniques of invention.

communicating the project, its formal content and its process. While on the one hand the findings are specified through their 'classification', on the other, the tendency towards redundancy in the investigation, and the ongoing *mise en question* of results that occurs when analysing the projects, constitute the research challenges.²⁰⁸

2.2.5 Elucidation of Purini's Concept of Classification

On a general level, classification is essential in describing any system. In Purini, which also sees architecture as a system, its extensive use primarily reflects a way of thinking about architecture and examining its themes. In 'Una ipotesi di architettura', the classification method structures the steps in Purini's reasoning: the architectural propositions developed are classified by their constitutive affinities to one another and by references to their programmatic aspects.

The classification method is a direct consequence of Purini's attempt to reassess the notion of the order of architectural taxes. This implies, for instance, the definition of new kinds of relationships between architectural elements. In this sense, it is clear why Purini finds classification to be 'the form itself of architectural knowledge'.²⁰⁹ Hence, Purini's use of classification should not be seen as a constrictive framework for the formal process but rather as an intermediate and discursive system for testing ideas, making them accessible and with values that exceed those inherent in subjective expression. Classification is a constructive conceptual instrument; it establishes formal choices and evaluates their predisposition for inclusion in architectural space. Similarly, classification mediates between these two competing characteristics: any attempt to reduce the number of classes is never final, thereby fuelling further analysis.

In the present study, the link between classification and description plays a fundamental role. It allows the reclassification and redescription of 'Una ipotesi di architettura', from its general content and premises to the specific hypothesis of the drawing. It will be clarified in the following sections of this chapter, in particular in the section 'The Drawing', which analyses 'Classificazione, per sezioni, di situazioni spaziali'.

²⁰⁸ Purini, 'Ricerche di progettazione', (1972), 18.

²⁰⁹ Franco Purini, 'Classifications', in *Sette paesaggi/Seven Landscapes. Quaderni di Lotus International*, no. 12 (Milan: Electa, 1989), 16.

Since classification has a long and well-established tradition in architectural thinking, Purini's particular use of it should be considered in relation to the architectural precedents that have influenced his approach. In this sense, it is essential to discuss the relationship between Purini's use of taxonomy and that of the architect, theorist, and educator Jean-Nicolas-Louis Durand, who utilised it as a rational framework to systematise architectural elements and typologies, enabling a methodical and replicable design process. While this connection may appear highly pertinent when comparing Purini's 'Classificazione, per sezioni, di situazioni spaziali' with the plates included in Durand's seminal works of the *Recueil et Parallèle des Édifices en tout genre, Anciens et Modernes* (1800), and *Précis des Leçons d'Architecture* (1819), a deeper analysis reveals a complexity that far exceeds any similarity arising from a superficial reading of the works.²¹⁰ Above all, this association is decisive in establishing the role of classification in relation to drawing and, by doing so, to motivate the exclusion of Durand from the context of this research. If the focus here were classification, then Durand would be a central source, but since drawing is the general concept underpinning Purini's hypothesis of architecture, Durand's work can be misleading.

Tafuri sketched the association between Purini and Durand in the revised and expanded version of the essay 'L'Architecture dans le Boudoir: The Language of Criticism and the Criticism of Language' (1974), later published in *La sfera e il labirinto*.²¹¹ In discussing Purini's approach to the theme of the large-scale, Tafuri claims that it is merely a secondary issue compared to his primary focus: his research is centred on the theoretical investigation of the architectural project. Tafuri uses Purini's 'Classificazione, per sezioni, di situazioni spaziali' as an example of his research on the architectural sign and writes:

²¹⁰ In particular see the similarity between the 'Classificazione' and Plate 20 of the *Précis (Ensamble d'Edifices résultants de divisions du carré, du parallélogramme, et de leurs combinaisons avec le cercle)*, both comprising seventy-two examples. However, Durand's drawing present diagrams of plans, while Purini's represents sections whose orientation is unspecified. See Jacques-Nicolas-Louis Durand, *Recueil et Parallèle des Édifices en tout genre, Anciens et Modernes: Remarquables par leur beauté, par leur grandeur ou par leur singularité, et dessinés sur une même échelle* (A l'École polytechnique, chez l'auteur, 1800), and *Précis des Leçons d'Architecture*, 2 Vols. (Paris: 1819). English translation *Précis of the Lectures on Architecture with Graphic Portion of the Lectures on Architecture*, (Los Angeles, CA: The Getty Research Institute Publications Program, 2000), 242.

²¹¹ Manfredo Tafuri, 'L'architecture dans le Boudoir', in *La sfera e il labirinto: Avanguardie e architettura da Piranesi agli anni '70* (Turin: Einaudi, 1980). Note that the first version of the essay published in *Opposition* does not contain the passage on Purini. See Manfredo Tafuri, 'L'Architecture dans le Boudoir: The Language of Criticism and the Criticism of Language', in *Opposition* no. 3 (New York: The Institute of Urban Studies, May 1974), 42-46.

And yet the fact that in '68 Purini began a 'classification by sections of architectural systems'²¹² is no coincidence. Was not the abstract typology of Durand a reductive instrument, positing architecture in a 'state of waiting' with respect to new *programmatics*, derived from 'other techniques'? Again, the studies on the relations of the *Da-sein* of the signs, which Purini constantly conducts, express a similar 'state of waiting'. Without a doubt, his signs seek articulation: their purism is always in balance between eloquence – the will to metaphorical 'transparencies' – and retreat into self-contemplation.²¹³

Leaving aside Purini's constant research into new architectural configurations discussed earlier in this chapter, and Tafuri's critique in 'L'Architecture dans le Boudoir', Durand's classificatory method and *mécanisme de la composition*²¹⁴ can only be understood if one considers that his relevance in the sixties was based on completely different premises than the positive value usually attributed to his rigorous approach. French architect and planner Bernard Huet dealt with the topic in 'Les trois fortunes de Durand' (1984).²¹⁵ Huet observes that in the context of the École des Beaux-Arts, Durand's *Recueil et parallèle des édifices de tout genres*²¹⁶ had no specific programmatic function and served mainly as an encyclopaedic compilation of architectural examples to be used by students for various educational purposes. Huet identifies this new form of dissemination of knowledge as both the reason for Durand's editorial success and for its decline. Although a practical manual and source for immediate design solutions, *Recueil* did not harness the creative aspect of developing an architectural idea. Durand's second good fortune corresponds, notoriously, to the role that many historians attributed to him as one of the precursors of modern architecture and the father of rigorous functionalism, as well as, more generally, a symbol of scientific progress. According to Huet, the specific ideological value accorded to Durand's work, in reality, hid the many ambiguities it contains.²¹⁷

²¹² It is unclear why Tafuri changed the term 'spatial situations' in the original title to 'architectural systems'. Although Purini's spatial situations can also be understood as an architectural system, this translation is too reductive and, arguably, misleading, as this research will demonstrate.

²¹³ Tafuri, 'L'architecture dans le Boudoir': 341. (Writer's translation)

²¹⁴ For an analysis of Durand's *mécanisme de la composition*, see the seminal essay by Rafael Moneo, 'Prologo', in Jean Nicolas Louis Durand (1802): *Compendio de lecciones de arquitectura* (Madrid: Pronaos, 1981), V-X. Italian translation 'Gli elementi della composizione', in J.N.L. Durand, *Lezioni di Architettura* (Milan: Città Studi, 1986), 233-238.

²¹⁵ Bernard Huet, 'Les trois fortunes de Durand', preface to Werner Szambien, *Jean-Nicolas-Louis Durand, 1760-1834: De l'imitation à la norme* (Paris: Picard, 1984), 6-11.

²¹⁶ Jean-Nicolas-Louis Durand, *Recueil et parallèle des édifices de tout genres, anciens et modernes, remarquables par leur beauté, par leur grandeur ou par leur singularité, et dessinés sur une même échelle* (Paris, chez l'Auteur, à l' École Polytechnique, 1801).

²¹⁷ Huet, *Ibid.*, 9.

However, of interest here is what Huet highlights as Durand's third critical fortune. In the context of the Italian architectural debate at the end of the sixties, architects such as Aldo Rossi, Carlo Aymonino, Saverio Muratori, and Giancarlo De Carlo critiqued the rigid functionalism of the Modern Movement. Huet argues that in this context, Durand's work was repurposed primarily as a historical and theoretical source to inspire a new praxis for the architectural project. In other words, the figure of Durand was employed in the critical revision of the origins of the Modern Movement to promote the autonomy of the architectural discipline. Huet writes: 'Rather than a slightly simplistic and unreal metaphor about industrial space, this new generation of architects preferred to see in the graph paper method, the practice of orthogonal plotting or the modular composition system advocated by the professor at the École Polytechnique, a true concrete invention of a rational system of architectural design.'²¹⁸ Huet views this third stage of Durand's theoretical relevance as his development of the fundamental epistemological break that began with Boullée; namely, the transfer of the scientific and rational aspect of architecture from the moment of its execution (*l'art du bâtrir*) to the moment of design, which was discussed in Chapter 1.²¹⁹

However, Purini's architectural system conveyed through drawing – particularly in 'Classificazione, per sezioni, di situazioni spaziali' – achieves something substantially different yet again. In fact, even in the new interpretation of Durand's work, research into the autonomous rationality of architecture reveals its fictional character: 'the fiction of reason',²²⁰ to quote Peter Eisenman, which is implicit in any attempt at rationalisation and classification. In addition to the role of classification in reaffirming the merits of the autonomous disciplinary approach, the introduction to 'Una ipotesi di architettura' requires a discussion of the creative techniques that Purini devised to complete the complex structure of his research.

²¹⁸ Huet, *Ibid.*, 8. Huet argument's is particularly informed by the following sources: Carlo Aymonino, 'La formazione di un concetto di tipologia edilizia', in *Rapporti tra la morfologia urbana e la tipologia edilizia* (Venice: Cluva, 1966), 1-21; Aldo Rossi, 'Introduzione a Boullée', in Etienne Louis Boullée, *Architettura. Saggio sull'arte*, (Venice: Marsilio Editore, 1967), 7-24.

²¹⁹ *Ibid.*, 8.

²²⁰ Peter Eisenman, 'The End of the Classical: The End of the Beginning, the End of the End', in *Perspecta: The Yale Architectural Journal*, Vol. 21 (Cambridge, MA: The MIT Press, 1984), 154-173.

2.2.6 Purini's Seven Techniques of Architectural Invention

The fictional nature of architectural rationality revealed by Purini's research should not be viewed as indicative of a solipsistic attitude or as a cynical form of provocation. Particularly in his drawings, Purini grapples with the challenge of restraining his *poiēsis* in an effort to devise a universal alternative to past architectural ideas. Certainly, there is no sentimentality in Purini's work. Deeply influenced by the cultural conflict of the 1960s, 'Una ipotesi di architettura' engages in a relentless confrontation between the necessity for theory and the challenges of individual research.

In the first survey of his work, published in the journal *Constrospazio* in 1972, Purini addresses the complex relationship between individual and collective work:

'Among the countless difficulties that usually are part of any attempt to evaluate an experience, in the case of presenting one's own work these difficulties increase. The greatest of these is the tendency to speak in the third person in order to efface or suppress strictly personal aspects in an effort at objectivity that wrongly presupposes the existence of some external dimension of debate that is ready in advance for this, but which is often only the internal condition of what one is proposing.'²²¹

Purini demonstrates a keen awareness of the conflict between individual motives and the need for socialisation. ²²² He continues: 'In the course of this work I have attempted to "reconstruct" a system of partial certainties, to "describe" a design path through a series of remembered "places", to select combination of proposals for formulating an hypothesis of architecture that has a relative completeness, and which can be tested in wider fields of application.'²²³

My reading of the seven techniques devised by Purini is as follows:

²²¹ Purini, 'Ricerche di progettazione', 18. (Writer's translation)

²²² The tension between individual and collective motivations in Purini clearly exemplifies what has been already introduced in the previous chapter, in the section discussing Filiberto Menna's ideas on architectural drawings.

²²³ Purini, 'Ricerche di progettazione', 18. (Writer's translation)

- *Conceptual association among different elements.* This technique consists of questioning the association of autonomous and defined architectural elements and in particular, the six elements identified by Leon Battista Alberti: the wall, the window, the column, the roof, the chimney and the stairs.²²⁴ As in Robert Venturi's Guild House in Philadelphia (1960-1963), indicated as an example by Purini's text, a window – a hole in a wall – could grow in size to cover the full extension of the façade, and include the connective spaces of the building, therefore losing its original definition to acquire a new functional status.²²⁵ According to Purini, this technique stresses the metamorphic vocation of the elements, so that, ideally, one element could be transformed into another, thus exposing the instability of the element, whose consistency is granted only by the conventional system of relationships with other elements.²²⁶



FIG. 2.14 Robert Venturi (Venturi and Rauch), Guild House, Philadelphia, Pennsylvania (1963). Front elevation. The Venturi's Guild House illustrates the metamorphic vocation of the architectural elements. An architectural element such as a window could grow in size to cover the full extension of the façade, and include the connective spaces of the building, therefore losing its original definition to acquire a new functional status.

²²⁴ 'Libro Primo, Il Disegno' in Leon Battista Alberti, *L'Architettura (Da Re Aedificatoria)* (1452), Portoghesi ed. (Milan: Il Polifilo, 1966).

²²⁵ Purini, 'Luogo e Progetto', 35. For the definition of Purini's creative techniques it is possible to trace the influence of Robert Venturi's *Complexity and Contradiction in Architecture*. See: Robert Venturi, *Complexity and Contradiction in Architecture* (New York: Museum of Modern Art Press, 1966).

²²⁶ Ibid.

— *Reduction to the archetype.*

Reduction to the archetype consists of giving a “primitive” look to the [architectural] elements in use by restoring them to their conceivable origins in a hypothetical way. This procedure removes the elements from their fixed state, which through habitual use has come to seem natural and beyond question. The juxtaposition of the archetype and the family of derived elements gives the latter the appearance of an important sequence, while creating a remarkable novel effect.²²⁷

For instance, the relationship between a wall reduced to its archetypical form and a series of potential associations with other elements would enable a new vision.²²⁸ Important in this technique – comparable to Duchamp’s ‘ready-made’ – is that the reduction also implies the transfer from the concrete materiality of the ‘element’ to the field of representation and, more specifically, to the realm of the symbol. In fact, in *L’architettura didattica*, Purini expands the notion of archetype by observing that writing and drawing always involve research on the archetype: ‘What in fact is a written or drawn page? Both are the negative of an action. Moreover, the drawn page is the ideal section of a perspectival beam released from a point. Writing and drawing construct a space inasmuch as they interrupt an external situation by reversing it through the sign in a kind of “translation”.’²²⁹

Challenging the limits of what might seem a paradoxical statement, Purini emphasises the inherent creative aspect of research on the origin of an architectural element. He argues that the reverse process of forming an element embeds the typical character of the sign, which, as the negative of an action, always carries its memory. Therefore, research should aim to reveal this hidden memory embedded in the element through re-description.²³⁰ In synthesis, within a unifying research field, and, more specifically, within the field of architectural figuration, Purini aims to combine the historical temporality of architectural forms and architectural elements and drawing’s own temporality and individuality.

²²⁷ Ibid. (Writer’s translation).

²²⁸ As discussed in the previous chapter, this technique is frequently used in the designs of Dogma architectural office and clearly identifiable in their projects ‘Stop City’ (2007) and ‘A Field of Walls’ (2012).

²²⁹ Franco Purini, ‘La composizione architettonica nel suo rapporto con alcune “tecniche di invenzione”’, in *L’Architettura Didattica* (Reggio Calabria: Casa del Libro Editrice, 1980), 54.

²³⁰ This statement becomes clearer in relation to Pliny the Elder’s story of Diboutades (see ‘The Mythical Origin of Drawing’, Ch. 1, Section 2 of this manuscript), in which the act of drawing the profile of her departing lover was interpreted as the embodiment and memory of a loss, thus the presence of an absence.

- *Simplification and schematisation of how a building is connected to the ground.* Purini recognises only two ways of connecting a building to the ground: the first is to lay the architectural volumes on a base; the second is to lay horizontal surfaces on a dense grid of columns²³¹. For him, the first approach is traceable to the iconographic structure of the still life, in which a group of objects is placed on a supporting element, but also to the Etruscan sarcophagus, where human figures are typically sculpted reclining on the lid.²³² Significantly, in both cases, the objects acquire a marked figurative dimension by being arranged on a base. As discussed in reference to the iconographic structure of the ‘apparition’, the clearly identifiable theme of the base (present in most of Purini’s projects and graphic investigations) plays an essential role in the development of ‘Programma di fondazione grammaticale del linguaggio architettonico’ (1968).

The second type of support, consisting of columns, develops the figurative themes of the forest. According to Purini, architecture built on a dense grid of columns appears to be suspended: the refraction of light produces the effect of dematerialising the supporting elements, while a foreshortened view of the supporting columns highlights the weight of the building. Together, these two effects create a constant perception of instability²³³. In my view, early studies of this type are already evident in some drawings in ‘La città compatta’ (1965–66), ‘Ricerche di transizione’ (1967) and ‘Progetto di ponte a San Giovanni dei Fiorentini’ (1968). The series ‘Case nella campagna romana’ (1966, onwards) also features a continuous development of this technique.

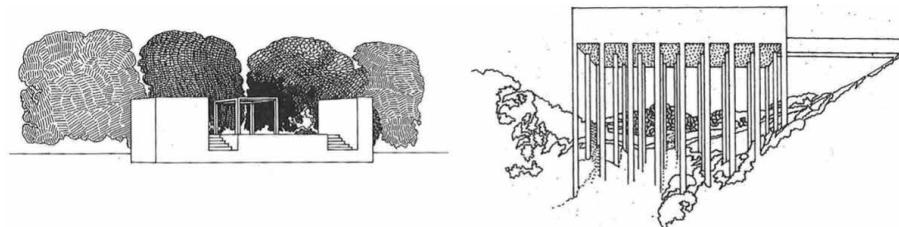


FIG. 2.15 Franco Purini, ‘Case nella campagna romana’ (1971). Views. These drawings illustrate the two ways of connecting a building to the ground: the first is to lay the architectural volumes on a base; the second is to lay horizontal surfaces on a dense grid of columns.

²³¹ Arguably, a third tectonic approach could be the construction of architecture as an intervention on the morphological character of the land or, more generally, as excavation. Peter Eisenman, among others, developed these themes in the project for Cannaregio in Venice (1978) and, more recently, in the City of Culture of Galicia in Santiago de Compostela (1999 onwards). Purini, however, does not include this technique since it cannot be simplified or schematised.

²³² Purini, ‘La composizione architettonica nel suo rapporto con alcune “tecniche di invenzione”’, 49–50.

²³³ Ibid., 50.

- *The use of pure volumes and simple structures together with the transformation of their geometry.* Purini relates his preference for pure forms to their high level of abstraction and the possibility of rigorously controlling their transformation within a system of variables that also considers, for instance, the type of material used. I would argue that this technique can also be seen as an addition to the findings developed in ‘Ricerche di transizione’ (1967). Purini’s first indication of this technique is found in the essay ‘Note sulla composizione architettonica’ (1967), discussed in Sections 3 and 4 of the present chapter.²³⁴
- *The choice of common, conventional architectural elements.* A complement to the previous technique, this approach reinterprets or, as Purini writes, ‘re-describes’²³⁵ the architectural elements by applying a minimal variation, such as a change in the scale or proportions of an element, in order to alter conventional perception and for instance introduce an effect of novelty, surprise or irony. As an example of this technique, Purini refers to the windows in the façade of Robert Venturi’s Guild House.²³⁶ It is also present in the façade of the Vanna Venturi House in Philadelphia (1959-1964).

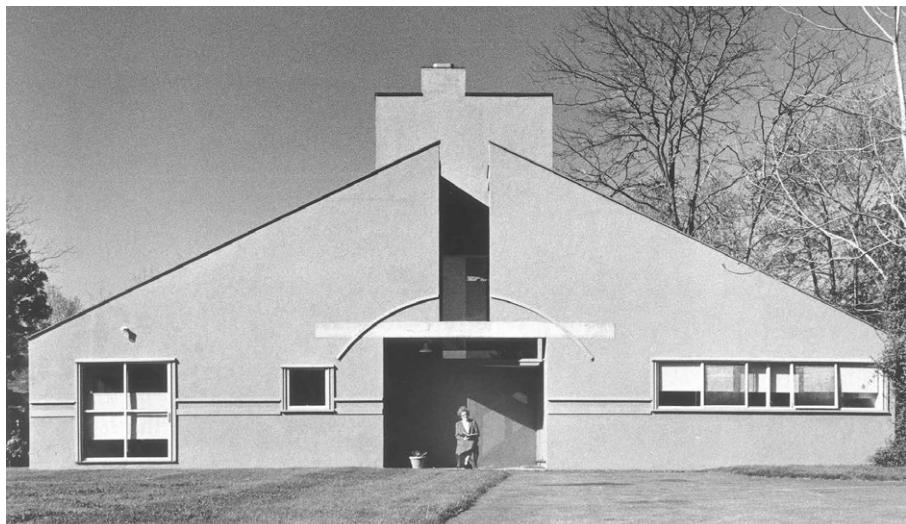


FIG. 2.16 Robert Venturi (Venturi and Rauch), Vanna Venturi House, Chestnut Hill, Philadelphia, Pennsylvania (1964). Front elevation. Photo by Rollin LaFrance, Venturi, Scott Brown and Associates, Inc. In the Vanna Venturi House, Robert Venturi explores the complexity of the façade through the variation and articulation of window features.

²³⁴ Franco Purini, ‘Note sulla composizione architettonica’ (1967), in *Grammatica* no. 3 (Rome: Editrice Feltrinelli, 1969), 69. English translation: ‘Notes on architectural composition’ in Appendix 1.

²³⁵ Purini, ‘Luogo e Progetto’, 35.

²³⁶ Ibid.

— *Estrangement*. Purini derives this technique from Russian literary theorist Viktor Shklovsky's original homonymous work. The architect breaks with convention and presents an object or situation in a new and unusual form, as if 'perceived for the first time'.²³⁷ Purini translates Shklovsky's technique into a design procedure whereby architectural elements should be designed as if for the first time. In my opinion, we see this technique most clearly at work, again in 'Ricerche di transizione' (1967), but above all 'Progetto di biblioteca a Roma' (1968) (both discussed in the next section). A first example includes the surprising element-stairs in some proposals for the 'Case nella campagna romana' (1968, onwards), and the proposal for a 'Literature Museum (Danteum) in Piazza Moretta in Rome' (1985). Comparable to the stairs element is the theme of the large moulding, which is often used as the crown of the building, introduced by Purini in 'Progetto di edificio lamellare' (1968). Here, the large moulding is designed in the same language as the building, so that the effect of incongruousness is appreciated primarily in the scalar difference rather than by the association of incongruous elements. According to Purini, the main sculptural themes of the building converge in the crown, establishing a transformation and the perceived amplification of the formal values of the building. The theme of the large moulding appears in many of Purini's projects, such as the extension to the project for the 'Municipio di Castelforte' [Town Hall in Castelforte] (1983), the 'Grattaciello barbarico' [Barbaric Skyscraper] (1985), 'Cappella di Sant'Antonio a Poggiooreale' [Chapel of S. Anthony at Poggiooreale] (1987), 'Casa Pirello' in Gibellina (1990), and in the more recent 'Torre Euroskey' [Euroskey Tower] in Rome (2012).²³⁸ In general, the crown as the focus of sculptural effects is a constant in all these projects. Interest in this particular technique is traceable to Luigi Moretti's ideas, in particular those expressed in the essay 'Valori della Modanatura' in *Spazio* no. 6, (1951-52).²³⁹ Note that the enlargement and reinterpretation of classical architectural elements was one of the distinctive leitmotifs of so-called postmodern architecture, especially in the work of Charles Moore, Michael Graves, Venturi, Schott Brown, Terry Farrell and the architectural group Site.

²³⁷ Viktor Shklovsky, 'Art as Device', in *Theory of Prose* (New York: Dalkey Archive Press, 1993), 6. With reference to Shklovsky see also the little-known essay by Manfredo Tafuri, 'Sklovskij, Benjamin e la teoria dello "Spostamento"', in *Figure. Teoria e Critica dell'Arte*, no. 1, *Sulla Critica*, Filiberto Menna, ed. (Rome: Edizioni Kappa, 1982), 38-51.

²³⁸ A good overview of these examples can be found in: *Sette Paesaggi/Seven Landscapes. Quaderni di Lotus International*, no. 12 (Milan: Electa, 1989). For the more recent 'Torre Euroskey' [Euroskey Tower], see: Franco Purini, and Laura Thermes, 'Torre Euroskey', in *Area*, no. 86 (Milano: Tecniche Nuove, 2006), 144-149.

²³⁹ Luigi Moretti, 'Valori della Modanatura', in *Spazio* no. 6, October (Milan: Gruppo Editoriale Spazio, 1951-52), 5-12. English translation 'The Value of Profiles', in *Oppositions* no. 4 (New York, 1974), 109-139.

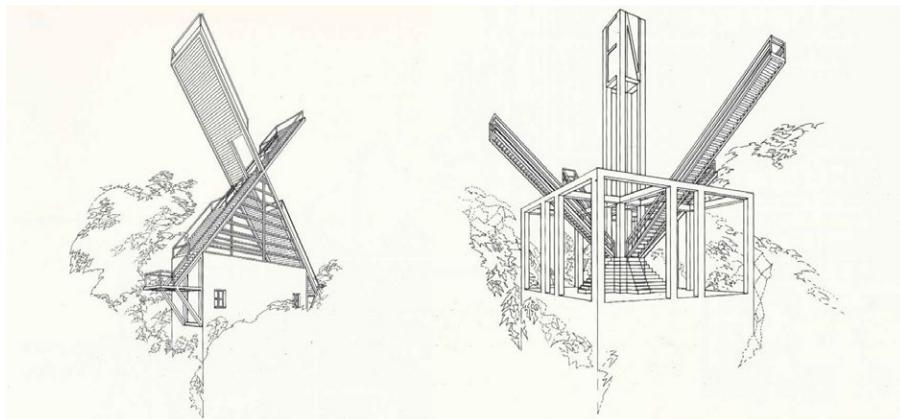


FIG. 2.17 Franco Purini, 'Case nella campagna romana' (1977). Views. In this design, Purini elevates the stair from a functional element to the crowning motif of the architectural composition.

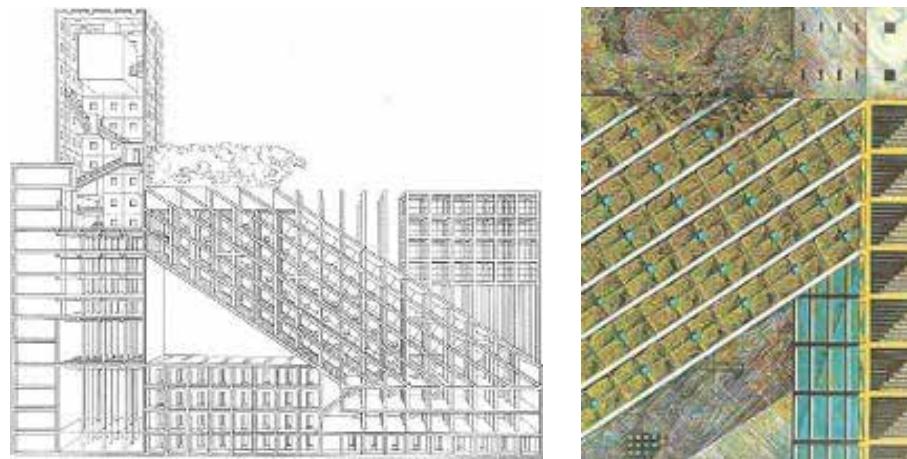


FIG. 2.18 Franco Purini, 'Proposta per un museo della letteratura (Danteum), Piazza Moretta, Rome' [Proposal for a museum of literature (Danteum), Piazza Moretta, Rome] (1985). Cross-section detail and side view. In Purini's Danteum the stair is the motif of the architectural composition

- *The disassembly of the building into parts.* This last technique refers to the separation of all the parts of a building to reach the minimal cell. According to Purini, this operation reveals the autonomous vocation of each formal system or configuration. The reference for this procedure is found in the skeletal configurations of Aldo Rossi's early designs, such as the 'Cimitero San Cataldo di Modena' [San Cataldo Cemetery, Modena] (1971-1984).²⁴⁰

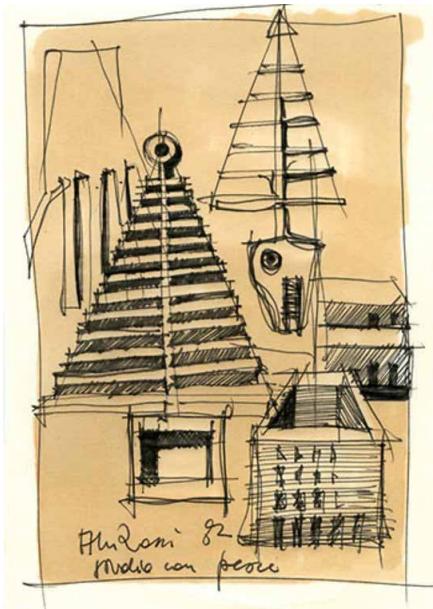


FIG. 2.19 Aldo Rossi, *Mano con pesce* [Hand with Fish] (1972). Sketch for the San Cataldo Cemetery, Modena. Here, the skeletal character of the architecture is made evident through the comparison with the fish bone.

²⁴⁰ Aldo Rossi frequently invoked the metaphor of the "skeleton" to describe the enduring structural and historical core of architecture. See: Aldo Rossi, *The architecture of the city* (Cambridge, MA: The MIT Press, 1982), 57, and: *A Scientific Autobiography* (Cambridge, MA: The MIT Press, 2010 (original Italian ed. Parma: Practices, 1981), 5.

2.3 The Premises of 'Una Ipotesi di Architettura' [A Hypothesis of Architecture] (1968) : 'La Città Compatta. Studi di Strutture Urbane' [The Compact City. Studies of Urban Structures], (1965-1966); 'Ricerche di Transizione' [Transitional Research] (1967); 'Progetto di Strada "Costruita" tra Roma e Latina' [Mechanised Road from Rome to Latina] (1967); 'Progetto di Biblioteca a Roma' [Design for a Library in Rome] (1968)

2.3.1 'La Città Compatta. Studi di Strutture Urbane' [The Compact City. Studies of Urban Structures] (1965-1966)

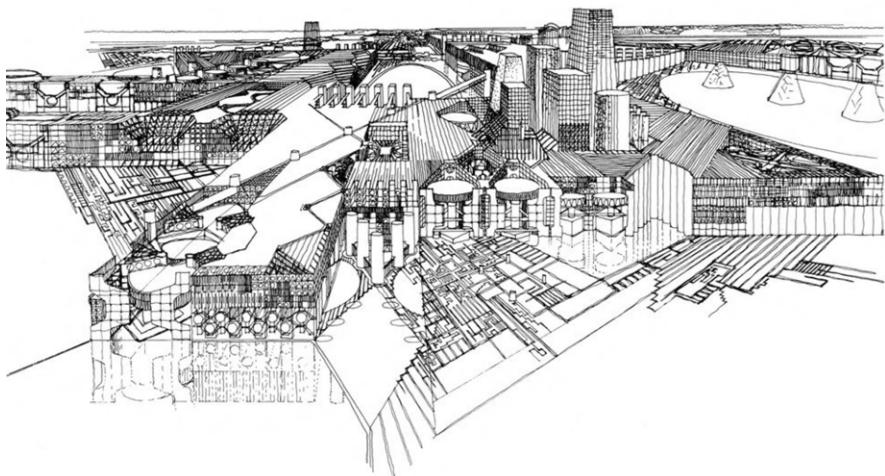


FIG. 2.20 Franco Purini and Laura Thermes, 'La città compatta. Studi di strutture urbane' [The compact city. Studies of urban structures] (1966). Bird's eye view.

'La città compatta. Studi di strutture urbane' is a design proposal for a city developed by Franco Purini and Laura Thermes between 1965 and 1966. It represents their manifesto and addresses all the implications of the relationship between architecture and the city. This project could be also regarded as a direct expression of the cultural climate of the 1960s described in the previous section, a time when architectural research was seen as a vehicle through which it was possible to formulate an ideological critique of society.²⁴¹ The present text I will not focus on the general ideological aspects of the project for the simple reason that Purini's position can be summarised in his radical reconsideration of the meaning of an architect's work, while architectural language is seen as the instrument capable of researching into the motivation for the architectural project and for building in general – the very same themes under investigation here, seen through the lens of drawing. Purini's ideological analysis is outlined in 'Il mestiere dell'architetto' a collective text written with *Gruppo Atrio Testaccio* in 1968 for *Nuova Generazione* [New Generation].²⁴²

In the text, Purini articulates a radical rejection of the 'professionalism' of the architect's work, considered part of the capitalistic mechanism, but also a radical rejection of the very notion of professionalism, in which Purini sees the presence of a self-verifying apparatus, hence inherently maintaining the continuance of a conservative attitude. Since the professional sphere tends, *de facto*, to maintain and reproduce existing building techniques over time, any development in such a context can only occur through its adherence to technological progress, thus ignoring other fields of development. Lastly, Purini also implacably condemns the most experimental and poetically inspired professional approaches. He sees them as ostensibly introducing elements of disturbance into the capitalistic system, while in reality, they merely serve the capitalistic need to expand the market offer.

²⁴¹ Scholar Antonio Riondino, in a recent publication of an interview from 1997 with Laura Thermes, in which Franco Purini also participated, reveals an interesting aspect regarding this project. Laura Thermes explains that the project was conceived independently, outside the design courses of the Faculty of Architecture, and that it epitomised the cultural situation of the so-called 'tendenza studentesca' [student movement], in which the work of students began to permeate academic programmes. In fact, this project has been highly influential at the level of theoretical and methodological innovation in courses led by Ludovico Quaroni for many generations. See Antonio Riondino, 'Intervista a Laura Thermes (con la partecipazione di Franco Purini)', in *Ludovico Quaroni e la didattica dell'architettura nella Facoltà di Roma tra gli anni '60 e '70. Il progetto della Città e l'ampliamento dei confini disciplinari* (Rome: Gangemi Editore, 2013), 175, 452-455.

²⁴² Franco Purini (with Gruppo Atrio Testaccio), 'Il mestiere dell'architetto', in *Nuova Generazione: settimanale politico dei giovani comunisti italiani* no. 2, April (Rome: Nuova generazione, 1968). Reprinted in *Grammatica* no. 3, Gastone Novelli and Achille Perilli eds. (Rome: Edizioni Libreria Feltrinelli, 1969), 70-71, and in *Del Progetto. Scritti teorici di Franco Purini 1966-1991*, Francesco Moschini and Gianfranco Neri eds. (Rome: Edizioni Kappa, 1992), 9-10.

Purini also indicates the field of intervention required in order to obtain new perspectives for architectural work. The necessary actions can be summarised as follows:

- reassessing the question of architectural language and challenging the reduction of the field of architectural variation to the level of mere styling;
- reorganising architectural education to better address the complexities of the challenges that society presents to architectural and urban phenomena. In particular, Purini calls for eliminating the artificial distinction between research and education and overcoming the over-exploited notions of avant-garde and utopia, which have been widely absorbed by the system they claim to reject and institutionalised within research.
- reformulating, at all levels, the relationship between design practice and architectural criticism, so that the latter is recognised for what it is: a manifestation of political and cultural power.

In order to grasp the tone of Purini's radical position in refusing professionalism, it is sufficient to quote the final notes of the collective statement 'Elogio dell'incultura' [In praise of the lack of culture] presented in 1968 at the conference *L'eredità di Terragni e lo sviluppo dell'architettura italiana 1943-1968*, in which Purini and Gruppo Atrio Testaccio concluded a very polemical presentation on the way in which Terragni, a key figure, was being instrumentally re-proposed:

And this is why we could call our statement 'In praise of the lack of culture'. In praise of the lack of culture stands for the refusal to read, interpret or study. The refusal to receive or make a contribution. We state our right to remove the material we are developing from the mechanism of the formation of cultural processes; and, if necessary, we are ready to abandon the very role of architect and its entire ambit through the systematic destruction within our own work of levels, problems, schemes, interests, powers, and technical and operative skills. What we declare is not the pure and simple dissolution of the definition of architect, but of its historical image and institutional duties. Praise for the lack of culture as an extreme and primitive availability, as a condition of continuous research without 'data', and as an instrumental refusal of present and future perspectives that, so far, have only been a mirrored projection of the present. We believe that from all this a new way of working and of simultaneous knowledge can arise, which includes within its very definition, beyond any personal capitulation or resistance, the mechanism of its own growth or demise. (September 1968).²⁴³

²⁴³ Franco Purini (with Gruppo Atrio Testaccio): 'Elogio dell'incultura': statement presented at the conference 'L'eredità di Terragni e lo sviluppo dell'architettura italiana 1943-1968', eds. Gastone Novelli and Achille Perilli, *Grammatica*, no. 3, (Rome: Edizioni Libreria Feltrinelli, 1969): 72-73.

Having now cleared the ground of any ideological approach that might lead to an inappropriate trajectory in pursuing the present investigation into Purini's work, I will now deal with so-called *specifico architettonico* [architectural specificity];²⁴⁴ namely, the specific characteristics of the project's architectural language, its procedures and its *écriture*, which will be evaluated by analysing its documentation.

'La città compatta. Studi di strutture urbane' generates Purini's framework and, as will become evident, functions literally as the base on which the research entitled 'Una ipotesi di architettura' was founded and systemised. In this sense, the beginning and end of Purini's research are bound to one another in an indissoluble and very fertile circularity, each of which could be seen as both prologue and epilogue. The project for 'La città compatta' constitutes the original moment of an enquiry developed according to a sequence of design investigations and a phase of laboratory-like experimentation. As mentioned in the previous introductory section, these projects should be considered beyond any concrete results they present and instead analysed for the questions they raise in relation to the development of the research. It could be argued that Purini never really abandoned the project for 'La città compatta' (as is true for all the other projects presented in this text), and still today it represents for him an essential framework for orienting his reflection on the subject of the city. In fact, most of the architectural and figurative themes that played a fundamental role in the development of 'Una ipotesi di architettura' are already present, or emerge as a consequence of the elaboration of this early project; namely, the theme of the plinth, or 'base' as the support of the architectural composition, and the adoption of the cube as the basic generative structure of the architectural element.

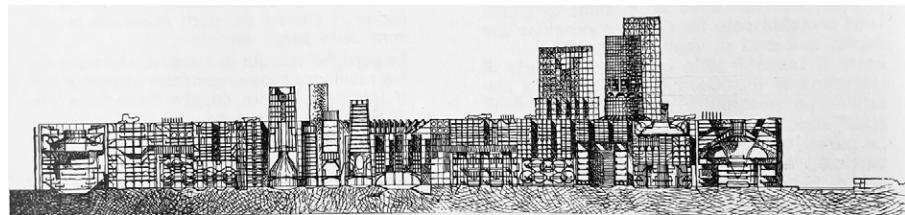


FIG. 2.21 Franco Purini and Laura Thermes, 'La città compatta. Studi di strutture urbane' (1966). Cross section of the urban fabric.

²⁴⁴ The idea of architectural specificity derives from Vsevolod Illarionovich Pudovkin's formalist understanding of film specificity and its artistic function. See Vsevolod Illarionovich Pudovkin, *Film Technique and Film Acting: The Cinema Writings of V.I. Pudovkin*, trans. Ivor Montagu (London: Vision Press Limited, 1954). In Italy, Pudovkin's theories were continued by the highly influential philosopher Galvano della Volpe. See Galvano della Volpe, *Il verosimile filmico e altri scritti di Estetica* (Rome: Edizioni Filmcritica, 1954), and *Critical del gusto* (Milan: Feltrinelli, 1960). Franco Purini's reference to Galvano della Volpe's ideas on the specificity of the architectural project can be found in 'Il progetto', footnote 13, *L'architettura didattica* (Reggio Calabria: Casa del Libro Editrice, 1980), 28.

It could be argued that the very theme of the city propels Purini's research. However, this observation would not be entirely appropriate because in 'La città compatta', the city is conceived as an architectural project encompassing all its various aspects, scales, and details. Furthermore, this proposal also engages with the broader architectural debate and, in particular, with the work and ideas of Louis Kahn, a key figure in Italian architectural discourse, whose influence catalysed a critical re-evaluation of the cultural and disciplinary assumptions of modern architecture. As noted by Francesco Moschini, 'La città compatta' represents a clearly identifiable critical response to Kahn's work, notably his Civic Centre: Project for Philadelphia (1957), which comprises the idea of the city as assembled institutions and the concept of 'served' and 'servant' spaces, whereby architecture internalises the basic elements of urban structure in its distinction between streets and buildings.²⁴⁵ In Purini and Thermes's project, however, this distinction is challenged through proposing its elimination.

Moreover, Louis Kahn's work is also important with regard to his drawings, and, in particular, to the role these play in the critical reassessment of architectural representation that Purini formulates in the previously introduced 1966 text 'I motivi di fondo – Sulla tecnologia – I problemi della città'. Purini recognises in Louis Kahn's drawings a fundamental source for achieving within the project, and therefore at the level of the image, a 'direct relationship in the design field between the proposal and its verification'.²⁴⁶ Purini sets Kahn's attitude towards drawing in contraposition with the rationalist approach of the Modern Movement:

For the rationalists, the drawing was not so much an instrument for verifying the preliminary figurative hypothesis, given that their research was directed towards geometries with a very low degree of abstraction, but rather an important instrument for the invention of the actual architectural organism (and thus capable of determining the fundamental relationships between the elements and the whole). Kahn, on the other hand, when referring to geometries that are elementary but not simple, used the two-dimensional drawing as an analytical instrument to investigate the geometrical possibilities of the form; in other words, to continuously extract the laws of aggregation and of montage that are determined by the logical organisation of the unitary elements. This leads to the possibility of an analogous operation by us: namely, to apply non-naturalistic representational codes to architectural organisms composed of three-dimensional modules.²⁴⁷

²⁴⁵ See Francesco Moschini, "Disegni d'invenzione": Progetti di Franco Purini 1966-1976', in Franco Purini, *Luogo e progetto* (Rome: Edizioni Kappa, [1976] 1981), 10.

²⁴⁶ Franco Purini (with Gruppo Atrio Testaccio), 'I motivi di fondo – Sulla tecnologia – I problemi della città' (1966), in *Grammatica*, no. 3 (Rome: Editrice Feltrinelli, 1969), 65. (Writer's translation).

²⁴⁷ Ibid., 65. (Writer's translation).

In this passage, the reference to Louis Kahn's architecture, and, in particular, to the aggregate rules of the forms, introduces another important component of Purini's research hypothesis that is developed within the proposal for 'La città compatta'.

'La città compatta. Studi di strutture urbane' formulates a critique of the modernist concept of functional zoning. Purini and Thermes imagined a city conceived as a continuum from which tower-like elements emerge in order to 'set a clear contraposition with the landscape, in which they represent a centralised and a thoroughly artificial alternative'.²⁴⁸ Here, the city, its parts, the buildings and the urban structures are organised according to a generative cubic element that endlessly iterates the canonical perspective cell. In 'La città compatta', the cubic structure is the basic architectural element through which the very idea of urban structure is reformulated – and thus, by extension, the city itself. The project is developed in the form of a series of drawings on all scales of representation, ranging from a general scale of urban plans, views and cross sections, to the precision of axonometric drawings, including architectural details, which are drawn in order to indicate how the city should be concretely materialised through a number of exemplary connections between architectural elements and materials for the original 'genetic' element – the cubic structure.

The urban fabric proposed in 'La città compatta' can also be read figuratively as a large square that corresponds to the expanse of the city. By simultaneously maintaining the theme of totalising construction and the emptiness of a square, the figurative dimension of the representation becomes destabilised. Moreover, this correspondence also creates a subtle unifying analogy between the city and the realm of representation, since the urban plan of 'La città compatta' could be compared with a sheet of paper and, therefore, to a drawing whose description would establish the content of the city: a drawing, therefore, to be deciphered and revealed. This is a decisive aspect for the present research. It is precisely this description that is attempted in my investigation in order to reconstruct the characteristics of the drawing implicit in Purini's research.

Purini and Thermes's city depicts a vast plinth generated by the cubic elements, from which either groups of tower-like structures rise, or parts are excavated to situate buildings. In the drawings, the parts and fragments of the city emerge – or, conversely, are carved out – from an extension of the cubic element, which is the ground or base of

²⁴⁸ 'By rejecting the method of zoning, [the compact city] as a total organism is conceived as a continuum of 'emergencies'. This city is set in clear contraposition with the landscape, thus representing a centralised and globally artificial alternative.' See Franco Purini, 'Studi di strutture urbane', in *Luogo e progetto* (Rome: Edizioni Kappa, [1976] 1981), 39.

the city. Therefore, the soil, the material on which the city is built, already becomes an architectural construct.²⁴⁹ ‘La città compatta’ is not conceived as if it should be built all at once; the drawings, embedding temporality, stratification, and variety, clearly illustrate that the city fabric follows many distinct development areas. Therefore, the very concept of a ‘city part’ should be understood literally as a construction site. Similarly, the forms that rise from the plinth shown on the drawings not only consist of completed towers, but also of others that intimate their own construction, namely the scaffolding which Purini maintains should remain in situ after a building’s completion in order to function as a primary scale reference.²⁵⁰ From this it is possible to infer that the city and its architecture should not only concretely incorporate the process of its own construction but also represent it in a rhetorical way.

The surface of the plinth, composed of architectural elements, should be understood both literally and conceptually as the place where it is possible to simultaneously carry out architectural experimentation and evaluate its performance and potential resilience in the evolution of the city. Through this operation, Purini transfers the concreteness and the complexity of the ‘real city’ to the realm of design experimentation, transforming it into pure architectural material. Hence, the cubic element, of which the urban fabric is an extension, not only represents the genetic code for the city’s entire composition but also embodies the series of experimentations and reflections that constitute this proposal.

It is precisely within the field of architectural representation that it is possible to ‘draw things together’,²⁵¹ in other words, formulate questions concerning the organisation of a plan alongside its constructive problems and their figurative dimension.

The fabric – the urban fabric – is therefore also a project that incorporates the surface of an architectural drawing, structured according to an inextricable system of signs which, to recall Achille Perilli’s and Gastone Novelli’s ideas, are waiting to be recognised as architectural and urban spaces. Hence, it is only the drawing’s representational quality that is capable of maintaining the indistinct, complex nature of the surface, and offering the possibility of identifying and isolating new spatial ideas and new architectures within it.

²⁴⁹ It is also in this sense that the city is constructed architecturally.

²⁵⁰ Purini, ‘Studi di strutture urbane’, 39.

²⁵¹ ‘Drawing Things Together’ is an essay by French philosopher Bruno Latour that investigates the theme of ‘visualisation’ within scientific disciplines. Although the present research does not enter this field, the directness of the title could also be appropriated in the present context. See Bruno Latour, ‘Drawing Things Together’, in *Representation in Scientific Practice*, eds. Michael Lynch and Steve Woolgar (Cambridge, MA: The MIT Press, 1990), 19–68.

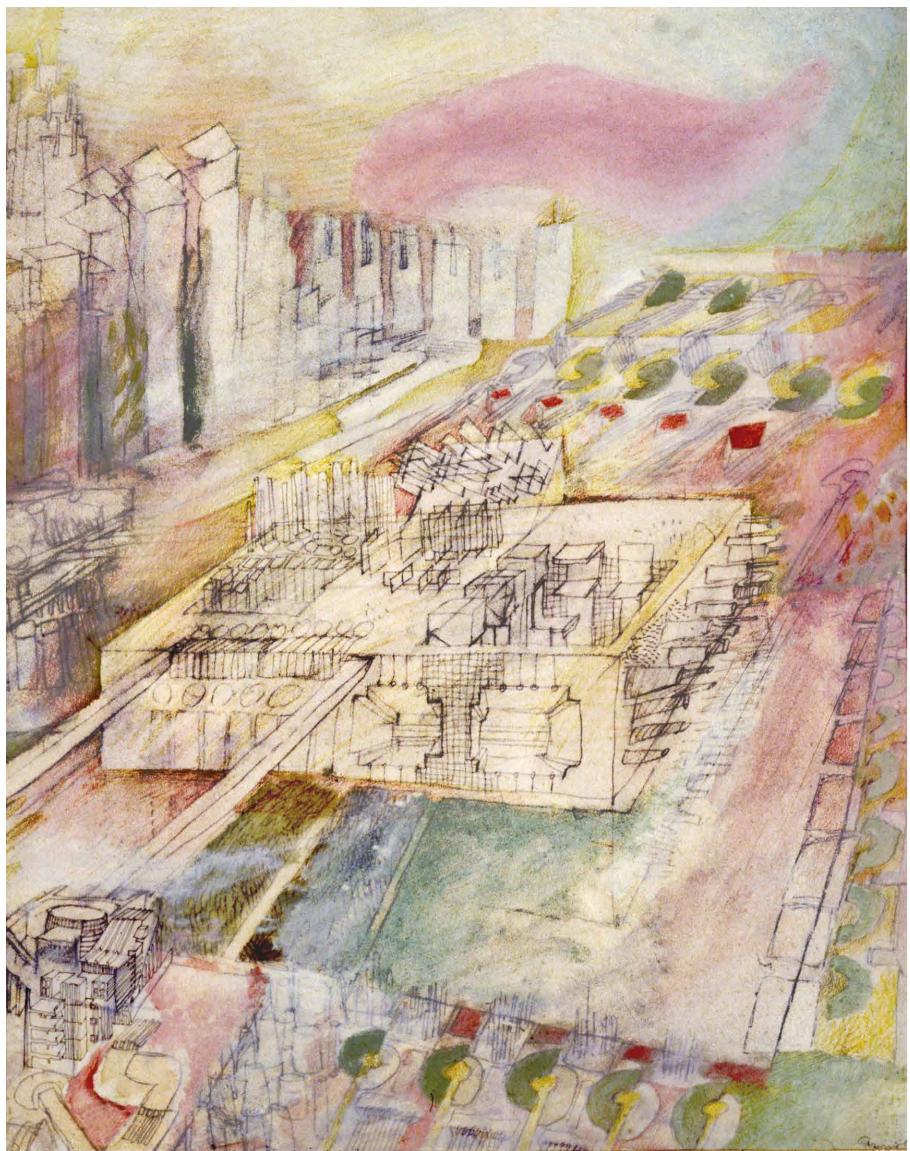


FIG. 2.22 Franco Purini, *Città in costruzione* [City in construction] (1966).

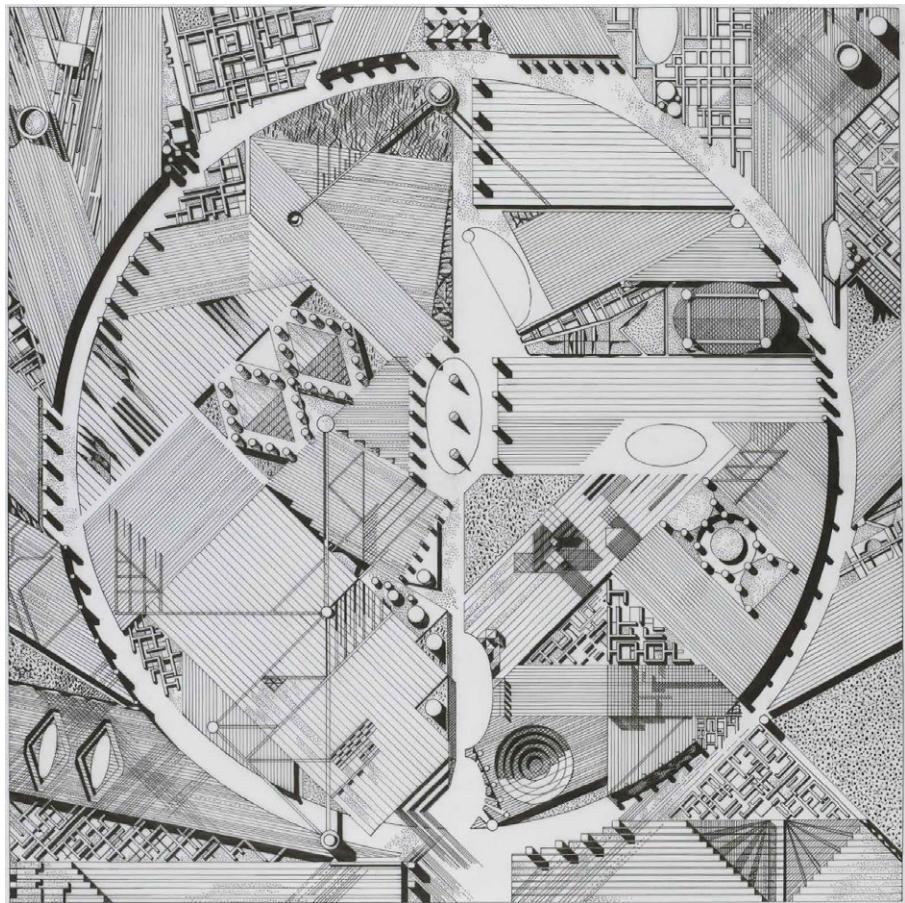


FIG. 2.23 Franco Purini and Laura Thermes, 'La città compatta. Studi di strutture urbane' (1966). Plan.

A further aspect can also be observed from the drawings. The city limits are only implied; they cannot be clearly recognised, thus favouring multiple readings. For instance, the main city plan (see drawing above) actually shows only a fragment of the city, and although it presents a strong relationship between a central area (defined by the regularity of a circular shape) and the peripheral area at the margins of the drawing, there is no difference between the two: the graphic substance of the background also corresponds with what should be the subject matter at the centre. The urban fabric occupies the entire space of the page. Moreover, the bird's eye views cannot fully resolve the finitude of the structures represented. Consequently, it could be argued that this type of representation has been deliberately chosen by the authors to allow them to circumvent a naturalistic representation of the city's true consistency; that is, a pre-established, scale-based definition of its parts and the

relative hierarchical relationships among them. However, if views and plans do not provide a quantification of the city's potential expansion, and therefore lead one to envisage a growing organism, then the very definition of 'La città compatta' and its intentional contrast to the landscape directly contradict this.²⁵²

It is precisely the conceptual tension generated by these apparent contradictions embedded within the graphic proposition that will reveal themselves to be of fundamental importance for the research process of 'Una ipotesi di architettura'. Therefore, the question is: what is 'compact' in 'La città compatta'? Where can this connotation be found in the project proposal?

It should be emphasised that 'La città compatta' is not merely a project illustrating an imagined city – one of the many produced during that historical period – but also incorporates the theme of its constructive process and a reflection on the role of building technologies. Therefore, it can be assumed that the adjective 'compact' indicates primarily its technical solidity and the complexity of the proposed urban structures, while simultaneously allowing the question of its limits to linger.



FIG. 2.24 Franco Purini and Laura Thermes, 'La città compatta. Studi di strutture urbane'. Study of the plan.

When viewed alongside an intermediate study (see the drawing above) where the city is represented as completely delimited inside the infrastructural ring, the previous drawing of the city plan seems able to maintain the same controversial aspects in which the dense and chaotic accumulation of the city fabric opposes the regularity of the circular element.

The next step in reading the project requires an examination of the accompanying text to 'La città compatta'. In it, Purini gives a rather unconventional description of what is to be found inside his proposed urban fabric. In essence, the text is a classification and juxtaposition of urban, architectural and spatial 'situations' that

²⁵² See footnote no. 248.

defies any reduction to the level of a synthesis.²⁵³ For example, some of Purini's 'descents' into the urban structure of the project include the following: 'Cylindrical skylights resulting from the geometry of the [cubic] bays illuminate the interior of the labyrinth-like fabric. Diagonal fissures, crossed by paths, allow the illumination of the bottom floors. Here, a system of huge, prefabricated beams serves as a foundation and accommodates large spaces.'²⁵⁴ The traditional scale-based hierarchy between city and building is dissolved: architectures and structures contain other architectures and structures.

Architectural elements, construction details, luminous densities, spatial compressions, and dilatations simply configure relationships between structures and the spaces they define, lacking any functional definition. Purini's text does not conform to a conventional description or narrative structure for proceeding inside the labyrinth. Instead, it follows an independent creative trajectory that seeks to envision or unveil the architectural content concealed within the graphic structures of the drawings. The basic ideas of how to inhabit, how to move from place to place, and how to go about daily life in 'La città compatta' are left to the imagination, requiring creative engagement with the drawing. The basic ideas of how to inhabit, how to move from place to place, and how to go about daily life in 'La città compatta' are left to the imagination in an act that requires a creative engagement with the drawing. In fact, the author specifies: 'Within the fabric of the bays, a series of enclosures introduces a minimum scale for dwellings. The geometry of the cubes determines the potential usability of the spaces. The border of the city fabric – real vertical sections – is clad with large, coloured screens, huge signs visible from far away.'²⁵⁵

'Things' – the things represented in the drawings – are seen with the same surprise as if they were perceived for the first time. This unusual description is not completely arbitrary, nor does it confuse; rather, it corresponds to experimenting with the 'estrangement' or defamiliarisation technique formulated by Viktor Shklovsky and introduced in the previous section.²⁵⁶ However, whether Purini accomplishes or solely attempts a description of 'La città compatta' through writing, what then is the

²⁵³ The word 'situation' is used here with a particular emphasis. In fact, this word, as anticipated earlier, will be very important in understanding the drawing 'Classificazione, per sezioni, di situazioni spaziali' (1968).

²⁵⁴ Purini, 'Studi di strutture urbane', 39. The circular and cylindrical elements are other obvious references to Louis Kahn's architecture.

²⁵⁵ Ibid., 39. (Writer's translation). See the coloured 1966 drawing 'Città in costruzione' [City in construction] in Appendix 1. Impressions of the coloured screen can be found in the drawings archived at the Maxxi, Museo Nazionale delle Arti del XXI Secolo in Rome.

²⁵⁶ Viktor Shklovsky, 'Art as Device', in *Theory of Prose* (New York: Dalkey Archive Press, 1993), 6. See also the previous section.

nature of this description embedded in the drawings, and how can it be revealed? Furthermore, when does drawing begin to develop and verify the architectural ideas in 'Una ipotesi di architettura'? 'La città compatta', presented in this section, introduces the themes and the research components whose development will lead to hypotheses that are formulated in the 'Programma di fondazione grammaticale del linguaggio architettonico' [Programme for the Foundation of a Grammar of the Architectural Language] (1968) and in the drawing 'Classificazione, per sezioni, di situazioni spaziali' (1968). My research will follow this progression to elaborate on the concept of drawing that underlies Purini's hypothesis on architecture. What is essential to underline here concerning 'La città compatta' is the conceptual value attributed to the drawing of the city (in all its details), which transcends the mere illustration of an idea by staging and incorporating numerous theoretical problems (such as conceiving and communicating the architectural form) that are intrinsic to the field of architectural representation. The answers to the questions will already begin to emerge in the next work examined, 'Ricerche di transizione [Transitional research]' (1967), which is a direct annexe to the project 'La città compatta', in which Purini's drawings study the themes opened in 'La città compatta', and which will allow the present research to examine what Purini considers as the generative element of his city: the cubic structure.

A series of fragments extrapolated from the project 'La città compatta' follow. They present additional details about the city that are either implied or discussed earlier. The fragments address: the relationship in scale between diverse urban elements; the circulation infrastructure (both horizontal and vertical); the cladding of the tower façades; corner solutions; vegetation imagined as though embedded in the porosity of the fabric (thus implying that by being incorporated in the plinth, the vegetation will be indistinct from the city); courtyard structures designated as housing units; and the calculated effect of the artificial landscape produced by the different types of technology incorporated in the construction of the city.

'At other points, internal elements, either voids or buildings, emerge from the façade, introducing a scale that is inconsistent with the modularity of the layout.'
(...)

'From this surface [the plinth] large light points, horizontal communication systems, open-air landing stages for vertical channels of communication and tall buildings emerge, some built in the same system of bays, others from alternative technologies, such as steel, concrete and brick.' (...)

'The same materials are used to clad the contiguous parts of each group of skyscrapers, so as to suggest a single building divided into separate buildings.' (...)

'At several points in the town square, large hollows contain receptacles for vegetation whose tops do not emerge above surface level.' (...)

'Buildings that occupy the angular sectors resulting from the communication routes are organised into three basic schemes: the central plan, the 'flat' urban fabric and the void, punctuated by a grid of elements.' (...)

'Truncated cone-shaped and parallelepiped volumes, towers with proportions similar to 'columns', double walls containing horizontal and vertical distribution systems, represent the figurative types of elements emerging from the plinth (...)

'All kinds of [building] technologies should assist the construction of this urban structure, from the most common to the most sophisticated. The large traditional construction sites will enable a gradual assimilation of new construction into the urban landscape, while light technologies will introduce an element of more rapid consumption into this process.' (...)²⁵⁷

Undeniably, these descriptions not only denote the absence of any order but actually focus on this absence. At the same time, natural curiosity creates a tension and provokes an effort to construct a new order. However, Purini's aim was not directed towards establishing a syntax to govern the elements of the city, but rather a grammar for the potential architectural language they encompass.²⁵⁸ As a consequence, it is the very absence of a syntax for organising the elements that Purini sees as the source for the architectural invention that will be discussed in the next section.

In order to evaluate the relevance of the project 'La città compatta' within the broader research of 'Una ipotesi di architettura', it is also important to emphasise that in a more general way, the city is for Purini a place of creative inspiration in which 'any architectural grammar is valid, and where the juxtaposition [of elements] leads to their eventual congestion',²⁵⁹ notions which are certainly in agreement with the themes in Piranesi's 'Campo Marzio' and 'Cammini' series. However, Purini also claims that 'the city has no direct relations with architecture beyond the will to negate it'.²⁶⁰ From this, we can assume that he also sees the city as the place where the creative source of inspiration is transformed into a conflict.

²⁵⁷ Purini, 'Studi di strutture urbane', 39. (Writer's translation).

²⁵⁸ Indeed, a syntax is not even conceivable for 'La città compatta', since the project comprises only one element, namely the cubic structure.

²⁵⁹ Franco Purini and Laura Thermes, *Aforismi Architettonici* (Milan: Giancarlo Politi Editore, 1995), (unnumbered). (Writer's translation).

²⁶⁰ Ibid., (unnumbered). (Writer's translation).

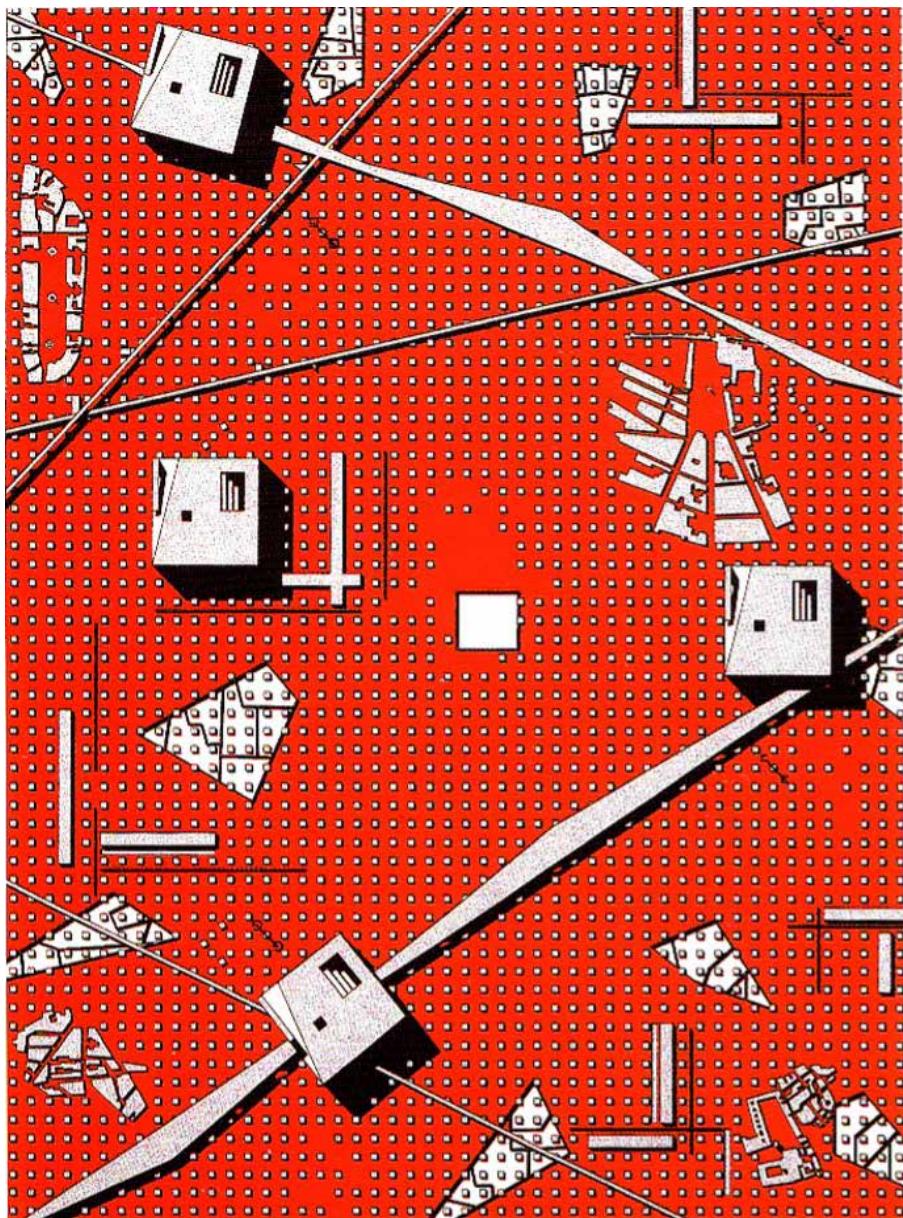


FIG. 2.25 Franco Purini, 'La città uguale' [The equal city] (2000). Fragment of the plan.

In conclusion, it is also important to bear in mind that my research does not the city instrumentally to support and explain an argument on the relationship between drawing and architecture. Moreover, 'La città compatta' also represents a source of constant inspiration to Purini. This is confirmed by the way he compared it with the project for the 'La città uguale' [The equal city], developed for the VII Venice Architecture Biennale, *Less Aesthetics, More Ethics* (2000).

Although the idea of an all-encompassing urban fabric found in 'La città compatta' has been (if not abandoned) reinterpreted in 'La città uguale' in the form of a continuous grid of houses, the dialogue between the two is still powerful because the two projects can be considered to some extent as two potential developments of the same principles: the grid of individual houses in 'La città uguale' works, de facto, as the fabric for an indistinct urbanisation that iterates the same element of the dwelling found in 'La città compatta', while the mega-blocks in 'La città uguale' work as functional containers and are the measuring devices for the city, a role played in 'La città compatta' by the towers that emerge from the plinth. If 'La città compatta' is a city where a new urban dimension is reconceived from scratch, then in 'La città uguale', the function of the city once again returns to a minimal dimension in the contraposition between living – conceived as an absolute private space where the houses have only one room and no windows – and working – conceived as absolute public space where the buildings are so big they incorporate all urban functions.²⁶¹

²⁶¹ The complete documentation of 'La città uguale' can be found in Franco Purini, *La città uguale. Scritti scelti sulla città e il progetto urbano dal 1966 a 2004*, eds. Gianfranco Neri and Margherita Petranza (Padua: Il Poligrafo, 2005), 37-110. The presentation of 'La città uguale' also included the most recognisable image of the project for 'La città compatta', even if, mysteriously, the authors did not elaborate on the relationship between the two projects.

2.3.2 Ricerche di Transizione [Transitional Research] (1967)²⁶²

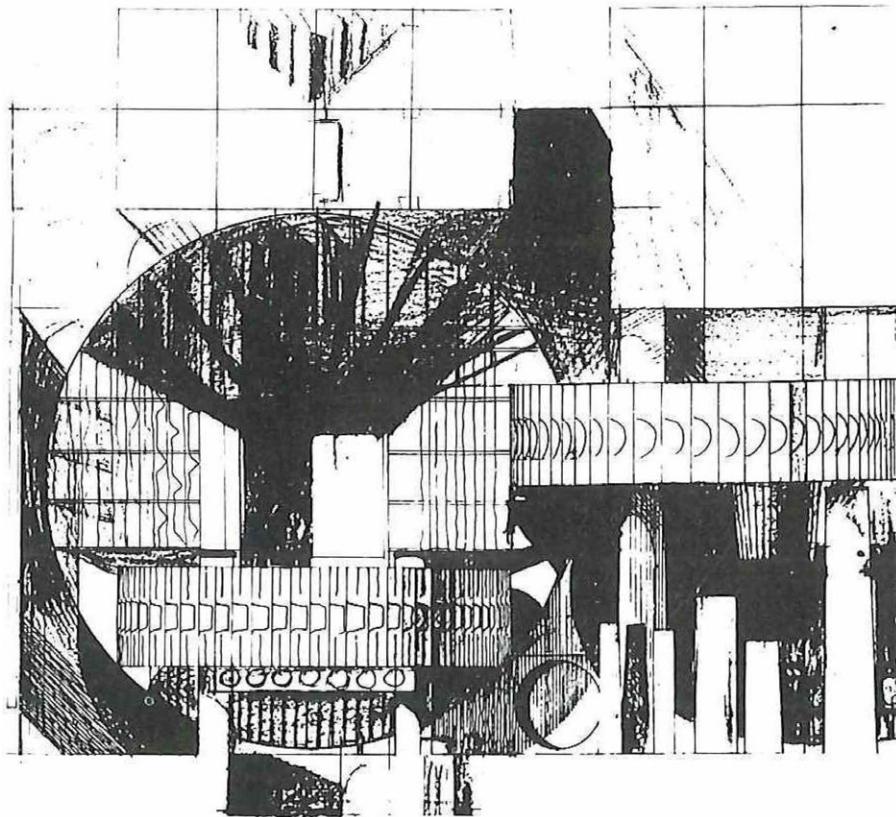


FIG. 2.26 Franco Purini, 'Ricerche di transizione' [Transitional research] (1967). Study of an architectural organism. Front view.

²⁶² The title of this project could also be translated as 'Ephemeral Research', which might instil a subtle and interesting relationship with the series of ephemeral architectures that Purini realised for the fortunate experience of the *Estate Romana*, [Roman Summer] organised by Renato Nicolini from 1977 and 1985, in which many monumental locations in the city of Rome became the stage for the public to encounter alternative and experimental culture. For the *Estate Romana*, see Renato Nicolini and Franco Purini, eds., *L'effimero teatrale* (Rome: La Casa Usher, 1981); Renato Nicolini, *Estate romana 1976-1985. Un effimero lungo nove anni* (Reggio Calabria: Città del sole edizioni, [1991] 2011); Ruggero Lenci, Franco Purini and Claudio Strinati eds., *L'estate romana di Renato Nicolini. Mostra Internazionale di pittura* (Rome: Gangemi Edizioni, 2013).

The 'Ricerche di transizione' consists of a series of drawings that aim to test the logical limit of the formal resources introduced by Purini's previous hypotheses of urban structures; namely, the cubic structures and the urban fabric/plinth. Here, the fabric (generated by the cubic structures) and the tower-like buildings that emerge from the plinth cease their confrontational opposition by blending into a continuous and somewhat indistinct material. However, in the 'Ricerche di transizione', the cubic structures are removed from the generic role they occupied in the urban fabric of 'La città compatta'. This new autonomy of the cubic elements, now freed from the duty of denoting the urban or architectural component, implies they can be identified as 'figures'. Purini defines these peculiar representations of architectural elements-figures as 'transitional elements',²⁶³ and they are conceived with the purpose of testing the series of possible variations in the architectural element and the consequent implications with regard to its original logic.²⁶⁴

The operation in which an element is isolated from its context is the result of a technique that Purini will later define as 'reduction to the archetype' (illustrated in the previous section), whereby an architectural element reassumes its original appearance.²⁶⁵ This critical operation has consequences when interpreting the project for 'La città compatta', because it reveals the internal contradiction that exists in the very hypothesis of conceiving an urban fabric out of three-dimensional elements. In fact, if the complexity of a spatial system can be achieved by juxtaposing a number of cubic units, then presenting the drawn construction of the total system can add nothing further to what is already expressed in the basic cube. The reduction to a hypothetical archetypal form aims to test and contest this assumption by devising a series of highly dense compositions of elements that configure an index of spatial 'individualities' that establish their own autonomous completion in opposition to the endless growth of the fabric. It is important to note that this operation already contains *in nuce* the logic that, one year later, underpinned the development of the drawing 'Classificazione, per sezioni, di situazioni spaziali', (1968).

²⁶³ Franco Purini, 'Ricerche di transizione', in *Luogo e Progetto*, 54.

²⁶⁴ The purpose and the themes addressed in the 'Ricerche di transizione', the definition of the 'transitional element' and the introduction to the serial character of drawing, represent the first rough elaboration of what will be completed in the drawing *Classificazione, per sezioni, di situazioni spaziali* (1968) and will proceed with the drawing series.

²⁶⁵ See Laura Thermes, 'Appunti su alcune tecniche d'invenzione', in *Controspazio*, no. 3. (Bari: Edizioni Dedalo, 1975): 82-85; and Franco Purini, *Luogo e Progetto*, 35. See also Chapter 2, Section 2, Purini's Seven "Techniques of [Architectural] Invention".

In the 'Ricerche di transizione', the distinction between figure and background (already discussed in general terms with reference to Purini's drawing in the introductory section of this chapter and also questioned in 'La città compatta') tends to disappear due to two alternative graphic constructions of three-dimensional space. The first concerns the basic cubic element; the second, the urban fabric understood as a surface. Purini writes: 'The first [the figure] evokes a constructive individuality, an unrepeatable uniqueness; the second, due to its contradictory characteristics, presents itself as fabric, while the exceptions that characterise it, despite not altering the structure, undermine the character of the homogeneous fabric to the point of eliminating it'.²⁶⁶

The figurative aspects of the architectural element and the urban fabric (surface) provoke the following considerations:

- first, these operations can only be conceived and developed within the field of representation;
- second, there is no negotiation (no relationship is attempted) between the architectural element and the surface. Instead, their relationship is radically tested to investigate the logical consequences of the conflict established between the two.²⁶⁷

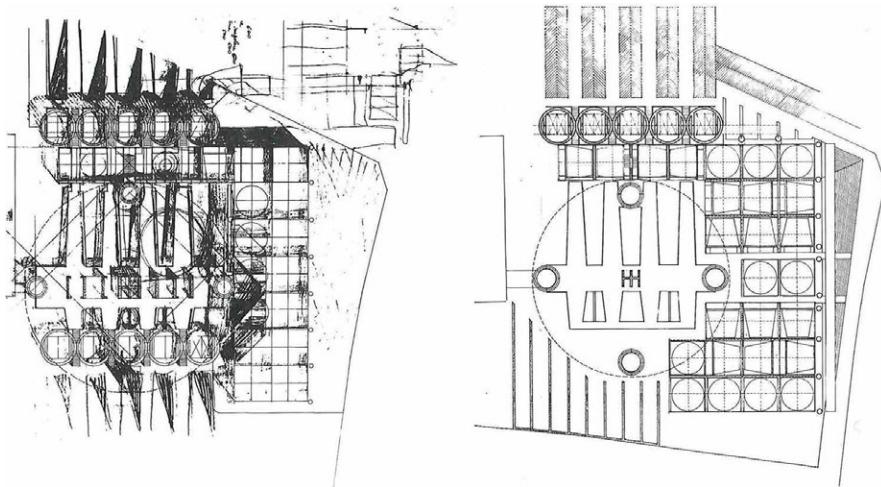


FIG. 2.27 Franco Purini, 'Ricerche di transizione' (1967). Study of architectural organisms consisting of cylindrical volumes and systems of columns, organised according to a central plan.

²⁶⁶ Purini, 'Ricerche di transizione', 54 (Writer's translation). This alternative mode of construction and elaboration is a constant in Purini's work and could provide another legitimate approach towards understanding the speculative character of the drawing series.

²⁶⁷ It is important to recall in this opposition what was discussed in the previous section in relation to the theme of contradiction and seen as a constant stimulus for innovation.

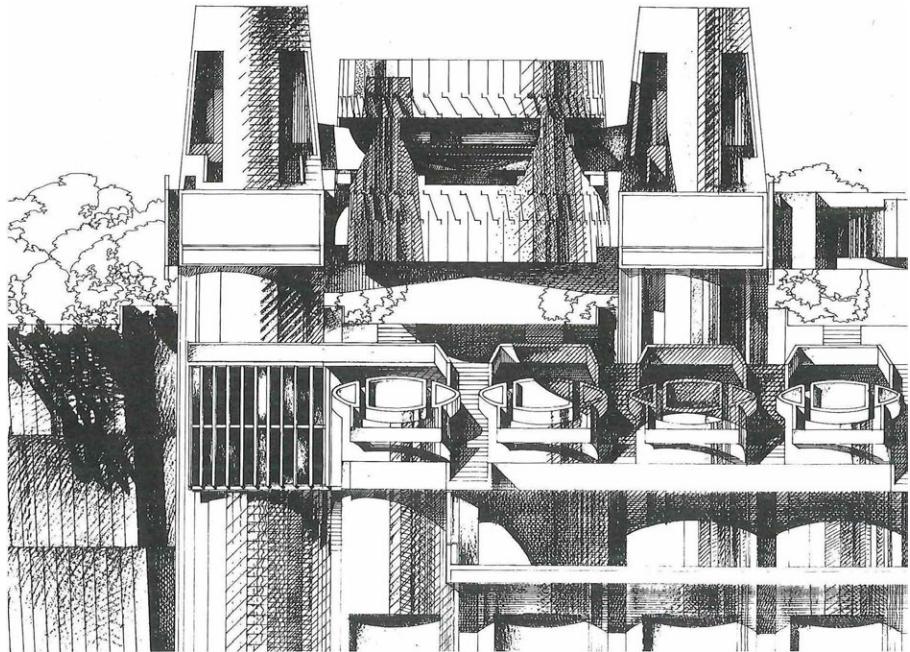


FIG. 2.28 Franco Purini, 'Ricerche di transizione' (1967). Rear view of the transitional element.

To formulate this opposition, Purini made a series of drawings; the one presented in FIG. 2.27 is one of the clearest. In order to analyse the maximum degree of figurative individuality of the architectural element, Purini creates an experiment in which he develops a figurative problem whereby the excess generated between two architectural elements appears unresolvable through their representation. The drawing shows two volumes, a vertical ring and a horizontal cylinder, constructed on a central plan and held in place by hollow circular columns. This configuration produces an extreme exaggeration of both the trilithon structure and the circular setting, so that the theme becomes ungovernable. In fact, the corresponding representation – the plan, the section and the façade – cannot fully control the definition of the object.

At the same time, beyond the figurative redundancy, the very loss of the ordering consistency of the vertical axis and, consequently, of the vertical arrangement of the horizontal levels, structurally destabilises the architectural theme of the articulation of the ring and the cylinders due to the constant variation of position and scale on the two axes. Therefore, if the conventional ordering cannot describe the 'architecture', then an approach that attempts to investigate the figurative themes of the drawing autonomously becomes legitimate. By occupying the space

in unusual positions and interacting with the elements of the composition, the objects represented, intended as figures, develop geometric 'behaviours' rather than identifiable spatial themes. The circle penetrated by columns positioned at the vertex of an inscribed square becomes a figurative theme that Purini examines further by analysing numerous variations. According to Purini, it is possible to overcome this conceptual impasse by observing that the 'transitional element' is represented by the 'appearance' of the towers framing the space, by the emergence of parts of the base (see, in the drawing below, the horizontal structure comprising the four circular elements recognisable in their oblique projection), and by the presence of a figurative commentary: vegetation drawn as an indication of an hypothetical ground level intermediating between the upper and lower structure.²⁶⁸

All subsequent architectural investigations by Purini will be greatly influenced by the figurative theme found in 'Ricerche di transizione'. In fact, 'Ricerche di transizione' follows a research direction that aims to reduce the three-dimensional modalities of architecture by reformulating some primary elements, starting from examining their unequivocally architectural position in a given space. In other words, Purini hypothesises that the position of the architectural elements in space should be reconceived and organised by a system analogous to the classical notion of 'order' and understood as a sequence of objects, above all, temporal.²⁶⁹ With this step, which identifies the need for rules, a grammar and a position for the architectural elements, Purini enters the most complex area of his research, which consists of a rigorous redefinition of the notion of the architectural element, of composition, of architectural order and, in general, of a set grammatical rules for an architectural element. Therefore, the transitional research links the premises and the themes that emerged in 'La città compatta' with Purini's rigorous experimental elaboration, which, as indicated in the previous section, is variously influenced by Achille Perilli and Gastone Novelli's radical ideas on painting, Donald Judd's 'specific objects', and in particular by Noam Chomsky's theory of transformational grammar and Arnold Schönberg's 'Twelve Tone Composition'.

²⁶⁸ Purini, 'Ricerche di transizione', 54.

²⁶⁹ Purini, 'Ricerche di transizione', 54.

Purini states: 'The outcome of these studies is the conviction that the three-dimensional character consists of one grammatical element rather than the result of a syntactic operation, and that in some way the 'degree' of three-dimensionality is a fixed quantity that can be accumulated either in a single element of the construction or dispersed in more points.'²⁷⁰ Moreover, the three-dimensionality as a quantitative datum is not only established by the actual space, but also by the relationship between different materials, by the rhythm of the elements, by colour in relationship to neutral surfaces, and, above all, by the direct expression of the construction technique used for a part or the whole building. By furthering the inference contained in Piranesi's 'Cammini',²⁷¹ all the available elements participate towards defining the architecture.²⁷²

This section ends with an account of two of the three design projects comprising Purini's first research phase. The 'Progetto di strada "costruita" tra Roma e Latina' [Design for a mechanised road from Rome to Latina] and the 'Progetto di biblioteca a Roma' [Design for a library in Rome] are relevant because they expand the field of the thematic reformulation of architecture and the possibility of developing it through exemplary projects. Specifically, the themes deal with the relationship between architecture and landscape, and a design proposal for a further investigation of the notion of 'apparition'.²⁷³

²⁷⁰ Ibid. Many of the aspects covered in this research can be also found in Manfredo Tafuri's analysis of Piranesi's 'Campo Marzio'. Thematic analogies with Purini's argument on the relationship between the grammar and syntax of an architectural composition is also found in Ezio Bonfanti's essay on the elements and composition of Aldo Rossi's architecture. This was already mentioned in Chapter 1, in the section on Filiberto Menna's 'Analytical Line'. On this same argument, see also Fabrizia Berlingeri, 'L'equivalenza tra grammatica e sintassi', in Franco Purini, *Sette tipi di semplicità in architettura* (Melfi: Libria, 2012), 103-110.

²⁷¹ The absolute hybridisation of the artistic language in which anything could hypothetically become material for the contamination of the composition and the consequent disappearance of any regulating principle in the conception of form.

²⁷² See, Chapter 1, the subsection 'The Destruction of Language as *Grammaire Raisonnée*: Manfredo Tafuri and Piranesi's 'Wicked' Drawings'.

²⁷³ The third project (not presented here because analogous to 'Mechanised road') is the 'Proposta di ristrutturazione del Lungotevere a Roma' [Proposal for the restoration of the Tiber riverbanks] (1966).

2.3.3 'Progetto di Strada "Costruita" tra Roma e Latina' [Design for a Mechanised Road from Rome to Latina] (1968)

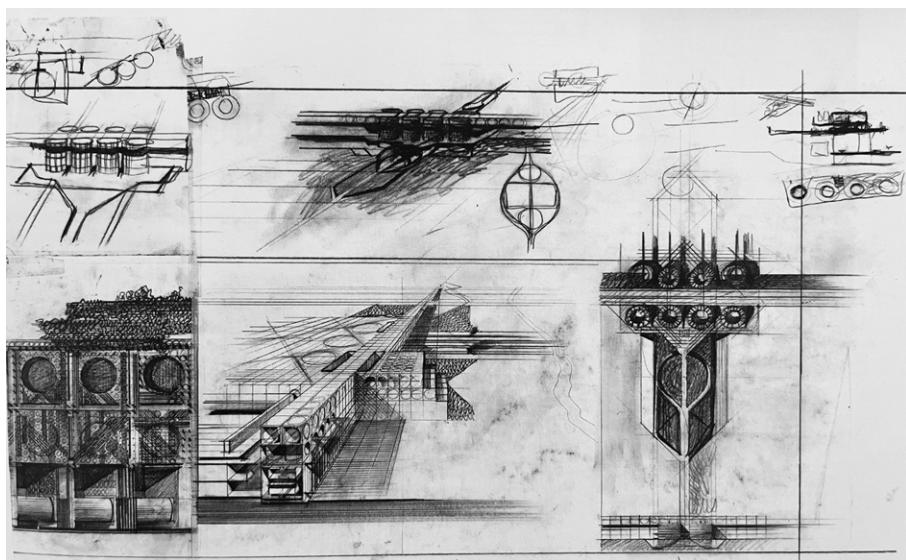


FIG. 2.29 Franco Purini, 'Progetto di strada "costruita" tra Roma e Latina' [Mechanised Road from Rome to Latina] (1966). Sketches.

This project addresses the theme of measuring the territorial scale through architecture. The architectural construction is conceived here in direct relation to the geographical dimension, serving as a reference for existing and potential future settlements. Consequently, the relationship between architectural elements and the urban fabric, previously explored in 'La città compatta' and 'Ricerche di transizione', is reformulated. The architectural elements now engage with the natural topography and both existing and hypothetical future constructions in the landscape. Simultaneously, the territorial scale is articulated through a linear structure conceived as a spine, capable of regulating and crystallising the context and its transformations. Thus, the constructive focus of this project shifts from the surface-based logic of 'La città compatta' to a linear theme.²⁷⁴

²⁷⁴ Franco Purini, 'Progetto di strada "costruita" tra Roma e Latina', in *Luogo e Progetto*, 49.

The spatial hypothesis for the proposal consists of the construction of a mechanised road that comprises three distinct sectors: a technical sector for installations that also supply the factories in the area, a transportation line for containers between Rome and Latina, and a monorail line for pedestrians.²⁷⁵ The profile of the mountains and the different heights of the ground are magnified by the artificial horizon established by the constant height of the linear building. At the same time, the vastness of the space is restricted by the continuous façade of the road.²⁷⁶ The archetype is the aqueduct, which is still a very strong feature of the Roman countryside. Aqueducts shape the landscape, and buildings tend to cluster around them.²⁷⁷ Finally, this project could also be regarded as a linear interpretation of the 'Compact city', transformed from the surface to the line.

²⁷⁵ Ibid.

²⁷⁶ Ibid.

²⁷⁷ This reference is particularly to the *Acquedotto Felice*, which after World War II, especially in the area of San Lorenzo, was occupied by sheds built by the people evacuated as a result of the bombings. In the fifties the area was notorious for street prostitution, often narrated by Pier Paolo Pasolini.

2.3.4 'Progetto di Biblioteca a Roma' [Design for a Library in Rome] (1968)

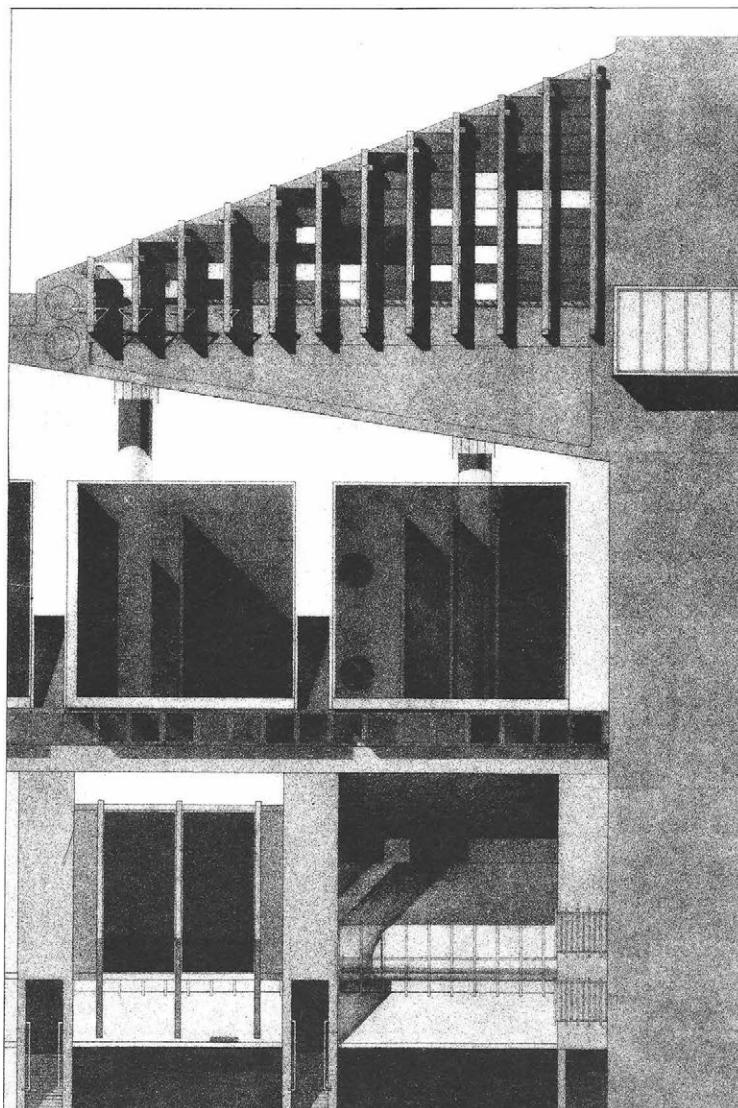


FIG. 2.30 Franco Purini, 'Progetto di biblioteca a Roma' [Design for a Library in Rome] (1968). Detail of the façade.

This project further experiments with two of Purini's invention techniques that were subsequently published in 1975-1976. The first technique is the already discussed 'estrangement of the architectural element', presenting it as if perceived for the first time. The second technique is the 'dislocation' of an object from its usual context into another, and the control of the incongruous effects produced by this operation.²⁷⁸

In this case, the object is a bridge, certainly an unconventional element for a library building. The bridge structure, transferred into the new context, is introduced with its real dimensions, namely those generally associated with a bridge. The unconventional logic of this operation is increased by the redundancy of the bridge's intrinsic function and magnified by the occupation of the space beneath that a bridge would normally span. Therefore, the 'out-of-scale' effect is not produced by the oddity of the dimensions, but by the relationships among incongruous elements.²⁷⁹

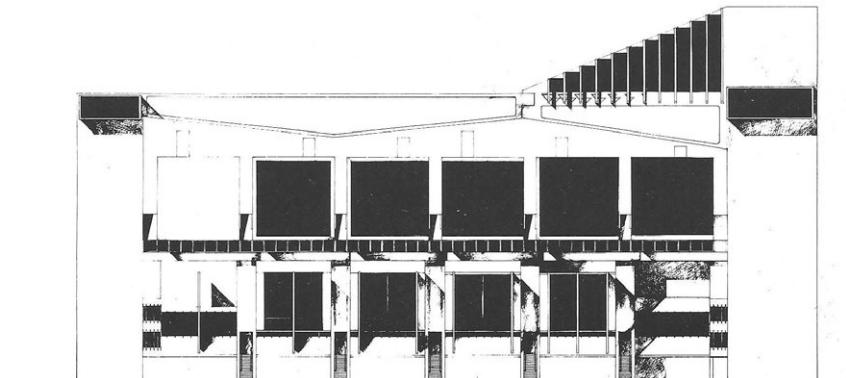


FIG. 2.31 Franco Purini, 'Progetto di Biblioteca a Roma' (1968). Façade.

²⁷⁸ See Laura Thermes, 'Appunti su alcune tecniche d'invenzione', 82-85, Purini, *Luogo e Progetto*, 35, and Chapter 2, Section 1, *Purini's Seven "Techniques of [Architectural] Invention"*.

²⁷⁹ Franco Purini, 'Progetto di Biblioteca a Roma', in *Luogo e Progetto*, 57.

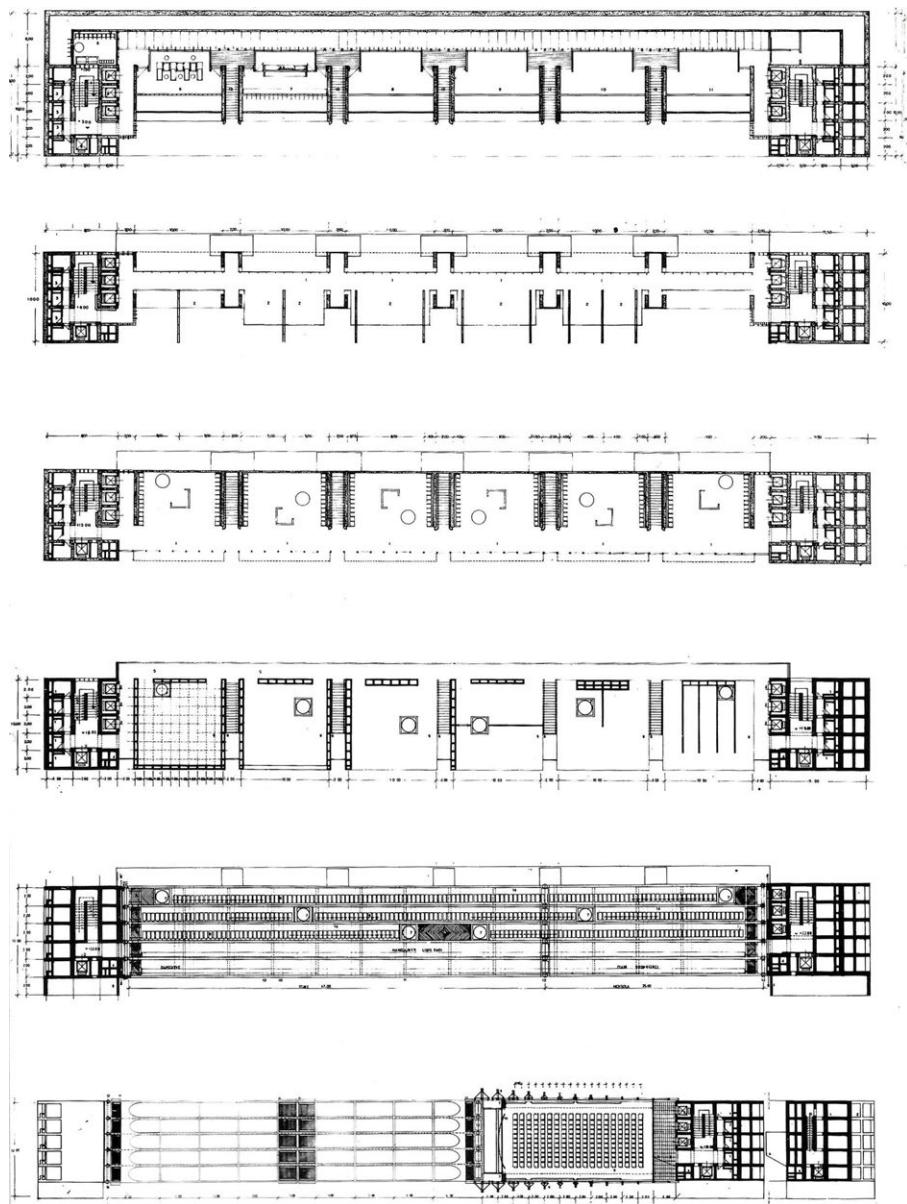


FIG. 2.32 Franco Purini, 'Progetto di biblioteca a Roma' (1968). Floor plans: 1st level, technical services; 2nd level, design space; 3rd level, book catalogue and book distribution; 4th level, reading rooms; 5th level (Gerber structure), book storage; 6th level, conference room.

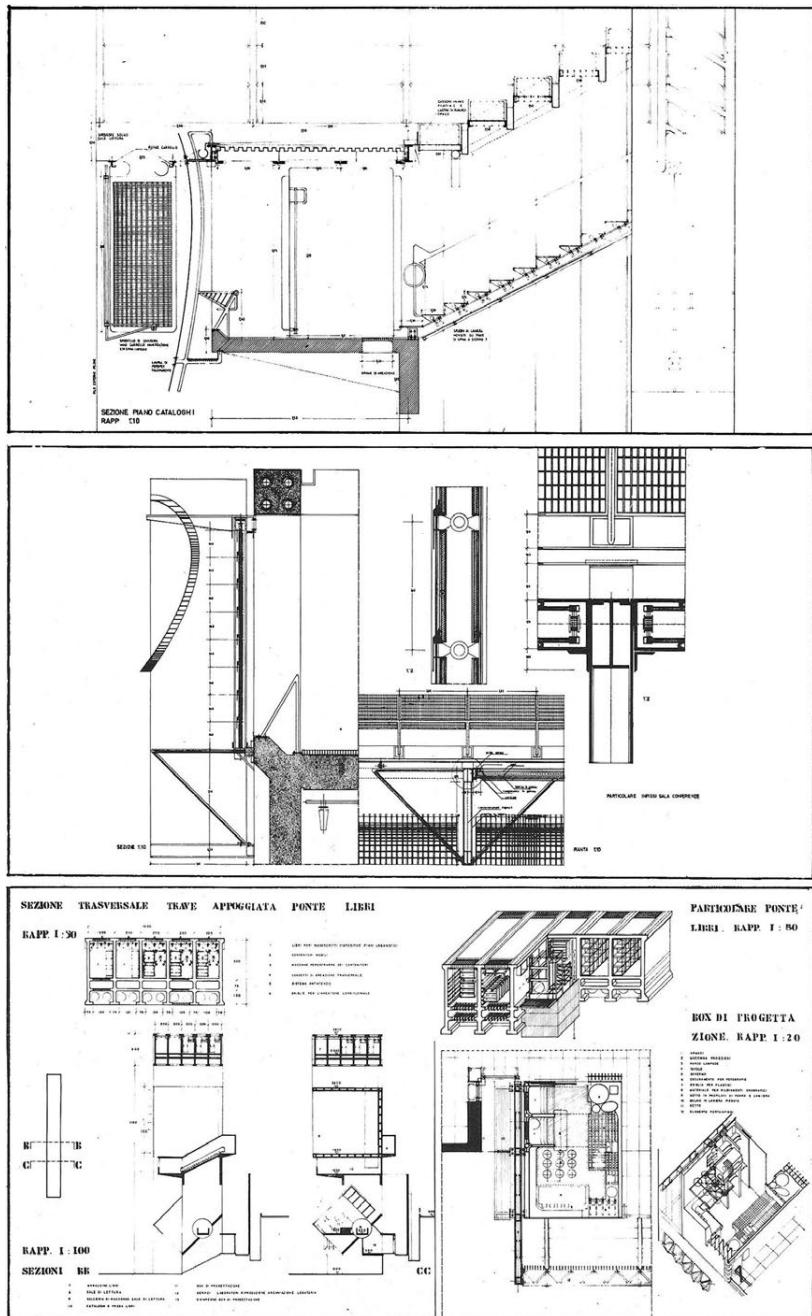


FIG. 2.33 Franco Purini, 'Progetto di biblioteca a Roma' (1968). From top to bottom: Detail of the ramp connecting the reading rooms to the catalogue area; The framings of the bridge overhang bracket; Cross section and detail of the book storage.

Purini's drawings and the building description reveal that this unconventional library – a bridge spanning a flat slab – is organised in sequences of reading rooms measuring 10 by 10 metres and set on a linear structure above the library catalogue area. The reading rooms are cubic volumes whose surfaces have been progressively replaced by glass panels. The volumes are constructed from light prefab concrete panels, held together by a concrete structure to be realised in situ. The rooms are supported by five pairs of concrete pillars incorporating the vertical circulation system, while steel pipes clad in coloured Perspex house mechanical devices to distribute books. Mechanised storage is located on the bridge's Gerber beam, which is carried by two tie beams. Lastly, a conference room at this level is enclosed by a glass structure.

It is important to emphasise that once again the written description approaches the project not as a totality, but rather from one of its internal elements – its technological aspect and the system of relationships that this element has with other spaces. Following the conceptual 'accident' and the unanticipated development introduced by the bridge structure, Purini metaphorically inhabits the building in his writing. By doing so, he qualifies it as architecture and, more specifically, as a library. The particular logic of this project suggests that a bridge can also serve as a library building and that its conventional typological definition can be reconsidered.

This project also introduces the theme of the lamellar building, which will be further developed in the next section of the chapter. The building's formal structure is marked by an emphasis on its bidimensionality, evoking the flatness of a drawing – a drawing capable of conveying the building's essential characteristics. This flatness enables an appreciation of the relationship between the elements that constitute the project, which is conceived not only as a relationship between elements but also includes their de-codification, or to be more precise, their (graphic) description. In fact, the front of the building exposes the relationship between the bridge and the lamellar structure, and, within the lamellar structure, between the different functional spaces of the library. The rear of the building, however, is treated as a residue, or 'negative' of the front, and since it has no overhangs, openings, or any other details, it is capable of expressing the scale of the building.²⁸⁰ This façade, imagined by Purini as a perforated element in concrete, represents the matrix of the frontal composition. Hence, the rear façade is the 'real drawing': it contains all the architectural information about the building and should be interpreted in relation to the external agent, the bridge that frames it.²⁸¹ In this project, the criteria for a new relationship between the architectural drawing and drawing architecture begin to appear.

²⁸⁰ Ibid., 57.

²⁸¹ Ibid., 57.

2.3.5 Conclusion

In this section, I examined Franco Purini's 'La città compatta' (1965–66), conceived as a continuum of cubic architectural elements. I demonstrated how this project established a foundational moment for defining the ambition of Purini's research, leading to the design investigations and analytical study of 'Una ipotesi di architettura'. I illustrated how, within 'La città compatta', drawing operates not only as a representational tool but as the site where architecture and the city merge through a conceptual field – the plinth – equated with the drawing surface. After closely reading Purini's drawings, I analysed how architecture can be conceived as both a hypothesis and a construction, critically testing established conventions. I further traced the evolution of this inquiry in 'Ricerche di transizione' (1967), where I showed how Purini isolates and redefines the cubic element, destabilising conventional representational codes and signalling the need for a new notational system. My investigation linked these design experiments to the broader cultural critique Purini advanced, responding to architecture's mediatisation and disciplinary stagnation. I positioned architectural representation as a privileged site for rethinking architecture, a perspective that informed Purini's 'Una ipotesi di architettura'. By identifying drawing as a speculative and critical tool, I argued for its role in articulating a new architectural system based on relational principles. The 'Progetto per una strada "costruita" tra Roma e Latina' (1968) extends to re-describe the content of 'La città compatta' through a different spatial strategy consisting of a linear building, testing the territorial scale and revisiting the archetypical form of the Roman aqueduct. In my analysis of the 'Progetto di biblioteca a Roma' (1968), I demonstrated how Purini questions typology by envisioning a bridge as a library, focusing on internal spatial and technological relations. I emphasised how the project's bidimensionality evokes the flatness of drawing, with the rear façade acting as the architectural matrix – what I identified as the actual architectural drawing.

2.4 A New Notational System for Architecture: The Role of Drawing in Purini's 'Programme for the Grammatical Foundation of Architectural Language'

2.4.1 Introduction

In conjunction with the project for 'La città compatta' and the 'Ricerche di transizione' annexe, Purini began a more focused line of research that culminated in the definition of an architectural language and, most crucially, the rule that governs it – its grammar. This phase corresponds to a moment of rigorous theoretical and laboratory-like research. Given the dense nature of the logic of Purini's conceptual elaboration during this phase, this section will chart its development in a step-by-step examination of his drawings and writings from this period. However, since the documentation available (based on published material) contains a certain degree of ambiguity, a series of interpretative drawings and scrutiny of Purini's research references will be employed to clarify and, most importantly, highlight the specific relevance of these works within the present context. The complete set of drawings can be found in Appendix 1, 'Una ipotesi di architettura': Documentation and Analysis', which also includes English translations of Purini's writing on the subject of 'Una ipotesi di architettura', namely 'Note sulla composizione architettonica' [Notes on architectural composition] (1967), 'Programma di fondazione grammaticale del linguaggio architettonico' [Programme for the grammatical foundation of architectural language] (1968), and 'Una ipotesi di architettura' (1976) itself.²⁸² It is important to note that this last text is a summary of Purini's research, which he wrote later for the first edition of *Luogo e Progetto*, and that it is the first time the research bears the said title.

²⁸² Franco Purini, 'Note sulla composizione architettonica (1967)', in *Grammatica*, no. 3 (Rome: Editrice Feltrinelli, 1969), 69. English translation: 'Notes on architectural composition'. (See Appendix 1). 'Programma di fondazione grammaticale del linguaggio architettonico', in *Palatino. Rivista Romana di cultura*, no. 2 (April-June, 1968), 225. (Rome: Edizione Palatino, 1968). English translation: 'Programme for the grammatical foundation of architectural language'. (See Appendix 1). 'Una ipotesi di architettura', in *Luogo e progetto* (Rome: Edizioni Magma, 1976), 61. English translation: 'A hypothesis of architecture'. (See Appendix 1).

As observed earlier, both the complementary and analytical graphic material produced for the research at hand, together with the selection of a highly heterogeneous set of references that informs it and the clarifications of the content, are the results of the struggle to describe and order this research phase. Furthermore, the difficulties of description that also emerged during the attempt to focus on Purini's research into drawing created the risk of either an overexpansion or dilution of its specificity.

Yet it is precisely this focus on the concept of drawing that proves decisive, owing to its systematisation of Purini's work. In fact, Purini's approach to the research is fully coherent with his declared theoretical aim and, alongside the extensive range of sources that inform it (though never entirely explanatory), is open to enquiries and spin-offs in other areas of research. Furthermore, it is crucial to reiterate that it is in this phase that the entirety of Purini's architectural work converges – including his initial motivations and later work (not investigated here) – and thus, it represents the pivotal moment for formulating a comprehensive critical evaluation.

Parallel to the reduction Purini attempted in this exercise on architectural drawing, this present text will follow his speculations on architectural language and highlight the development of the role of drawing, positioning the emergence of new characteristics of architectural drawing within the wider framework of 'Una ipotesi di architettura'. In order to follow this development, it is necessary to restate the key points that concern drawing and, more generally, the field of architectural representation within the premises of Purini's research, which were discussed in the previous section.

- In 'I motivi di fondo – Sulla tecnologia – I problemi della città', Purini formulates a critique of the ways in which the architectural form is conceived within the conventions established by the Modern Movement. Purini also identifies architectural representation as a field in which the figurative dimension of the architectural object can be investigated and reformulated.
- The 1966 project for 'La città compatta. Studi di strutture urbane' establishes a metaphorical relationship between city and drawing. In fact, the large urban fabric proposed in 'La città compatta' corresponds to a large square; hence a figurative relationship is established between the problem of constructing the city's surface and the problem of constructing its representation on the surface of a sheet of paper. Furthermore, the project also identifies the relationship between the surface/urban fabric and its generative (grammatological) architectural element.
- The relationships between surface/urban fabric and the generative element of 'La città compatta. Studi di strutture urbane' are investigated as three-dimensional structures through a series of drawings. At the same time, the urban structures

undergo a parallel written process of creative re-description in order to reveal their function and inhabitability. Consequently, between drawing and text, and between the drawn and written description of the (imagined) architecture, a strong conceptual tension is generated, instigating the creative dimension of the research work. This has led to identifying and investigating the singularity of the generative architectural element in the research section 'Ricerche di transizione'.

- Investigating the singularity of the generative architectural element focuses on its degree of three-dimensionality and the way it can be described (represented) within the field of representation. In this context, Purini examines the conceptual problem that emerges when the conventional representations that aim to describe an architectural element are unable to convey its figurative dimension. If the conventional representation of the architectural element is ambiguous or generates a figurative paradox, then the rules applied should be conceived anew, and a new order for the process and for the architectural object should be investigated.
- Purini's assumption derives from this last point: the way in which architecture (understood exclusively as a three-dimensional structure) is conceived is based on a pre-existing, yet-to-be-revealed grammatical rule, rather than being the outcome of a syntactic process.
- In other words: if the degree of three-dimensionality characterising architecture is not the outcome of a process, then it is a pre-existing, fixed quantity, and, consequently, the three-dimensionality is not established by the actual space of an element but by the relationship of all the particulars that make up its definition, namely the materials, the colour and the construction techniques. The only context in which this can be elaborated is, once again, architectural representation, through the creation of its simulacrum.
- The analysis of an architectural element also undergoes a process of estrangement through the reduction of its denotative content. This process will be pushed to its extreme dimension in the 'Progetto di biblioteca a Roma' (1968) [Project for a library in Rome], in which the conflicts generated by the design proposal question the conventional notion of architectural order as a structuring principle, while introducing the possibility of an architectural form conceived by ordering the relationship or composition that links all of its parts.

In the following research section, the drawing becomes the field within which it is possible to formulate a general critique of architectural conventions and a redefinition of architecture's constitutive components. In doing so, the conventional understanding of drawing is also questioned, namely the codification of its role within the project, whereby drawing becomes a notational system, with the drawing itself reduced to a simple denotation and, ideally, devoid of any ambiguity with regard to its referent. Purini's reduction of architectural language to a "zero degree" in order to establish a new language, beginning with the foundation of its grammar,

corresponds to the “zero degree” of the architectural drawing. This implies that even the basic denotative properties of drawing are questioned, given that the reference is not an architectural object, but an operation conducted at the level of architectural language: Purini’s notational system describes the structural relationships intrinsic to the definition of architecture, and from this basis it also identifies the architectural object. Therefore, starting from the hypothetical reset of the notion of architectural drawing, it follows that this investigation will evaluate the role of drawing in the definition of Purini’s architectural language.

2.4.2 Franco Purini and the ‘Uselessness of Architectural History’ to the Project

The essay entitled ‘Programme for a grammatical foundation of architectural language’, which forms part of ‘Una ipotesi di architettura’, and which Purini sometimes regards as coinciding with it, is an experiment with the primary elements of architecture which investigates the possibility of conceiving a direct relationship between all the components inherent to the architectural project. It does so by first reconsidering the definition and corresponding relationship between the architectural elements and the composition, and second, by reassessing the resulting concepts of ‘architectural object’ and ‘project’.²⁸³

Understanding Purini’s approach hinges on the fact that the new definitions and their reciprocal relationships are not influenced by any historical interpretation or concept of taste or style. The research begins with a preliminary rejection of architectural historicity, which Purini contends is often not merely illusory but also impacts the definitions of architectural categories and their compositional procedures.²⁸⁴

The role of history was introduced earlier in this chapter when discussing the ideas of Perilli and Novelli and, more directly, in a second instance, when presenting Purini’s

²⁸³ An alternative way to conceive the architectural project, and, more generally, an alternative way to conceive architecture and its experience, were ambitions already anticipated in the collective essay ‘I motivi di fondo. Sulla tecnologia. I problemi della città’. See Franco Purini, with Gruppo Atrio Testaccio, ‘I motivi di fondo. Sulla tecnologia. I problemi della città’, in *Grammatica*, no. 3, 64–68. (Writer’s English translation in Appendix 1). See in particular the section ‘I motivi di fondo’ [The fundamental principles].

²⁸⁴ The controversial role of history in design research is conveyed in the critique of the classical notion of architectural order formulated by Purini and Gruppo Atrio Testaccio in ‘I motivi di fondo. Sulla tecnologia. I problemi della città’. In it, they propose the need for a new interpretation, which became the objective of the grammatical exercise that constitutes ‘Una ipotesi di architettura’. See in particular the section ‘Sulla tecnologia’ [On technology].

creative techniques. It should be emphasised that Purini has developed this theme widely in many writings and represented it in drawings, of which the following notes aim to give an account.²⁸⁵ A clear elaboration of the relationship between history and the architectural project can be found in 'Il paesaggio della storia/The landscape of history', one of the seven architectural *topoi* investigated in the *Sette paesaggi/Seven landscapes* issue of *Quaderni di Lotus International*, where the illusory role of history is unambiguously delineated:

Architectural history's inability to suggest solutions is the clearest paradigm of the architect's solitude. If every history presupposes a design of time, the design by the architect can only born through a sort of temporal arrest. The design is compelled to be logical while it is forbidden to be 'chronological', even though in retrospect, only its dependence on something previous to it ensures its legitimacy. The uselessness of architectural history for the design is demonstrated by the fact that the latter is, in theory, never complete. Its infinite progression, which transforms it into a history of itself written in 'real time', needs to be radically contradicted.

This amounts to abandoning the design by fixing it in its interrupted configuration, which transforms its incompleteness into a definitive, irreversible and unique form.

The design rediscovers its ability to manifest itself by tearing itself out of that interminable power of growing upon itself which can wholly negate it. In other words, the design is nothing but the contrary of the representation of time. Realising that a design is never finished does not, however, resolve its hostility towards all history. A design may be defined as the prediction of certain operations to be carried out in a more or less imminent future. The future that it describes is possible only in the hypothesis that certain conditions traverse intact the temporal interval separating the moment of the prediction from its generalisation. In this arc of time nothing can theoretically move and change. But precisely as a representation of the future, as a present prolonging itself, the design reveals itself as a temporal paradox.²⁸⁶

²⁸⁵ Among the numerous writings in which Purini directly or indirectly discussed architectural history in relation to a wide range of other related themes, such as typology and the notion of place (but always from the vantage point of architectural design), it is important to mention the paragraph, 'La storia' [history], in Franco Purini, 'L'architettura didattica', published in *L'architettura didattica* (Reggio Calabria: Casa del Libro Editrice, 1979), 97-98. It was also published in Franco Purini, and Laura Thermes, 'Modern + Modern + History as a History of Themes: Anatomy of a Divided Work', in *AA files*, no. 8 (London, Architectural Association School of Architecture, January 1985), 57-63, in Franco Purini, 'Il paesaggio della storia/The landscape of history', in *Sette paesaggi/Seven landscapes. Quaderni di Lotus International*, no. 12 (Milan: Electa, 1989), 69-70. The theme of history is also recurrent in various drawing series, such as Parieti [Walls] (1977), *Around the Shadow Line* (1985) and *Repertori moderni* [Modern catalogues] (1989).

²⁸⁶ Purini, 'Il paesaggio della storia/The landscape of history', in *Franco Purini. Sette paesaggi/Seven landscapes*, 69.

But Purini's act of positioning architectural history outside the design problem, and therefore outside design research as well, does not mean that he considers history irrelevant to the architect's work. In fact, after underlining the 'uselessness of architectural history', Purini clarifies the target of his critique of history:

While history is of no use to the architect, a knowledge of all the kinds of architecture in history is essential to him. This statement is not just verbal conjuring. Any historical reconstruction is like a landscape that may be more or less irregular, but which, like all landscapes, cannot be continuous. The history of architecture as a history of continuity ends up legitimising any building at all, rescuing it both from the examples of architecture from which it is derived, and from those that come into existence subsequently, taking it as a point of reference or a model.²⁸⁷

What Purini questions in particular is the linearity of history as the foundational base for a design approach. He observes that historical buildings with their compositional procedures or their abstract and/or material characteristics do not appear to the architect as a temporal trajectory but as a space, a 'landscape' whose elements will be clearly recognisable within the theoretical constituents of his or her hypothesis of architecture, as this section will later demonstrate. This landscape, which in the course of the design reveals itself to the architect, also corresponds to the iconographic structures that were introduced in the subsection 'The Apparition' (Chapter 2, Section 2) as elements of a *still life* present on the architect's table, either in the form of inert material available for multiple investigations and compositions, or seen as a frontal view. These procedures established through the research 'Una ipotesi di architettura' have been the subject matter of numerous subsequent drawing investigations. Among them, the etching 'Dedicato allo storico' [Dedicated to the historian] from the series 'Pareti' [Walls] (1977)²⁸⁸ is one of the first attempts to directly address the theme of history through a graphic representation. 'Dedicato allo storico' (arguably an etching that condenses all the themes elaborated in the entire 'Pareti' series) presents two homogeneous tower-like structures slightly rotated in relation to the picture plane, together with Purini's characteristic repetition of modular elements that vary now and then in a subtle way. A stairs element departs from the inside of the right tower and connects with a platform jutting out from the top of the left tower. The connecting element marks the façades with its shadow, thus enabling not only the readability of the architecture represented but also emphasising the frontal character of the picture and the appearance of the two towers as a unique structure.

²⁸⁷ Ibid., 69.

²⁸⁸ Purini's signed and numbered collection of seven etchings, *Pareti*. 1977, was also published in the exhibition catalogue *Franco Purini: Pareti: Sette incisioni* (Rome: Grafica Romero, 1977).

The small background areas uninvolved in the representation of the building are populated by a heterogeneous series of vignettes representing natural scenes, either framed or measured by architectural features such as gates, windows, walls, trilithon structures or houses. Furthermore, the drawing also contains examples of notable architecture and unrealised designs, such as Gerrit Rietveld's 'Schröeder House' (1923-24), Theo van Doesburg and Cor van Eesteren's 'Maison Particulière' (1923), and Adolf Loos's 'Villa Moissi' (1923). One can also spot the profile of Costantin Brancusi's *The Infinity Column* (1918; 1938) and graphic motifs that suggest associations with Paul Klee and Wassily Kandinsky. Last but not least, the word 'SCHNITZLER' appears in reference to the author Arthur Schnitzler. In this way, Purini reveals the references that inform his work. However, this operation only increases the difficulty of interpreting a riddle that begins with the title: what exactly is Purini 'dedicating to the historian'? How does this etching indicate or, more precisely, represent his critique of historical method? In response to the latter question, one could argue that the multitude of references are indeed variously placed as though in a landscape, and, certainly, at least as far as architectural references are concerned, there is no apparent historical trajectory behind Purini's representation, since the examples shown are all from the same year: 1923. Instead, the etching does contain recognisable thematic associations among its references; for instance, the relationship between Loos's 'Villa Moussi' and the *De Stijl* examples establishes a dialogue on various themes: architectural language, the relation between interior and exterior, and the compositional principle of modernist architectural space. Analogously, Brancusi's column, whose iteration of a single element follows a single grammatical rule – the inversion of the basic element – is also reflected in the modularity of Purini's wall structures. Yet these associations only lead to disillusion: first, because the sources are too many and raise too many issues to be controlled in any interpretative exercise; and second, because Purini's demonstration of his refined cultural erudition is combined with a destabilising character that arises from his playful selection of sources (the houses all from the same year), and the unclear relationship between the house as type and the tall buildings he presents.

In the critical commentary for the catalogue that accompanied the publication of the etching, Francesco Moschini suggests that Schnitzler's *Traumnovelle* [Dream Story] (1926) holds the interpretative key to the buildings Purini refers to in the engraving.²⁸⁹ For Moschini, the allusion to Schnitzler's *Dream Story* offers a precise

²⁸⁹ Francesco Moschini, "L'insensato gioco di scrivere". Note su un progetto grafico di Franco Purini', in Franco Purini. *Sette incisioni* (no page numbers). See also Arthur Schnitzler, *Traumnovelle* (Wien: S. Fischer Verlag, 1926). English translation: *Dream Story*, trans. Otto P. Schinnerer (London: Penguin Classics, 1999). It is worth noting that the title of the Italian translation of Schnitzler's novel is *Doppio sogno* [double dream], a title that resonates immediately with the double structure drawn by Purini.

indication of what history signifies for the architect: '[It] could only be to him the pale corpse of the preceding night, doomed to irrevocable decay.'²⁹⁰ In 'Dedicato allo storico', Purini confesses his 'dreams' to the historian by presenting him with their residue: specifically, a wall symbolising the impossibility for the historian to access what is behind it.

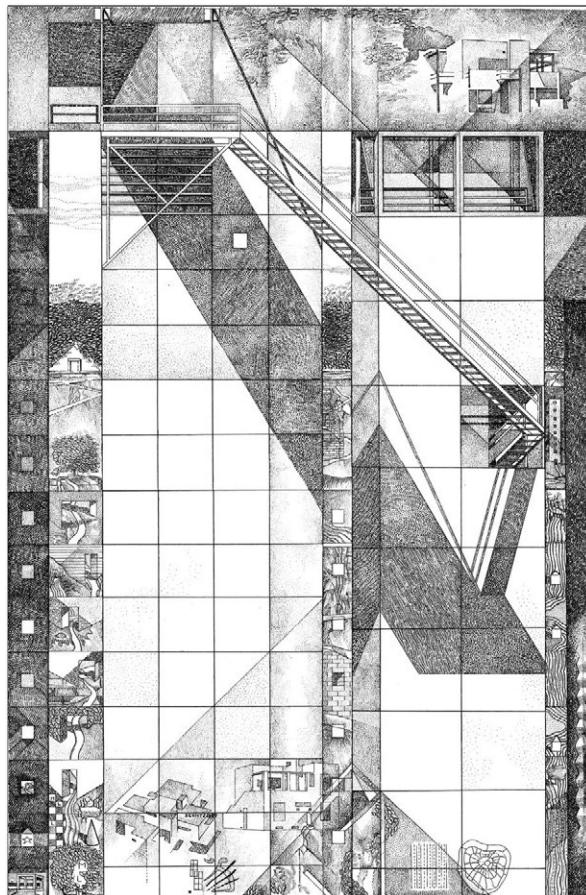


FIG. 2.34 Franco Purini, 'Dedicato allo storico' [Dedicated to the historian], from the series of etchings *Pareti* [Walls] (1977).

²⁹⁰ The excerpt from *Dream Story* from which Moschini took his quotation is the following: 'Even if the woman he had sought, desired and perhaps loved for an hour were still alive, he knew that the body lying in the arched room – in the light of flickering gas-flames, a shadow among shadows, dark, without meaning or mystery as the shadows themselves – could only be to him the pale corpse of the preceding night, doomed to irrevocable decay'. See Moschini, 'L'insensato gioco di scrivere', unnumbered.

2.4.3 The Relevance of Noam Chomsky's Transformational Generative Grammar to Purini's 'Programme for the Grammatical Foundation of Architectural Language'

With specific reference to Purini's initial research, it should be clarified that his hypothesis of architecture is not set in contraposition to history. Quite simply, history is considered irrelevant to Purini's goal of reinstating within architecture a "primitive act of 'construction'", intended as a simple montage of basic architectural elements.²⁹¹ The research phase 'Programma di fondazione grammaticale del linguaggio architettonico' is an attempt to establish an architectural language beginning from the definition of its rules (the grammar) and, consequently, the possibility of a new, descriptive notational system.²⁹² The visual and spatial appearance of architecture emerging from such an original formula would match the actual structure of the composition and its generative process. At the level of the composition, other aspects of architecture are reintroduced and reformulated ad hoc, such as the function, or the relationship with a specific context. In this way, the grammar of the architectural system Purini conceived establishes a perfect correspondence between the composition, the construction process and the resulting architectural object. Ultimately, at a conceptual level, this correspondence also embodies the relationship between drawing and architecture.

Given that conventional research approaches based on an historical corpus, do not apply to this research by Purini, what other references inform this specific stage, and how do they do so?²⁹³ As was stated earlier in the chapter, in conducting this research Purini was inspired by various sources, which he indicates in many of his writings. However, since this specific research stage is highly rigorous, these indications require a precise location.

In the monograph *Luogo e progetto*, Purini explains:

²⁹¹ Franco Purini, 'Programma di fondazione grammaticale del linguaggio architettonico', in *Palatino. Rivista romana di cultura*, no. 2, April-June (Rome: Edizione Palatino, 1968), 225.

²⁹² This consideration is of fundamental importance in accessing the analytical steps of Purini's research on architectural language and in interpreting the meaning of the drawing 'Classification, by sections, of spatial situations' (1968).

²⁹³ The plurality of sources also requires clarification with regard to the choices made within this present research. In fact, all of Purini's resources are not discussed here, only those which are specifically relevant to understanding his research in relation to drawing. In Chapter 1 the sources aim to provide a specific understanding of drawing as it discussed in the research, while in Chapter 2, the references aim to inform and clarify Purini's research components in relation to drawing.

The precedents for 'Una ipotesi di architettura', can be found in Minimal art, as research into primary forms; *arte povera*, in its attempt to eliminate the relevance of the creative technologies in favour of expressions derived from the logic of the materials themselves, and freed from everything capable of diminishing the 'ingenuity' of intuition; conceptual art for the attention that, on the contrary, it presupposes behind the least gesture, and for the value it gives to the physical 'result', to the sculptural presence, and to visual values.²⁹⁴

In other writings, Purini makes a more explicit reference to both Donald Judd's work on primary structures, an acknowledgement of the value of Minimal art to his own research, and to Noam Chomsky's transformational grammar for the study, stability and significant variation of forms.²⁹⁵ Unquestionably, Judd's simple formal language and reconsideration of the relationship between painting and sculpture, image and object, elaborated in his seminal essay 'Specific Objects' also characterises Purini's work.²⁹⁶ For the purpose of this present research, the role of the three artistic movements mentioned by Purini form part of the development of his 'analytical line', which was expanded upon in the discussion of Manfred Mohr's work in Chapter 1.

More central to understanding Purini's research structure in this phase is to examine the role played by Noam Chomsky's transformational generative grammar. Moreover, in addition to Chomsky, another source further explains Purini's elaboration of the notion of composition within his project of language: Arnold Schönberg's theory of dodecaphonic music, which will be considered in the following subsection.²⁹⁷ These two sources will add to the discussion of Perilli and Novelli's ideas on artistic language, published in the journal *Grammatica* (1976) and discussed earlier in relation to 'Una ipotesi di architettura'. An examination of Chomsky and Schönberg's ideas on language and music, and their related theories regarding notational systems, will help to access the dense conceptual formulation of Purini's work on architectural language and elucidate what Purini regards as a 'primitive act of construction' and its relationship to drawing.

²⁹⁴ Purini, 'Una ipotesi di architettura', in *Luogo e progetto*, 63. A reminder here that *Luogo e progetto* presents 'Una ipotesi di architettura' as coinciding with the 'Programma di fondazione grammaticale del linguaggio architettonico'. In the context of the present research, 'Una ipotesi di architettura' is seen as incorporating all the projects from the period 1966-1968.

²⁹⁵ Franco Purini, 'Gli inizi', in *Franco Purini. Le opere, gli scritti, la critica*, ed. Gianfranco Neri (Milan: Electa, 2000), 17.

²⁹⁶ Donald Judd, 'Specific Objects', in *Contemporary Sculpture, Arts Yearbook*, no. 8 (New York: The Art Digest Inc., 1965), 74-82. Reprinted in *Donald Judd: Complete Writings 1959-1975* (Halifax and New York: The Press of the Nova Scotia College of Art and Design/New York University Press, 2005), 181-189.

²⁹⁷ Arnold Schönberg, 'Composition with Twelve Tones', in *Style and Idea* (New York: Philosophical Library, Inc., 1950), 102-143.

Purini's notion of a "primitive act of 'construction'" finds a fundamental reference in Chomsky's generative grammar, since the linguistic field it initiated focuses on the formation of language and seeks to define the rules that govern its structure.²⁹⁸ At the core of Chomsky's theory lies a foundational redefinition of language: it is not a fixed corpus of utterances but rather a potentially infinite set of sentences, each composed of a finite number of elements.²⁹⁹ This shift from descriptive to generative thinking marks a decisive break with earlier linguistic models. Language is no longer conceived as a collection of observed phenomena but as the product of an internal, rule-based system capable of producing limitless expression from minimal means. The implications of such a redefinition reach well beyond linguistics and offer a compelling analogy for the alternative conception of the architectural form investigated by Purini, where the articulation of architectural elements may be understood as the manifestation of an abstract generative system.

In this framework, grammar is no longer understood merely as a codification of language usage but as a theory of language itself - a set of principles that governs the structure of possible expressions. The linguist's task, accordingly, is not only to describe individual languages but to identify the universal criteria that underlie them all. Grammar is therefore conceived as a formal system that, once internalised, allows a speaker to generate and comprehend sentences never previously encountered. The emphasis falls on the rules of formation, not on the specific forms

²⁹⁸ Chomsky first presented his ideas in the groundbreaking work *Syntactic Structures* (1957). In contrast, *Aspects of the Theory of Syntax* (1965) – which partially reformulates his earlier thesis – introduces his initial hypothesis of an innate language faculty, a theme explicitly developed later in *Rules and Representations* (1980). In the present context, only Chomsky's Standard Theory – developed between the publication of *Syntactic Structures* and *Aspects of the Theory of Syntax* – will be introduced. See: Noam Chomsky, *Syntactic Structures* (The Hague: Mouton, 1957); *Aspects of the Theory of Syntax* (Cambridge, MA: MIT Press, 1965); and *Rules and Representations* (Oxford: Basil Blackwell, 1980). Furthermore, for the non-specialist yet specific and detailed purposes of this research, the schematic exposition of the principal concepts from Chomsky's highly technical work has been facilitated by language philosopher John R. Searle's explanatory article, 'A Special Supplement: Chomsky's Revolution in Linguistics', *The New York Review of Books* 18, no. 12 (New York, NY: New York Review of Books, 29 June 1972), 16–24; and by the canonical introductory work by linguist John Lyons, *Chomsky* (London: Fontana/Wm. Collins & Co. Ltd, 1970). Chomsky's work has already been the subject of architectural criticism, particularly in relation to Peter Eisenman. As stated in the introduction, Purini and Eisenman's research shows notable similarities, and their shared interest in Chomsky represents a clear point of contact. In this context, Chomsky's theory is used solely to describe the structure of this particular section of Purini's research. In contrast, a more specific consideration of the relationship between Purini and Eisenman will be addressed in the following section. References to Chomsky in Eisenman's work appear in Peter Eisenman, 'Appunti sull'architettura concettuale: verso una definizione/Notes on Conceptual Architecture: Towards a Definition', in *The City as an Artifact*, *Casabella*, no. 359–360 (Milan: Editrice Casabella, 1971), 48–58. For an analysis of the role of Chomsky's theory in Eisenman's work, see Mario Gandelsonas, 'Linguistica nell'architettura', *Casabella*, no. 374 (Milan: Editrice Casabella, 1973), 17–30. English translation: 'Linguistics in Architecture', in *Architecture Theory Since 1968*, ed. Michael Hays (Cambridge, MA: MIT Press, 2000), 129–139.

²⁹⁹ Noam Chomsky, *Syntactic Structures* (The Hague: Mouton, 1957).

they generate. This orientation towards rule-governed generativity finds a clear parallel in this phase of Purini's research, where architectural form is understood not as a repetition of historical models, but as the product of a 'primitive act of "construction" grounded in an internal logic.

Chomsky's distinction between linguistic *performance* (the actual use of language) and linguistic *competence* (the internalised knowledge of its rules) further reinforces this model. Competence, rather than performance, emerges as the appropriate focal point of linguistic theory, just as for Purini, the architectural drawing is not merely a representation but the very site of compositional thought. Syntax is the privileged site of this knowledge, and for Chomsky, it holds primacy over semantics and phonology. The well-known sentence, 'Colourless green ideas sleep furiously', used as an example by Chomsky, is grammatically correct yet semantically nonsensical, demonstrating that syntactic well-formedness is independent of meaning.³⁰⁰ In architectural terms, this suggests that form may possess internal coherence even when severed from programme, function, or traditional cultural values associated with it.³⁰¹

A crucial component of Chomsky's approach is his use of a formal notational system – tree diagrams, phrase markers, and transformation rules – which enables the precise mapping of grammatical operations. This notational system is not merely illustrative but constitutive: it provides a framework for modelling the internal structure of language, making explicit the generative processes otherwise implicit in linguistic competence. Similarly, in Purini's work, the drawing operates not simply as a means of representation but as a generative field in itself. His development of a new notational system calls for reconsidering the role of drawing in architectural design, not as a vehicle for illustrating preconceived forms, but as the operational site where architectural thought is structured and articulated. Like Chomsky's diagrams, Purini's notations do not depict finished objects but map the relations and transformations of elements that make form possible.

Generative grammar, the final component of Chomsky's system, is a formalised set of rules that produces only syntactically valid sentences. In architectural terms, this can be likened to a design language that generates valid forms within a consistent logic, applicable in algorithmic, parametric, or more traditional typological frameworks. Within this model, Transformational Grammar introduces rules that modify basic phrase structures – for example, converting active to passive sentences.

³⁰⁰ Chomsky, *Syntactic Structures*, 15.

³⁰¹ Chomsky, *Aspects of the Theory of Syntax*, 4.

When these transformations are combined with phrase structure rules, the result is Transformational Generative Grammar: a system that derives complex expressions from simpler base structures. These grammars operate within the broader framework of Universal Grammar, Chomsky's hypothesis of an innate, biologically grounded system shared by all human languages – a theory suggesting that the human mind is predisposed to generate and understand structured expressions.³⁰² In this way, generative grammar defines the overall system; transformational and transformational generative grammar specify how transformations operate within it. These distinctions mirror architectural processes where rule-based operations generate complex configurations from basic architectural elements, in line with Purini's research of an autonomous architectural system of internalised rules.

2.4.4 **The Relevance of Arnold Schönberg's 'Composition with Twelve Tones' to Purini's 'Programme for the Grammatical Foundation of Architectural Language'**

Arnold Schönberg's dodecaphonic method, introduced in the essay 'Composition with Twelve Tones' (1941)³⁰³ and developed between 1911 and 1922, will be easier to synthesise than Chomsky's conceptual structure. The main aspects of these ideas, which had a great impact on music, will be presented without reference to detail or to the debate Schönberg's theory prompted. Instead, the discussion will cover a series of research steps that Purini took in his 'Programme for a grammatical foundation of architectural language'. Whereas Chomsky's ideas were functional in accessing the notion of grammar, Schönberg's were directed primarily to composition.³⁰⁴ It is also important to underline that both men not only produced a conceptual caesura in their respective disciplines, affecting many other areas and giving rise to new fields of study,³⁰⁵ but also investigated the concept of notational systems, a theme intrinsically associated with this present research into Purini's architectural programme. Schönberg's ideas are also pertinent in the next section and will be

³⁰² Ibid.

³⁰³ Arnold Schönberg, 'Composition with Twelve Tones (1941)', in *Style and Idea* (New York: Philosophical Library, Inc., 1950), 102-143.

³⁰⁴ The association of Chomsky and Schönberg's ideas, although certainly controversial, is not extravagant. An attempt to introduce Chomsky's ideas into the discussion on musical creation can be traced back to Leonard Bernstein's famous Charles Eliot Norton Lectures on Poetry held at Harvard University in 1973. See Leonard Bernstein, *The Unanswered Question: Six Talks at Harvard* (Cambridge, MA: Harvard University Press, 1976).

³⁰⁵ In Chomsky's case, the fields of computation and politics; in Schönberg's, serial music, electronic music and mathematics.

used to sustain an interpretive hypothesis for analysing Purini's 'Classificazione, per sezioni, di situazioni spaziali' (1968).

The method of composing with twelve tones grew out of the search for a new base for understanding tonality. Schönberg saw the need to overcome the conventional musical structure in which tonality was seen as a comprehensive compositional system governing musical creation. This system was based on a hierarchical organisation of pitches, where one or two primary tones became the leitmotif of the entire composition.

According to Schönberg, this system, based on the harmony of chromatic scales, progressively induced a passive attitude towards the development of an intellectual and emotional understanding of music.³⁰⁶ For instance, Schönberg criticises the use of 'pictures' and 'moods' (inherently non-constructive elements in music) in some of Debussy's impressionistic harmonies, arguing:

Moods and pictures, though extra-musical, thus became constructive elements, incorporated in the musical functions; they produced a sort of emotional comprehensibility. In this way, tonality was already dethroned in practice, if not in theory. This alone would perhaps not have caused a radical change in compositional technique. However, such a change became necessary when there occurred simultaneously a development, which ended in what I call the *emancipation of the dissonance*.³⁰⁷

For Schönberg, dissonance is not to be understood in relation to the main musical theme but rather as an aspect of music endowed with own structural values that should be studied and developed musically; in other words, 'emancipated' and therefore able to contribute to a musical system.

Schönberg's method consisted of breaking the hierarchical principle of tonality and introducing a new order in which all tones have equal value. All twelve notes of the chromatic scale are organised on a basic set (BS) and serve as the tonal centre of the musical composition, all exclusively 'related only with one another'.³⁰⁸

³⁰⁶ Schönberg, 'Composition with Twelve Tones', 103. It is noteworthy that Schönberg's call for a new approach to the emotional and intellectual understanding of music is analogous to Purini and Gruppo Atrio Testaccio's critique of architecture with regard to the way in which architecture was perceived and its forms conceived. See Purini (with *Gruppo Atrio Testaccio*), 'I motivi di fondo - Sulla tecnologia - I problemi della città', (1966), 64.

³⁰⁷ Schönberg, 'Composition with Twelve Tones', 104.

³⁰⁸ Ibid., 107.

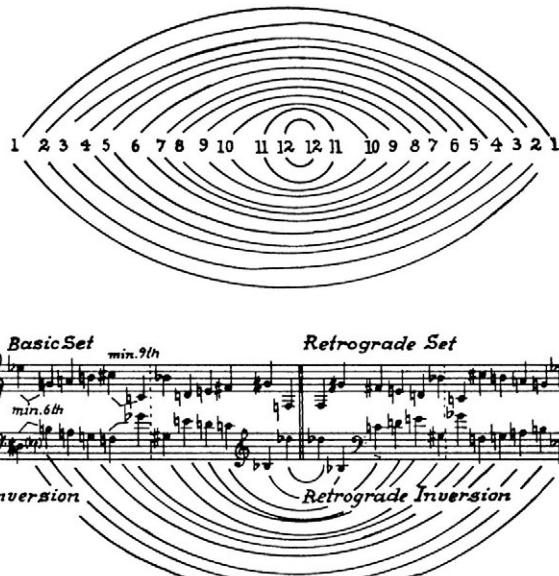


FIG. 2.35 Arnold Schönberg's set from the Wind Quintet, Op. 26, an example Schönberg used in 'Composition with Twelve Tones', to illustrate the three derived forms that comprise the basic set.

The composer determines the basic set, also called the prime, that is, he arranges the set of twelve notes according to a relative pitch. With only a few exceptions, such as trills and tremolos, no note can be played twice in the basic set. Furthermore, the basic set can also be played in the three derived mirror forms of the prime: an inverted set (upside down), a retrograde set (backwards), and a retrograde inverted set (backwards and upside down). The derivative forms also serve to generate what Schönberg called the 'rhythmisations' and phrasing of the original set, and 'correspond to the principle of *the absolute and unitary perception of musical space*'.³⁰⁹

The dodecaphonic approach leads to some characteristic compositional aspects, such as the organisation of the intervals between tones and the study of the particular tension produced, while the rhythms are often irregular with great variation. In addition to these typical characteristics, the idea was to free the imagination by providing a basic set of rules to guide the composer in the unlimited possibilities of generating formal elements of music, such as melodies, themes, phrases, figures and chords.³¹⁰

³⁰⁹ Ibid., 115-6. Schönberg later introduced other derivative forms, such as eleven transpositions of all the four basic forms.

³¹⁰ Ibid., 116-117.

However, the clarity and simplicity of the approach, and the fact that the series can also be charted and analysed by assigning a number to each tone of the basic set, should not be understood as a recipe for composing good music. The application of this method also has the purpose of teaching musical composition, although compositional quality is not guaranteed. As Schönberg explains:

The introduction of my method of composing with twelve tones does not facilitate composing; on the contrary, it makes it more difficult. Modernistically-minded beginners often think they should try it before having acquired the necessary technical equipment. This is a great mistake. The restrictions imposed on a composer by the obligation to use only one set in a composition are so severe that they can only be overcome by an imagination which has survived a tremendous number of adventures. Nothing is given by this method; but much is taken away.³¹¹

The straight line is forbidden to the author, and precisely this consciousness generates in him a continuous innovative stimulus to recall Shklovsky's warning. The intricate path that leads to the totality of the work is marked by a sequential procedure established by the work itself, according to a few strictly specified rules that provide basic guidance. This approach underpins any form of serialism. As Markus Bandur explains: 'Serialism is first of all a philosophy of life (*Weltanschauung*), a way of relating the human mind to the world and creating a completeness when dealing with a subject.'³¹² This approach to creating completeness corresponds to the conceptual structure of the drawing as it is investigated here: where researching the art object by researching the subject is reformulated into a new system of relationships in which the artist provides a unitary notion of the idea of art (whatever it may mean), whether it be the man-machine operator characterised by Mohr's approach, or a process of step-by-step elimination within a labyrinth of signs, as Perilli suggested.

³¹¹ Ibid., 114.

³¹² Markus Bandur, *Aesthetics of Total Serialism: Contemporary Research from Music to Architecture* (Basel, Boston and Berlin: Birkhäuser, 2001), 5.

2.4.5 'Programma di Fondazione Grammaticale del Linguaggio Architettonico' [Programme for the Grammatical Foundation of Architectural Language] (1968)

The Research Assumption

Purini's experimentation reported in this essay from 1968 consists of a project for creating an architectural language and defining a notational system capable of organising and classifying the spatial complexity of architectural structures once their figurative and constructive expression has been reduced to an unambiguous, elementary level. According to Purini, the 'ordering criterion' for the notation hypothesised is based on the degree of three-dimensional complexity of the architectural elements, which was 'made to correspond to the elementary phases of construction of a figure in space'.³¹³ Within this logic, architecture, or more precisely, the architectural space, would consist of the relationship of the degree of three-dimensionality between a number of elements ordered according to a number of classes. At the same time, the architectural project would consist in identifying a series of minimal, elementary constructions – that is, a notational description of sequential operations arranged on an ideal surface. Since this identification in notational form is intended to describe the underlying architectural language, and since, analogously to Chomsky's work, grammar is meant to describe the structure of a language, a direct correspondence is established between notation and the architectural project.

Therefore, Purini's research objective becomes the construction of grammatical rules (the ordering criterion) and a corresponding notational system that can describe the architectural space in an unambiguous, non-intuitive way. The analogy with the aims of Chomsky's linguistics is clearly recognisable, yet to understand Purini's specific application of Chomsky's work in the context of architecture; that is, to explain how architectural language can be founded through its grammar, one needs to consider in particular Chomsky's analyses of the models of grammar and to then take a further step from there. In fact, compared to Chomsky, Purini has one problem fewer. In Purini's hypothesis, the syntax is made to correspond to the grammar, which means the structure of the architectural space coincides with the rules of grammar.

³¹³ Franco Purini, 'Una ipotesi di architettura', 61.

More generally, if, as Chomsky claims, syntax is the most characteristic aspect common to all languages, and if grammar is at the core of syntax, then, in the context of Purini's research, by incorporating the specifications of syntax into the rules of a grammar conceived as elementary three-dimensional structures, these rules become both the representation and the theory of architectural language.³¹⁴ Given this hypothesis, the research problem can be transferred to the field of representation: to the search for a notational system that is able to directly organise and classify 'the construction of a figure in space'.³¹⁵ The greater notational complexity required for representing the three-dimensionality of architectural forms, compared to the mono-dimensionality of the written sentence, is overcome by equating the representation of the syntactic level of language with grammar. Purini's grammatical foundation of architectural language should be specifically understood in this way.

Also important to recall is that the premises for Purini's research into the elementary character of the architectural space (which led to the hypothesis of the equivalence between grammar and syntax) first emerged in 'La città compatta. Studi di strutture urbane' (1966) and was further elaborated in the 'Ricerche di transizione' (1967), which was examined in the previous section. In fact, in 'Ricerche di transizione' Purini confronted the figurative ambiguity produced by his elaboration of a conventional notation system for describing the basic architectural element and concluded that 'the three-dimensional character [of architectural space] consists of a grammatical element, rather than being the result of a syntactical operation'.³¹⁶

Seen within the specific context of this present research, the definition of a notational system capable of directly representing architecture through a new order means assigning to drawing a new role in describing architecture. This description is not only illustrative of the architecture proposed but is also generative, in the same way that grammar is generative for Chomsky, as will be shown in the following pages of this section and exemplified in particular in the analysis of the 'Padiglione in cemento e vetro' (1976), which ends this research. This new role for drawing says nothing about the specific type of drawing; for instance, it does not mean that drawings such as plans or sections should not be used anymore, but rather that

³¹⁴ In the context of this specific research phase, this claim could be regarded as apodictic. However, it could be argued that in order to exceed the limits of this experimental logic, Purini simultaneously developed an actual series of architectural projects to test, verify, and reformulate this position. For the purpose of this present research, this claim will not be further investigated, given that a more comprehensive evaluation of the implications of this claim would necessitate considering Purini's work realised after 1976, when the grammatical basis of his work began to confront more widely the themes of architectural theory, including the semantic dimension of the architectural image.

³¹⁵ Purini, 'Una ipotesi di architettura', 61.

³¹⁶ Purini, 'Ricerche di transizione', 41. (Writer's translation)

their role in conceiving and describing architectural form has changed. An indicative example that illustrates Purini's new system of relations governing architectural form is the 'Progetto di biblioteca a Roma' (1968), discussed in the previous section. This project posed the conceptual problem of the impossibility of typologically and programmatically interpreting a 'library' by means of its form or through the plan. At the same time, the project introduced an alternative reading. In fact, the programme for the library can be recognised and reconstructed through the system or relationship presented by the two façades.

The Three Transformational Series

In order to explicate the concept of classes (or sets) of architectural elements, Purini began this first step by selecting the cube as the generator of the basic architectural elements. For Purini, this form contains the structural properties from which it is possible to define the grammatical rules of architectural language. Like Chomsky's system, it has a grammar capable of generating an infinite number of 'architectural sentences', but also like Schönberg's, it embodies a compositional method for generating architecture. Purini informs us that the cube was chosen for two specific reasons: 'its geometric characteristics, which consist in its extreme "constructability", starting from fragments, together with its recognised perspectival character'.³¹⁷ Given a basic cube structure, the elements that are able to reconstruct the space of the cube can be reduced to a series of volumes, planes and lines.³¹⁸ Therefore, through a series of transformations of the basic elements of the cube, all the constructive possibilities of an architectural space were investigated.

The transformational rules of the basic cubic elements are organised according to three series:

- The first series consists of a sequence of planes. Through subsequent thickenings these generate a volume that is ideally not homogeneous but composed of strata.
- The second series starts with a linear element. Through progressive stages of construction it defines the geometrical structure of the cube, namely the wireframe.

³¹⁷ Ibid., 69. (Writer's translation). Thus, the cube is chosen both for its constructive performance and for a figurative reason – its perspective clarity. It is also important to add that the experiment transformed the figurative clarity of the cube into complex configurations as was previously discussed in the analysis of Mohr's work. Therefore, the reliance on the figurative clarity of the cube should not be understood as an ideal quality to be confirmed at the end of the experiment, but rather as a characteristic to be questioned.

³¹⁸ Ibid. 'Architecture consists of the relationship of degrees of three-dimensionality inherent to classes of volumes, planes and lines.' (Writer's translation). See also 'Una ipotesi di architettura', 61.

- The starting point of the third series is to transform the wireframe structure of the second series into a volume. Subsequently, through a series of eliminations, the cube is reduced to its primary spatial element: the plane and the dihedral angle. Step by step, the faces of the volume are eliminated until the initial element of the second series is reached.³¹⁹

According to Purini: 'The three-dimensional character consists of a grammatical element, rather than being the result of a syntactical operation', while 'the "degree" of three-dimensionality is a fixed quantity that can be accumulated either in a single element of the construction or dispersed in more points.'³²⁰ Moreover, this quantity 'is constructed not only by the actual space itself, but also by the relationship between different materials, by the rhythm in which the elements are arranged, by the colour in relation to a neutral surface, and, most of all, by the precise indication of the ways of constructing all or part of the building'.³²¹ Therefore, translated through Chomsky's ideas, the cube contains the structural properties from which it is possible to investigate the grammatical rules of architectural language.

For this experiment, Purini made a series of drawings that were only published at a later stage.³²² The above illustration of the series of volumes, planes and lines was first published in *Luogo e Progetto*.³²³ It can be seen immediately that this drawing is not self-explanatory: it presents something both more and less than Purini's explanation provides or the title indicates. The plate is divided into four horizontal parts, each of which illustrates a particular theme through one or more series of drawings. For instance, Section 1 (the top row) does not represent any of the three series; instead, it refers to a concept of base that has not yet been introduced and, for now, will be left aside. Section 2 presents a series of cubes drawn both in section and in projection. Here, the third transformational series is visible: a cube that is progressively reduced to a plane and a dihedral angle. However, the written description of the series presents an ambiguous aspect. Purini, in fact, writes that through progressive eliminations of the elements, the cube is reduced to a plane and the dihedral angle corresponding to 'the initial element of the second series is reached'.³²⁴

³¹⁹ Ibid.

³²⁰ Purini, 'Ricerche di transizione', 54. (Writer's translation)

³²¹ Ibid.

³²² Some of the drawings were presented in *Controspazio* no. 11-12 in 1972, while a more comprehensive account of the graphic material can be found in *Luogo e Progetto* (1976). See Purini, 'Ricerche di progettazione', in *Controspazio*, no. 11-12 (Bari: Edizioni Dedalo, 1972): 18-32; and Purini, *Luogo e progetto*, 61-67. The complete overview, including the additional graphic material created for this present research, can be found in Appendix 1.

³²³ Ibid.

³²⁴ Purini, 'Una ipotesi di architettura', 61.

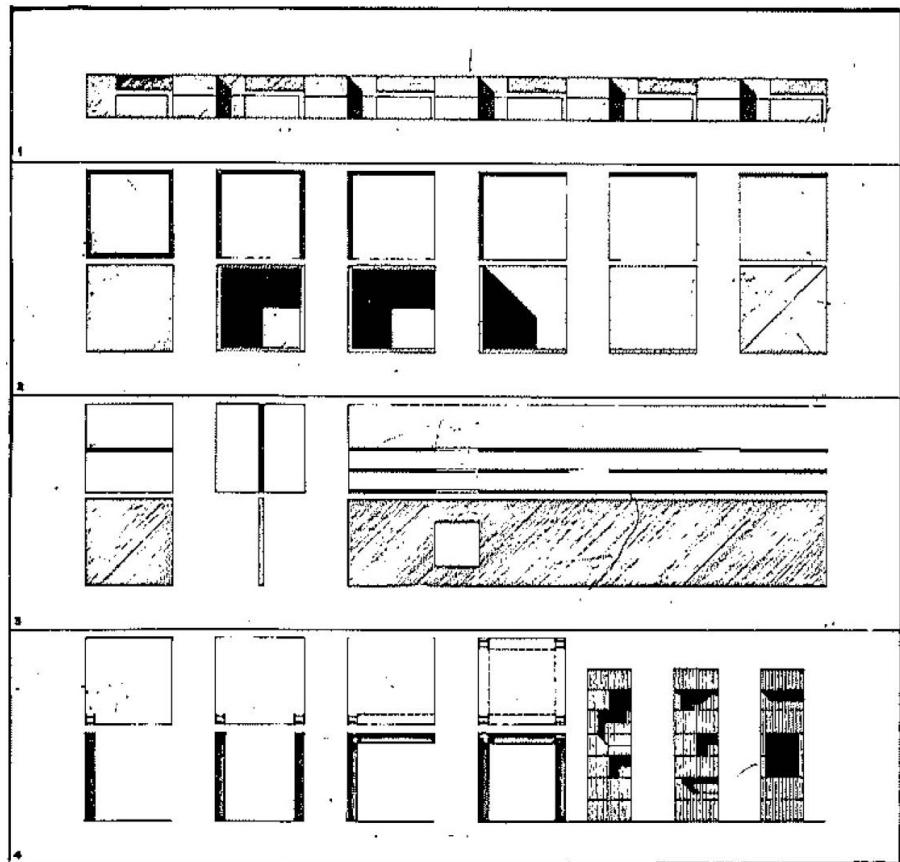


FIG. 2.36 Franco Purini, 'Una ipotesi di architettura'. Series of Volumes, Planes and Lines (1966-1968)

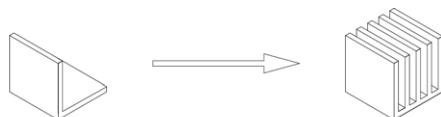
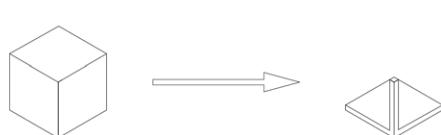
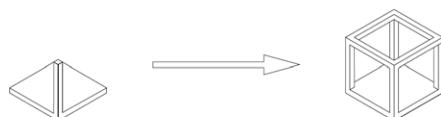


FIG. 2.37 Graphic interpretation of the initial and final elements of the series of volumes, plane, lines. (Author's Image.)



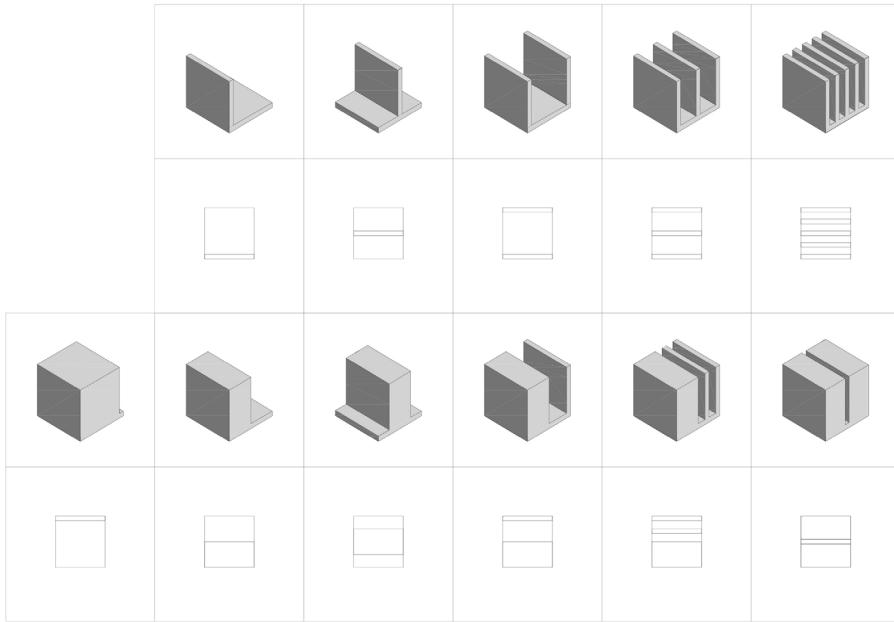


FIG. 2.38 Graphic representation of Series 1 (Author's Image.)

Except that the initial element of the second series does not comprise a plane and a dihedral angle, but a linear element. Section 3 presents two cubic elements, one in section and one in projection, followed by a non-homogeneous stratification of planes resting on a base. Arguably, these drawings refer to the first transformational series; that is, the cube composed of strata. Section 4 certainly illustrates Series 2, in other words, a cube progressively constructed from linear elements. To the right, completing the content of the plate, are three tower-like structures. Similar to Section 1, they introduce further development of the experiment, which will be discussed at a later stage.

This drawing already prompts an essential observation. Even during this rigorous research phase that demands formalisation and precision, Purini's drawing seems to challenge these very basic representational standards. In fact, as the following drawing also shows, Purini systematically avoids directly communicating the concept he is expressing. In fact, it could be argued that in order to be verified and evaluated, the three transformational series could be illustrated at the very simplest level.

Consequently, to clarify Purini's illustration of the series, I have created a second version (see FIG. 2.37, and FIG. 2.38). This scheme depicts the initial and final elements of each series, with arrows indicating an ongoing transformation from the first to the last element of the series. It is important to note that Series 1 is

ambiguous, allowing wide margins for interpretation; thus, no definitive representation can be produced. Indeed, reconstructing the volume of a cube through a progression of planes with varying thicknesses cannot be analytically described without first defining the rule that quantifies the following aspects: the thickness of the plane and its growth coefficient, and the number and frequency of the strata. Therefore, if one follows the description and characteristics of the architectural elements presented in Purini's initial statement – namely, a minimal constructive and figurative expression of the element and the possibility of identifying the three-dimensionality of a cube – then only a provisional description of the series can be offered (see drawing below). In the upper row, the cube is reconstructed through a progressive layering of a basic plane structure. The lower row interprets the thickening of the basic element.

Series 2 and Series 3 can be represented through notation. However, whereas Series 3 can be unambiguously interpreted through a transformational rule, Series 2 necessitates a clarification that Purini's description fails to provide. In Series 2, 'the progressive construction' of a cube starting from a basic wireframe structure can involve more than one transformational rule, and even when considering the most basic transformations, there are two rules. In fact, it is not specified how this progressive construction would occur. For instance, beginning with a basic wireframe structure (consisting of a vertical element placed in one of the four corners of a base), the first basic transformation involves the addition of a second horizontal element at the upper end of the vertical element, while the third element is connected to the free edge of the second element and the corresponding corner of the base, and so forth. Yet, a second transformation as simple as the first is also possible. This entails, firstly, the progressive addition of the four vertical elements of the wireframe structure, followed by the addition of the upper horizontal elements. In summary, it could be argued that while some doubts remain regarding the validity of the formulation of Series 1, it is indeed possible to represent Series 2 and Series 3. Although Series 2 has more transformational rules and more than one basic transformational rule due to its greater number of elements, these transformations can still be described through notation. However, it should be emphasised that Purini's notational system in 'Programma di fondazione grammaticale del linguaggio architettonico' has a different foundation from the notational system utilised in linguistics, mathematics, computation, etc. Purini does not pursue the formalised methods employed in these fields. For him, a fundamental architectural reasoning underpins his method. And yet, neither is it based on architectural precedents – only on the degree of three-dimensionality of basic elements, organised according to coherent classes. The very fact that Purini did not publish a practical illustration of the concept he proposed could be regarded as an allusive indication (or an indirect warning) not to misunderstand the real goal of this experiment, which will be fully elucidated only with the discussion of 'Classificazione, per sezioni, di situazioni spaziali', in the next section.

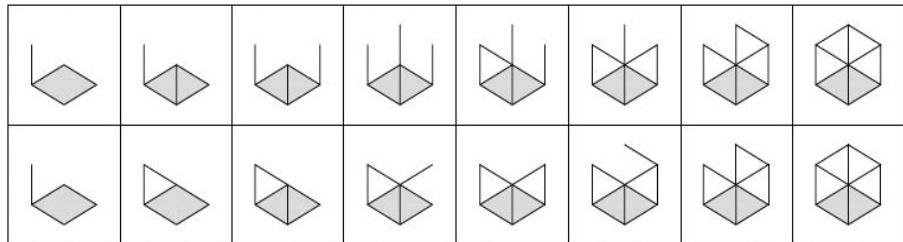


FIG. 2.39 Basic graphic representations of Series 2. (Author's Image.)

As with Series 1, both Series 2 and 3 have been further illustrated in a number of drawings that can be found in Appendix 1. These additional representations aim to identify all the intermediate elements of the series, and also to include the interrelations between the series, an additional characteristic Purini specified.³²⁵ More specifically, the additional drawings include a graph representing the (finite) elements of the series, while at the same time excluding the possibility of embedding instances of the cube configuration contained in other instances when representing them. The final drawing was influenced by an issue raised by Sol LeWitt's 'Incomplete Open Cubes' (1968-1993).³²⁶ In fact, one can see that in the second and third series (the second, in particular) there is a strong analogy with Sol LeWitt's work on cube elements, in which he codified, constructed and represented all possible structural variations of a wireframe structure of the cube: from a three-piece structure to one of a maximum of eleven pieces. In following LeWitt's process, the inherent problems of representation and ordering posed by this work, and the associated question about the completeness of 'Incomplete Open Cubes', inspired the integration I made of Purini's illustration.³²⁷

³²⁵ In fact, Purini writes: 'Particular configurations are obtained by combining elements of two series.' See Purini, 'Una ipotesi di architettura', 61. (Writer's translation).

³²⁶ On Sol LeWitt's work, 'Incomplete Open Cube', see Nicholas Baume, ed., *Sol LeWitt: Incomplete Open Cubes* (Hartford, CT and Cambridge, MA: The Wadsworth Atheneum Museum of Art and The MIT Press, 2001).

³²⁷ An analysis of the combinations in this work which influenced my graphic interpretation of Purini's transformational series can be found in Natasha Rozhkovskaya, 'Is the List of Incomplete Open Cubes Complete?'. Accessed 21 March 2015. http://www.math.lsu.edu/~rozhkovs/LeWitt_cubes.pdf.

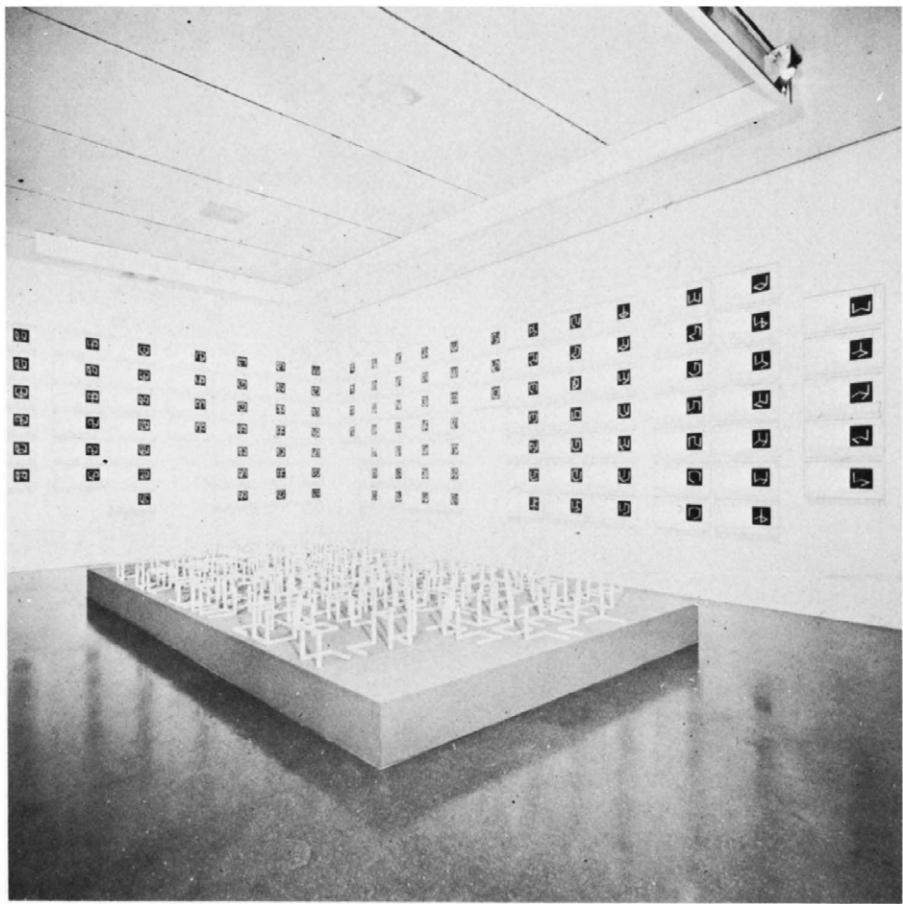


FIG. 2.40 Sol LeWitt, 122 Variations of Incomplete Open Cubes (1974). 122 structures, painted wood, each 8x8x8 inches; base, 182 plywood squares, each 2x12x12 inches; 131 pen and ink drawings and photographs. Installation, Museum of Modern Art, New York.

The Notions of 'Degree of Three-dimensionality' and 'Interval'

The next step consists in specifying the notions of 'degree of three dimensionality' (introduced in 'Ricerche di transizione'), and interval; in other words, the specific significance of the unoccupied space between Purini's elements. If, for Purini, architecture consists in the relationship between the degrees of three-dimensionality of a given class of elements, and if the aim of the project is to describe this relationship in notational form, then when does this relationship exist? What is the grammatical rule and corresponding drawing that substantiates Purini's new architectural order?

If the elements of the series of volumes, planes and lines are capable of prefiguring all the spatial situations of a building (notions that have been reduced, within the context of the experiment, to the basic elements of a cube); and if, at the same time, the basic elements of the cube do not have any scalar definition, since traditional hierarchical relationships governing architectural order have been excluded a priori, then, for Purini, the elements of the series come to function as an abstract model of measurement for the relationships between the parts of a 'construction'. In other words, the elements of the grammar also describe the syntactic relationships determined by the intervals between elements. As Purini explains:

[The relationship that specifically qualifies architecture] exists as soon as the original level of three-dimensionality and the scalar interval – an interval that defines the degree [of three-dimensionality] – is defined. This interval, chosen for one of the elements from one of the three classes [volumes, planes and lines], consists in establishing the number of operations (spatial, geometric, distributive) that are subtracted, or are considered inherent, in the passage between an object 'A' and an object 'B' of the class in question. The series thus obtained – more or less dense in intervals and intersected or not by the upper or lower parallel series – constitutes the 'supporting' core of the architectural notation.³²⁸

An additional remark is required to explain this concept. In this specific passage, Chomsky's formulation cannot be applied to Purini's model since it does not include the case in which the grammar as a representation of language becomes language itself. Instead, at this point, Purini's model bears a very strong resemblance to Schönberg's dodecaphonic method. Indeed, the title, 'Notes on architectural composition', could be interpreted as having a double meaning in that 'notes' refer not only to the idea of a record or summary but also to musical notes (a reference to Schönberg), implying that both converge in Purini's basic architectural element. However, the title is not just a subtle wordplay, given that (as mentioned earlier in the description of 'La città compatta'), Purini considers the mutual attraction among all forms of notational systems as a source for revealing both their intrinsically contradictory nature and their powerful creative energy.

However, the relationship between Purini's and Schönberg's methods also has a more concrete basis. By transforming the rules of the dodecaphonic method into an architectural context (thus, to all effects, substituting the twelve tones with the basic elements of the cube), the spatial hypothesis of Purini's notational system already comprises the complete citation of an entire series of line, plane and

³²⁸ Purini, 'Note sulla composizione architettonica', 69. (Writer's translation).

volume elements (which could be called a basic set or prime, to use Schönberg's terminology) before introducing a further set of elements. It is also important that the concept of interval should be understood with reference to musical notation, for instance, the octave, which includes the twelve tones. As with a musical score, the complete citation of all possible permutation of pitch can be literally represented as a narrow string of cubic architectural elements (see FIG. 2.41), set on a wider surface – the musical stave now transformed into a matrix – systems that are both coherent with Schönberg's idea.

As I previously remarked, Purini gave few indications, and only at a later stage, about the relationship between his research and music. One of these is written in the form of an aphoristic commentary to the 'Programma di fondazione grammaticale del linguaggio architettonico' [Programme for the grammatical foundation of architectural language], which in *Aforismi architettonici* (1995) is changed to 'Progetto di linguaggio architettonico' [Architectural language project]. Purini writes:

Proportions and relationships are not conceived in an abstract way but coincide with precise elements. Composition is therefore applied to predefined parts. The architect arranges these volumes, planes and points within a sort of spatial pentagram, like in a musical score where sound corresponds to weight, tone to geometry, and the intervals to the gaps in the structures.³²⁹

Definition of the Architectural Sign and Architectural Composition

From the definition of architecture as a sequence of basic three-dimensional elements and intervals, Purini also derives the definition of architectural sign. The architectural sign is 'the double succession of classes (volumes, planes, and lines) and the degree of three-dimensionality adopted for them'.³³⁰ Compared to the basic three-dimensional element, the architectural sign introduces the notion of 'double succession', which for Purini corresponds to the vertical direction of the rhythmic and to the horizontal temporal direction of his spatial pentagram.³³¹ Even if Purini does not expand the concept of double articulation, it could be argued to refer to the combination of sequences of elements, such as Schönberg's mirror forms: the inverted, the retrograde and the inverted retrograde sets, but above all, the retrograde set, since the inverted set would imply an impossible architectural

³²⁹ Purini and Thermes, *Aforismi architettonici*, aphorism no. 76. Pages unnumbered. (Writer's translation).

³³⁰ Purini, 'Note sulla composizione architettonica', 69. (Writer's translation).

³³¹ Purini, 'Note sulla composizione architettonica', 69.

construction, which was not introduced by Purini but exists in Schönberg's model.³³² At the same time, at a more general level, 'double succession' may also refer to the 'double articulation' of language, a concept from the field of phonology,³³³ according to which, given a linguistic sign, in the first articulation, the morphemes (meaningful morphological units of a language that cannot be further divided) can generate new words, whereas in the second articulation, the phonemes (distinct units of sound), unlike the morphemes, have no meaning but are able to produce changes in the meaning of a word or sentence.³³⁴ Therefore, translated into the context of Purini's definition of the architectural sign, the first linguistic articulation would concern the formal individuality of the element, capable of generating other elements and forms; whereas in the second articulation, the basic element bears no specific formal value in itself, but only in relation to the other elements of the series. Therefore, in this specific relationship, the significance of the architectural sign should be analysed with regard to the overall production of formal values. In other words, the architectural sign is an element that is endowed with both an individual and a relational formal value, both figurative and constructive. Since it is impossible to determine the precise cause of this development, the precedents, or examples for this, are the cubic elements analysed in 'Ricerche di transizione' (1967). In fact, as was discussed, their role is investigated not only in relation to the urban fabric and to the buildings in 'La città compatta', but also as autonomous structures.

In the successive chain of concepts, the definition of the architectural sign leads to the notion of architectural composition. However, this step also introduces other architectural aspects, such as the function, materiality, and context of the

³³² Schönberg, 'Composition with Twelve Tones', 115.

³³³ The drift into phonology might seem controversial since it introduces a different field of language compared to Chomsky's syntactic approach. However, the idea of double articulation introduced here to expand Purini's concept of 'double succession' is also coherent with the concepts of deep structure (concerning language competence) and surface structure (spoken language). Also, more generally, Purini's metaphorical use of the terminology of linguistics in the architectural context is not confined in the adherence to the sole conceptual structure elaborated in Chomsky's early work, but it includes a comprehensive, yet, carefully selected, range of concepts such as for instance the elaboration in the field of architecture of the notion of morpheme, which could be understood as a consequential development of his grammatical. For Purini the morphemes are 'elementary connections of primary signs. These generative combinations are configured, at the same time, as *theoretical principles* concerning the architectural object and its context, and as formal devices capable to be declined in different scales and in different thematic contexts'. See Franco Purini, 'I morfemi', in *Franco Purini. Le opere, gli scritti, la critica*, ed. Gianfranco Neri (Milan: Electa, 2000), 101.

³³⁴ More specifically, the double articulation of language or, duality of patterning, is defined as 'a particular type of structure found in all human languages: every meaningful unit (such as a word) is built up from a small set of meaningless units. In spoken language, these meaningless units are the phonemes (consonants and vowels)'. See Robert Lawrence Trask, *Language: The Basics* (London, New York: Routledge, [1995] 2004), 219.

architecture. Therefore, the notion of architectural composition represents the link that joins together all the previous elaborations based on the simplification of the cube into a comprehensive conceptual formulation of architecture.

If each of the three series (lines, planes, and volumes) corresponds to a complete architectural operation (three different ways of constructing a cube in space), then the architectural composition can be defined as the series of all the transformational sequences of elements and their combinations. Purini writes:

The architectural composition should therefore be understood as a succession of structured series alternated and arranged, or disarranged, according to an axial direction, in such a way that, for instance, an interval between two elements, whether a void or occupied by an element belonging to another class of elements, has the function of making it possible to virtually reinterpret the series in its entirety.³³⁵

Also in this passage the reference to Schönberg's mirror forms is evident and does not require further clarification. Purini continues by introducing a specification regarding the notion of the architectural element:

Clearly, the most basic element should be defined in relation to the minimal subdivision possible of the primary functional element in its geometrical development, and beyond any analytical-cellular interpretation of the architectural setting.³³⁶

Here, the functional dimension is introduced for the first time. Whereas the elements were previously considered in their structural and figurative dimension, the function of the element also needs to be qualified, even if this specification only indicates the primary character of function and not a conventional understanding of function; in other words, which function would correspond to each element. The functional dimension that the composition requires to become a concrete proposal is still open to the particular interpretation applied in a specific design situation.

In conclusion, Purini summarises his definition of architectural composition and describes the characteristics of its drawing:

³³⁵ Purini, 'Note sulla composizione architettonica', 69. (Writer's translation).

³³⁶ Ibid.

Ultimately, the composition is a definition of 'dense blocks' of real or virtual three-dimensionality; in other words, the maximum or minimum concentration of three-dimensionality compatible with the constitutive objects of the (architectural) element.³³⁷

The drawing obtained, endowed with structural properties of reciprocal compensation between the constitutive elements, affects all degrees of the design process at all levels, including the modulation of the structure, which should follow the rhythmic succession of the classes of 'dense blocks'. Hence, the modulation of the compositional structure should not be chosen according to conventional rules based on a constant axial modulation (even though the results of the process might also produce a regular grid).³³⁸

What Purini calls 'dense blocks' are generative architectural elements, and, more specifically, the way in which the grammatical elements 'generate' architecture, both in theory and in practice, a difference that is insignificant here. In the context of music, the 'dense blocks' could be associated with material discovered and identified by means of notation during the compositional process, perhaps consisting of particular fragments of tunes which the composer recognises could have a structural role in the creation of a musical composition. In the case of writing, the term could refer to a paragraph or note that might be used or developed in a different context when the situation presents itself. Even more specifically, it could be exemplified in literature by the relationship between short stories and novels, where narrative traces or characters from the former may at times be developed further in the latter. In architecture, this corresponds to preformed compositional material used as a means of constructing a corpus through which the architect establishes a system of relationships of different kinds and for different purposes. In fact, it is precisely for this reason that conventional aspects of architectural conception (such as architectural precedents, function, or the architect's inspiration) are not *a priori* necessary in Purini's procedure. These approaches can only access the architectural project laterally, in the event that in a more or less relevant role they might at some point become part of the system of relationships established in a compositional elaboration in a revised form, in other words through their re-drawing. Thus Purini's 'dense blocks' find their most specific purpose not as actual architecture but as representations.

³³⁷ Ibid.

³³⁸ Ibid. It could be argued that research on the architectural elements, in deriving compositional rules, finds an analogy in John Hejduk's projects, 'Texas House no. 1 and no. 2', where the theme of the veranda – a structurally labile architectural element – is reinterpreted as a primary element for the composition of the house. See John Hejduk, *Mask of Medusa: Works 1947-1983* (New York: Rizzoli, 1985), 42 and 222-225.

In synthesis, the dense blocks are elements of the composition that can be regarded as both autonomous and heteronomous; that is, they can be qualified architecturally by their potential to be interpreted functionally, typologically, constructively, and so forth. As discussed in Chapter 1 regarding the phenomenon of *Architettura disegnata*, it is only within the representation that these devices are able to play a relational role – theoretical or practical – in different contexts of design research, depending on the situation. The notion of dense blocks will find its acme in the ‘Classificazione, per sezioni, di situazioni spaziali’, a drawing that was realised as a conclusive step in Purini’s proposal for an architectural language.

An example of the composition of architectural signs is presented in FIG. 2.41. The drawing on the left was published in *Luogo e progetto*, whereas the one on the right is arguably a later reworking of the first drawing in the form of a perspectival view with minor variations. It was published in *Aforismi architettonici*.³³⁹ The illustrations present a linear sequence of architectural forms generated by signs, resting on a base and variously connected to one another, but still maintaining both a degree of individuality and legibility of the intervals. The original formal language is recognisable, but also Purini’s non-rigid application of his method. Furthermore, even if the particular function or programme of these compositions is not specified, they do not exclude a functional or, more generally, a programmatic interpretation.

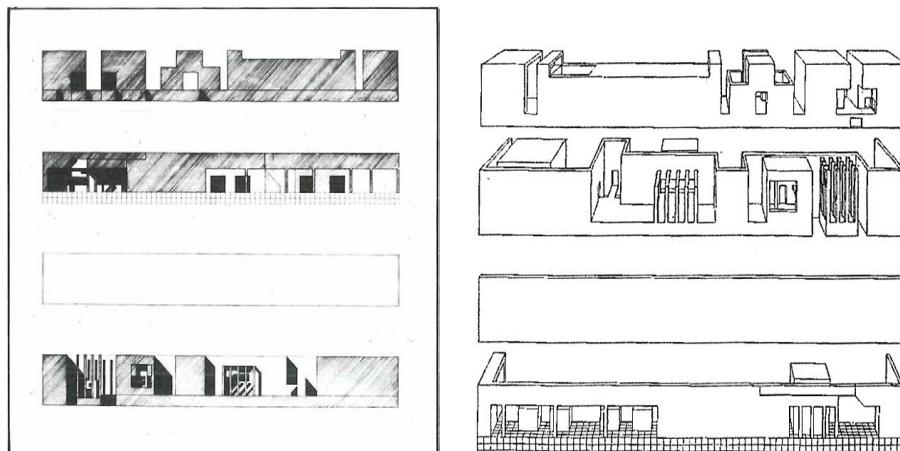


FIG. 2.41 Franco Purini, ‘Una ipotesi di architettura’. Development of architectural signs and intervals on a base (1966–1968). The drawing on the left is certainly from the period 1966–1968, whereas the one on the right, which is a perspectival view of the drawing on the left with minor variations, is presented in *Aforismi architettonici* and was perhaps made at a later date since there are no earlier records.

³³⁹ Purini, ‘Una ipotesi di architettura’, 63, and Purini and Thermes, *Aforismi architettonici*. Illustration of aphorism no. 76.

Supports for the Composition: The Base and the Wall and Their Metaphorical Relationship to the Drawing.

Now that the compositional rules and notational system have been explained, the next step concerns the definition of the support and the manner in which the elements are situated on it. Purini establishes a twofold procedure for this, defining the base as the mediator between the composition and the ground, and with the wall or 'lamellar structure', as Purini calls this last. Thus, one horizontal and one vertical structure. In associating the base and the lamellar structure with the horizontal and vertical directions, Purini establishes a direct correspondence between tectonic and iconographic structures; that is to say, a correspondence between the object and its representation.³⁴⁰

Both Purini's analytical and design research embody the idea of defining a surface as a measuring device, and in doing so establish a correspondence, sometimes metaphorical, sometimes concrete, with the drawing. The base and the wall correspond to the sheet of paper on which architecture is drawn and to its support. In this sense, the architectural project – at least in its conceptualisation – maintains a complete identification with the drawing.³⁴¹ In fact, the 'Programme for the grammatical foundation of architectural language' theorises the most relevant aspect that emerged vividly from the analysis of the project 'La città compatta'. Indeed, it was this link that confirmed the decision to include 'Una ipotesi di architettura', the project 'La città compatta' and 'Ricerche di transizione' in this present research. This decision was therefore a motive that goes beyond an evaluation based on the published material, whose description in the Introduction might lead to misinterpretations.

As indicated above, there is another motive for the choice of a horizontal and a vertical surface: their correspondence establishes a field through which tectonic, distributive and figurative themes can be ideally studied and evaluated, both at the level of a plan and at the level of a façade, which means that the conventional role assigned to the plan as organisation, and to the façade as an image of the building, lose their specificity. According to Purini:

³⁴⁰ The base and the lamellar structure, i.e., the horizontal and the vertical planes, correspond to the typical iconographic structure of Purini's drawing previously discussed in Chapter 2, Section 2.

³⁴¹ One of the most distinctive theoretical contributions elaborated by Purini in the field of the representation concerns precisely the identification between an idea of 'project' and an idea of 'architectural drawing'. While the project imposes an idea of necessity, tending progressively to normalise architectural expression, the drawing tends to conceive spaces of freedom within the rule. Purini's approach attempts to establish a field of consistency between these two opposing tendencies. References that underline the scholarly relevance of Purini's contribution to the field of architectural representation can be found in Livio Sacchi, *L'idea di rappresentazione* (Rome: Edizioni Kappa, 1994), and in Roberto de Rubertis, *Il disegno dell'architettura* (Bologna: Carrocci, 2002).

The base, understood both as a podium on which the series of the architectural objects are placed, and as one of the two significant connections with the ground (the other is support by columns or pillars), establishes a visual tension; in other words, a sense of expectation that enhances the sculptural value of the forms.³⁴²

It is important to note that this formulation relates to the third of Purini's seven techniques of invention: 'Simplification and schematisation of how a building is connected to the ground', which was introduced in Chapter 2, Section 2. It is also important to emphasise that the base is the context in which architectural expression (which for Purini corresponds to the first purpose of architecture) will occur in the form of an apparition. Similarly, the lamellar structure proposes the tension between base and elements through the frontal view: 'Analogous to the base [podium] but developed in a vertical direction, the plane is understood as a page on which the positioned elements 'write' by means of shadows: the vertical plane renders the spatial relationships two dimensional'.³⁴³

The literal action of writing, or more specifically here, the act of drawing on the surface with the shadows, represents an additional element in the correspondence between drawing and architecture. Also worth noting is that this additional characteristic can be found in all of Purini's projects. In fact, there is always an element or elements that have the actual function of presenting the expressive character of the building through its shadows.³⁴⁴

The translation from the base to the lamellar building corresponds to the action of projecting the elements of the series onto a surface: a 'wall' that represents a flattening of the perspectival space. Purini states:

[The] drawings of the lamellae [...] are a reflection on the theme of the skyscraper. Although abstract projects, they do not escape the realism of formal structures or the solidity of an image. They arise from the problem of the recognisability of a formal type when it is translated into another grammatical system. The translation enables the typical elements of an established organism to be compared with those of the system proposed.³⁴⁵

³⁴² Purini, 'Una ipotesi di architettura', 61.

³⁴³ Ibid.

³⁴⁴ See, for instance, 'Casa Pirrello' [Pirrello House] (1990) in Gibellina.

³⁴⁵ Purini, 'Una ipotesi di architettura', 61.

This operation allows the presentation (reduced to the level of proportional relationships) of the elements' apparent inhabitability. This operation means transgressing the convention binding architecture to an idea of form, programme and most importantly, the possibility of being inhabited. Thus, habitability is not a predetermined concept but one reformulated through the project. More specifically, the project redefines the idea of habitation through the construction of an inscription in the realm of representation – literally, habitation is rewritten through an inscription in the very architectural body.

The lamellar building and the base thus become both the subject matter and framework for a continuous investigation through drawing and experimental projects. Specific speculative design exercises centred on the theme of the base and the lamellar building can be found in 'Progetto di ponte a San Giovanni dei Fiorentini a Roma' [Project for a bridge at San Giovanni dei Fiorentini in Rome] (1968), and 'Progetto di edificio lamellare' [Project for a lamellar building] (1968), as well as in the studies of houses in the Roman countryside. These will be presented in Section 6 of this chapter. In these works, the abstract and concrete, representation and reality, the project and the architectural object are maintained in a subtle, unstable, yet productive relationship through drawing (and through the drawing). This corresponds to an idea of drawing endowed with a strong conceptual structure, which is inherent in a grammatical foundation of architectural language.

To return to the analogy with music, one can see that the base and the lamellar structure are similar to a musical stave, which organises pitch and time in a vertical and horizontal direction. In fact, Purini sees this support for the composition as a designed temporal framework, in which the actual distance between architectural elements is a function of the degree of constructive complexity, while the rhythmic intervals are multidirectional.³⁴⁶ The base and the lamellar structure function as a framework that orders and influences the composition of the dense blocks, while at the same time determining their nodal situation; in other words, they are identified in a relationship governed by the support. In fact, the composition of the elements derives its spatial effect not only from the rigour of the elementary forms but also from the programmatic schematic: the reciprocal position of the objects, provided by the support. Furthermore, the architectural definition of this characteristic acquires a specific interpretation. These supports can be regarded as physical entities with a thickness, which implies that the placement of the compositional elements on the support is also an operation that requires a particular procedure.

³⁴⁶ See Purini, 'Note sulla composizione architettonica', 69.

The drawing below shows an example of a base structure with all its recognisable characteristics: the structure of the intervals, the stratified material of the base, and the nodal locations for positioning the elements.

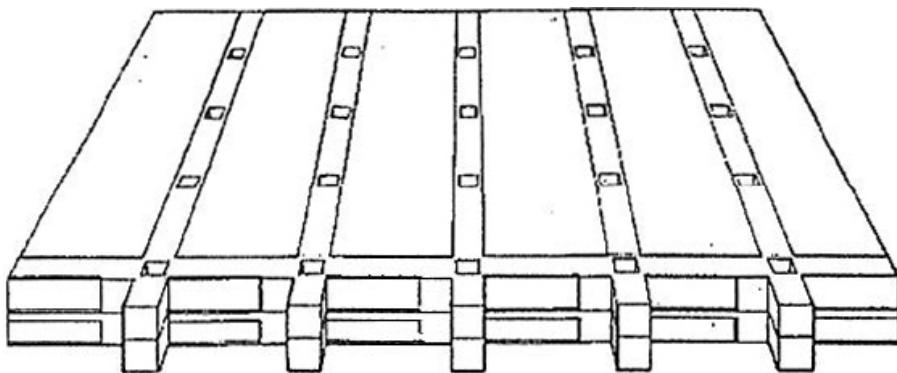


FIG. 2.42 Franco Purini, The support for the architectural composition.

The connections between the architectural elements and the base (or lamellar structure) are illustrated in FIG. 2.43, a drawing first published in *Controspazio*, no. 11-12 (1972).³⁴⁷ The organisation of the upper part represents a series of situations in the relationship between 'dense block' elements and the base. Once again, the section and the side views cannot be considered explanatory diagrams of the intended relationships, but something more and less than this: they are an exemplary solution. For instance, the first connective situation at the top left presents a massive element, which therefore belongs to the first transformational series of volumes. In the act of being positioned, it creates a depression in an area of the base. A variation of this theme is presented in the second example at the top left. Here, the placement of the element produces a transformation in both it and the base. This mutual transformation is also developed in the third and fourth example, but in these cases the element does not belong to the first transformational series, but to the second and third, namely the cube constructed from planes and linear elements. In the fifth and sixth example, all the transformational classes participate in the definition of the element and are further transformed during their placement on the base. If the solutions involving the base element concern the tectonic aspect of architecture, then the example for the lamellar structure refers to the figurative dimension. For the vertical structure, Purini made only frontal drawings.

³⁴⁷ Franco Purini, 'Ricerche di Progettazione', in *Controspazio*, no. 11 (Bari, Edizioni Dedalo, 1972), 23.

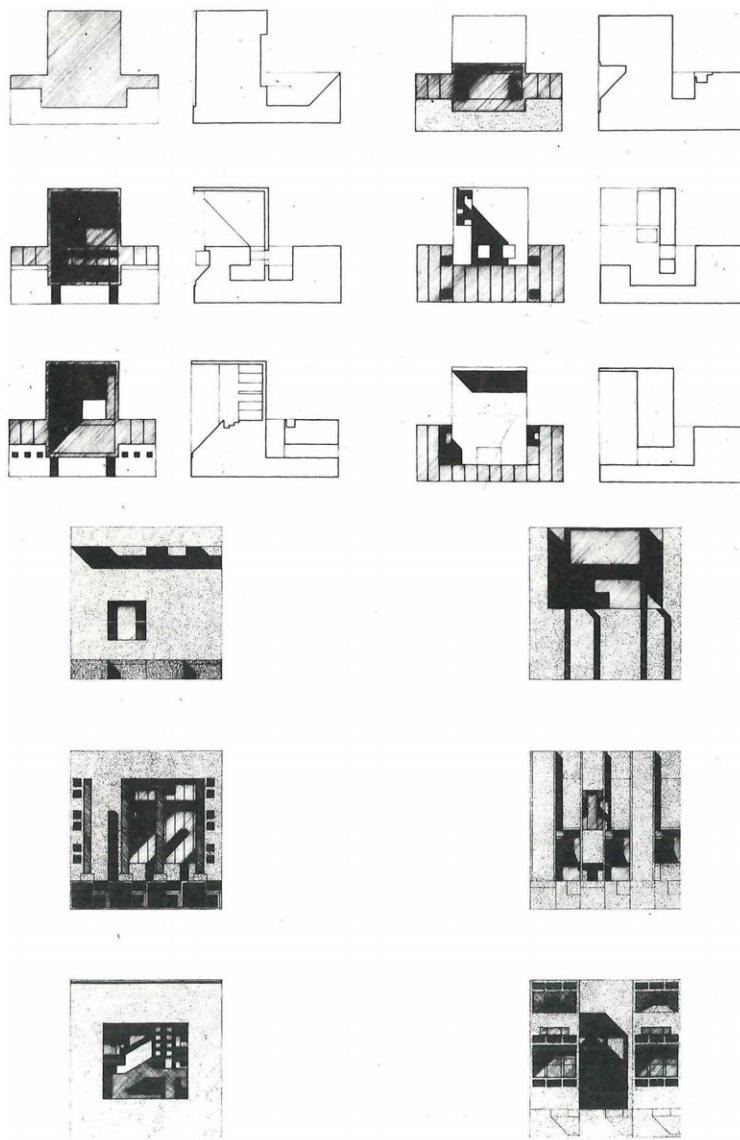


FIG. 2.43 Franco Purini, Relationship between base and volume and relationships in elevation between flat surfaces (walls and slabs) and linear elements (pillars, portals, towers) 1966-1968.

As in the previous set, the examples first make use of elements belonging to the first transformational series, then the second and third and their interrelation. In the last two drawings, the elements are generated by all three transformational classes. In the second set in particular, one can see that the relationship between element and lamellar structure comprises three main solutions. In the first, the elements protrude and the shadow is used to draw onto the surface of the lamella (see the first example); the second solution consists of a hole in the neutral surface where the light that penetrates into the structure reveals and describes unimaginable compositions of architectural elements belonging to various transformational classes. (See the bottom left drawing. The surface here becomes a frame for what could be considered an artificial landscape composed of architectural elements). The third solution combines the previous two. Here, in some cases, the very idea of surface is challenged by its interrelation with the elements (see the drawing on the mid-right-hand side). Lastly, it should be noted that none of these drawings has a recognisable scale, nor it is possible to identify a specific function. Yet all of them can be reinterpreted both in terms of scale and function if further developed on a specific design situation.

2.4.6 **The Project of a Temple as an Accumulation of the Research Concepts**

The experimental phase of 'Una ipotesi di architettura' ends with a project that gathers together in a sequence of constructions all the notions that have been developed in the 'Programma di fondazione grammaticale del linguaggio architettonico'. More specifically, in this project Purini aims to 'construct' a building that indexes all the elements and phases that define architecture. This includes the identification of a number of points on the building that allow for a creative approach, such as the ones evaluated above, namely the connection between the architectural elements and the base or lamellar structure.

The project concerns the temple, an architectural type that epitomises the relationship between language and architecture and the possibility of generating any building from it. Moreover, the temple is characterised by the individuality of all its parts, arranged according to a comprehensive compositional principle.

'Base, lamellar element [*lamella di bordo*], framework, stairs, monumental element and pyramid are presented as architectural features. The reference to the classic temple attempts to identify a formal architectural 'type' as a potential generative core for any building: it is the archetype *par excellence*, the only structure whose parts comprise the most significant series of variations.'³⁴⁸

³⁴⁸ Purini, 'Una ipotesi di architettura', 63. (Writer's translation).

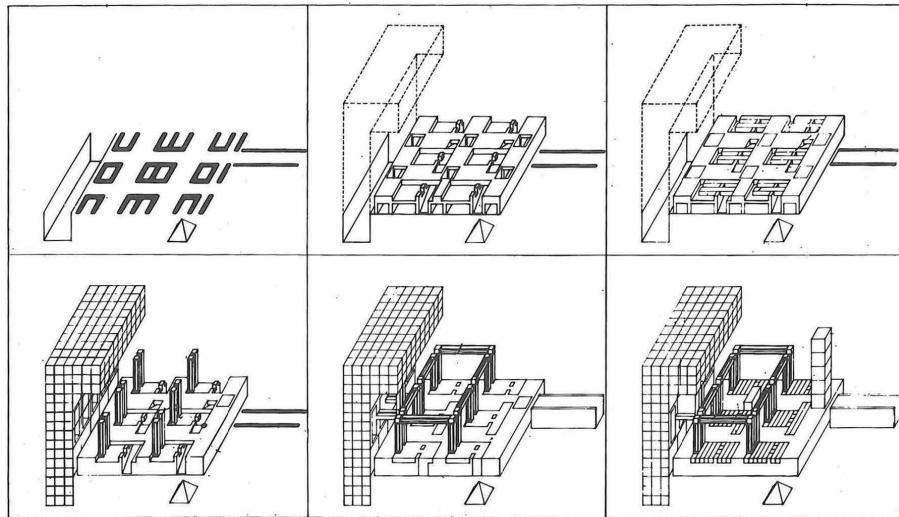


FIG. 2.44 Franco Purini, Study of the relationship between the base, volumes and linear elements. Analysis of the process of 'construction'. Axonometric drawings indicating the phases of temple construction.

Here, as in the previous drawings, the abstract architectural elements of the series acquire a specific architectural definition so that the linear elements become columns/pillars and framework/trilithon structures, while, for instance, the base becomes a podium: the *stereobate*. The constructive phases of the temple begin with the three distinct defining acts: the drawing of the compositional structure of the plinth or *stereobate*, the excavation of the ground to give stability to the lamellar structure, and the simple placing of the little pyramid: the token sign of a temple consisting of only one element. The second and third constructive phases include drawing the outline of the base and lamellar structure, thus determining the conceptual definition of the support for the composition. Their qualification as architecture and their representation in a material form only begins in the fourth phase, together with the construction of the *stereobate* and the placement of the paired columns/pillars (or, more simply, the vertical elements). The structural definition of the building is achieved in the fifth phase with the completion of the base, the positioning of the *architrave* (or the horizontal connecting elements, if this structure is interpreted as a framework) between the columns, the erection of the lamellar structure and the insertion of the entrance ramp. In the sixth phase, the temple is completed by laying the *stylobate* on the base and placing the monolithic element at the temple entrance. This element is usually a commemorative element, such as an obelisk, stela or, more simply, a gravestone; therefore, elements that bear an inscription. But why does a stela block the entrance? My hypothesis is that by blocking the entrance and obscuring the view of the temple, the project's intent

compels any visitor to devise an alternative route and experience. This singular gesture suggests that the temple's classical form and interpretation are invalid in this context and must be reconceived.

Although the temple form can be recognised from the description of the constructive phases listed above, a specific typology cannot be determined. It could be argued that in this project, Purini attempted to confront his architectural hypothesis with the concept of the classical and the possibility of reinterpreting it.

2.4.7 **Summary: The Description of Architecture and Architecture as Description**

This section ends with a summary of the main steps of the 'Programma di fondazione grammaticale del linguaggio architettonico' [Programme for the grammatical foundation of architectural language] with particular attention to the theme of drawing. The section is also a link that will introduce the last stage of this theoretical elaboration, namely 'Classificazione, per sezioni, di situazioni spaziali' discussed in the next section.

- 1 Purini's primitive act of construction directs research to the laws that govern the construction of architectural space; in other words, the phases preceding the definition of an (architectural) object, an investigation conducted at the level of architectural language. Purini excludes the historical corpus of architecture as a starting point for research in his conviction that no predetermined architectural language is capable of revealing the rules of a new kind of language. Instead, his research focuses on the grammatical basis of architectural language – the rules of a language prior its definition – in which the ideas of Chomsky and Schönberg are particularly relevant. It is here, in the move from architecture to 'before architecture', that drawing acquires an indispensable conceptual role.
- 2 Given these premises, the construction of a figure in space leads to the definition of a notational system capable of describing the elementary constructive phases of architecture. The research goal becomes the definition of a notational system that can unambiguously define and organise these rules. To undertake research in which the architectural language is founded on its grammar, Purini makes the rules of the language (the grammar) correspond to the organisation and classification of the degree of complexity of a three-dimensional basic structure, in this case, the constitutive elements of a cube.

- 3 These basic elements are organised into three series: volumes, planes and lines, which determine the degree of each element's three-dimensionality. Hence, it is the notational system of the grammar that is able to give a direct description of architectural language and, by extension, of architecture. This notational description is not only analytical and representative of architecture, but also necessarily generative. It is a way of conceiving architecture.
- 4 For Purini, 'Architecture consists in the relationship of degrees of three-dimensionality inherent to classes of volumes, planes, and lines. This relationship exists as soon as the original level of three-dimensionality and the scalar interval – an interval that defines the degree of three-dimensionality – are defined. This interval, chosen for one of the elements from one of the three classes [volumes, planes, and lines], consists of establishing the number of operations (spatial, geometric, distributive) that are subtracted or considered inherent in the passage between an object 'A' and an object 'B' of the class in question. In doing so, the series obtained – more or less dense in intervals and intersected or not by the other two parallel series – establishes the 'supporting' core of the architectural notation.'
- 5 The elements are placed on a support similar to the musical stave, a system that can identify the degree of three-dimensionality of an element from its position on it. By knowing the position of the element on the support, its spatial complexity can be described.
- 6 The elements are placed on a support similar to the musical stave, a system that can identify the degree of three-dimensionality of an element from its position on it. By knowing the position of the element on the support, its spatial complexity can be described.
- 7 Once the characteristics of the grammar and the notational system are outlined, and once the notions of the three-dimensionality of the element and the interval are clarified, Purini derives the associated concepts for the structural definition of the programme: the notion of architectural sign, the notion of the base and lamellar structure and, finally, the notion of architectural composition.
- 8 The architectural sign is the notation that provides a comprehensive description of the three-dimensional elements of the classes (volumes, planes and lines) placed on a support.

- 9 The architectural sign allows for the definition of the architectural composition: the stage where the conceptual structure unites with all the other architectural aspects that were omitted in the formulation. Purini sees the composition as a sequence of well-formed architectural signs capable of establishing a relationship with the building's function, materiality, context, and its relationship with historical precedents.
- 10 At the level of the composition, the support is specified architecturally as a base and lamellar structure. The base also links the elements with the ground, while the vertical structure (the lamella) also becomes a surface for evaluating the figurative dimension of the elements, drawn with their shadows. The link between the two types of support also implies the possibility of a tectonic interpretation of the element projected on a vertical surface and, conversely, the possibility of a figurative interpretation of the elements in the horizontal dimension (figurative-tectonic). Both the base and the lamellar structure are also two explicit metaphors for the sheet of paper on which they are drawn. Hence, the correspondence between notation and architecture is not only conceptually describable but is also immediately visually recognisable.
- 11 Consequently, the notation that describes the architectural project identifies the relationship between the compositional elements (dense blocks) and all the other architectural aspects. In other words, the project takes the form of a drawing that visually and conceptually describes in a unitary graphic structure the elements of the composition and the system of relationships they establish. This drawing simultaneously incorporates the representation of the architectural object and the principles regulating the relationship of its parts.

The next section will discuss the characteristics of drawing (and of the drawing) as the identifying moment of the architectural project.

2.5 The Drawing: ‘Classificazione, per Sezioni, di Situazioni Spaziali’ [Classification, by Sections, of Spatial Situations] (1968)

Drawing has meaning only if we seek disorder, if we explore chaos and if we explore obscurity.

Franco Purini³⁴⁹

2.5.1 Introduction

The drawing ‘Classificazione, per sezioni, di situazioni spaziali’ [Classification, by sections, of spatial situations] (1968) can be considered the foundation stone of Purini’s hypothesis of architecture. Related to the ‘Programma di fondazione grammaticale del linguaggio architettonico’ (1968), which has been extensively discussed in the previous section, the ‘Classificazione’ represents its crucial development. In fact, the ‘Classificazione’ demonstrates how drawing identifies the overall notion of an architectural project. Since the project is ultimately identified by a single drawing, this means the conceptual framework of the drawing can be isolated and expounded within Purini’s dense formulation.

More specifically, the exercise leading to the ‘Classificazione’ involves defining Purini’s typical spatial situations in architecture through configurations of elements that examine the principles devised in the ‘Programma di fondazione grammaticale del linguaggio architettonico’. However, the ‘Classificazione’ is not merely the result of applying the architectural language Purini has formulated; rather, it should be viewed as its epiphany. It crystallises the moment in which the potentially infinite proliferation of formal architectural compositions generated by Purini’s grammar is halted in the definition of a finite series of seventy-two configurations of his representational dense blocks. With this operation, Purini’s formulation of a language system, although devoid of a notion of (architectural) expression³⁵⁰ and

³⁴⁹ ‘Il disegnare ha un senso solo se si cerca il disordine se si esplora il caso, se si esplora l’oscurità’. In Franco Purini, ‘Tre aforismi per Franco su quattro’, in: *Dal progetto. Scritti teorici di Franco Purini 1966-1991*, Francesco Moschini, and Gianfranco Neri eds. (Rome: Edizioni Kappa, 1992), 363.

³⁵⁰ This argument has also been discussed in the research section on Manfred Mohr, and again in the conclusion to Chapter 2, Section 2..

of an (architectural) object, undergoes a radical experimental application. This does not lead to the proof of its validity, but reveals the limits of architectural language, both as an ordering criterion and as a generative apparatus. If the formulation of an architectural language system corresponds to the constructive moment of Purini's research, then the 'Classificazione' corresponds to the experience of its destruction.³⁵¹ It records it and, ultimately, reveals itself as a project to be continued – a hypothesis of architecture.

But what does the project actually hypothesise? And how does the drawing manifest it? How does the 'Classificazione' relate to the premises of 'Una ipotesi di architettura'? What role does Purini's grammatical approach play within the 'Classificazione'? And again: if the 'Classificazione' is not – or not primarily – the unified representation of the design methodology derived from applying Purini's language system, (as one might be led to believe on first seeing the drawing), but instead is evidence of the limits of architectural language, then what kind of relationship exists between these two alternative interpretations of the work? If the ambivalence between the desire to create a constructive, rational approach and the exposure of its fictional nature cannot be resolved but only represented and sustained by a drawing, is this then confirmation of the indisputable and definitive necessity of drawing?

In order to start positioning the 'Classificazione' in relation to Purini's work on the one hand, and on the other in relation to the focus of this present research, let me return to an observation I made in the previous section concerning the precision of Purini's illustrations of the three transformational series, and the notions of architectural sign and architectural composition. I suggested that Purini's representations do not primarily aim to denote content – they are not directed towards translating a concept from one linguistic system to another, or from one notational system to another (i.e. from words to lines). Instead, for him, images are always something more or something other than a direct translation. The representation is always an occasion for investigating the intrinsically ambiguous, if not contradictory, nature of the image.³⁵² Above all, Purini's images are strongly tied to the *hic et nunc* of a wider field of references that are irreducible to a unique

³⁵¹ I refer again to Bart van der Leck's notion of the constructive character of architecture and the destructive character of painting, characteristics that my research sees as coexisting in the idea of architectural drawing as discussed in Chapter 1. See Bart van der Leck, 'De plaats van het moderne schilderen in de architectuur', in *De Stijl*, no. 1 (Delft: Technische boekhandel en drukkerij J. Waltman Jr, October 1917), 6.

³⁵² On the relationship between Purini's writing and drawing, see Francesco Moschini, 'Lo spazio e le parole', in *Del Progetto. Scritti teorici di Franco Purini 1966-1991*, eds. Francesco Moschini and Gianfranco Neri (Rome: Edizioni Kappa, 1992), X-XII.

content. This characteristic aspect of Purini's drawing will be further expanded in examining and demonstrating the particular role of the 'Classificazione' and understanding its contents, which represent (and not merely illustrate) Purini's hypothesis of architecture. The following investigation aims to substantiate the hypothesis that architectural drawing is an indissoluble coexistence between a mode of enquiry that constantly questions premises and results, and a datum that embeds a project, therefore establishing a moment of stability in the enquiry.

Furthermore, I should also restate that my hypotheses, which order the problematic framework and structure of this present research and its choices, are a response to a constant attempt to establish an iconographic interpretation of the 'Classificazione'.

Indeed, this text results from a lengthy, tentative approach to the 'Classificazione', which, to date, has not been the subject of a dedicated analytical study within the scholarship. It was first published, but not commented on, in *Controspazio*, in 1972,³⁵³ and Purini provides very basic information in *Luogo e Progetto* (1976).³⁵⁴ Equally, scholarship on his work is predominantly limited to commentaries that are valuable contributions, but not sufficient to reveal or organise the complex structure of meanings contained in this drawing.³⁵⁵

Yet precisely what might seem Purini's paradoxical lacuna in presenting his work, (any argument of a deliberate 'artist's well-kept secret' attitude would oppose his explicitly stated didactic intention in his research and should be therefore excluded) and the inadequacy of the scholarship in recognising the range and the critical implications in his work, may be explained when one considers the ambivalence of the role assigned to drawing in 'Una ipotesi di architettura'. In fact, in Purini's research, drawing acts as a mode for an architectural investigation

³⁵³ Franco Purini, 'Ricerche di progettazione', in *Controspazio* nos. 11-12, Nov./Dec. (Bari: Dedalo, 1972), 25.

³⁵⁴ Purini, 'Una ipotesi di architettura', 63. Despite the fact that Purini repeatedly refers to this published work, to my knowledge, he has never thoroughly explained it.

³⁵⁵ Reflections on Purini's 'Classificazione' can be found in Francesco Moschini, "Disegni d'invenzione": Progetti di Franco Purini 1966-1976', in Franco Purini, *Luogo e progetto*, 4-10; in Manfredo Tafuri, "L'architecture dans le boudoir", in *La sfera e il labirinto: Avanguardie e architettura da Piranesi agli anni '70*, 341. English translation, "L'architecture dans le boudoir", in *The Sphere and the Labyrinth: Avant-Gardes and Architecture from Piranesi to the 1970s*, 280; in Adriana Soletti, 'Regesto dell'architettura disegnata in Italia', in XY. *Dimensioni del disegno*, no. 10, 1968-1988. *Vent'anni di architettura disegnata* (Rome: Edizioni Kappa, 1986): 105-130 (page 106); and in Marcello Sestito, 'Classificazione per sezioni/ regole e prototipi', *Alfabeti di Architettura* (Rome, Gangemi Editore, 1994), 157-162, which also includes a discussion of all the previous sources just indicated; Giorgio Muratore, 'Il segreto dell'abaco dei morfemi...', in Monica Manicone ed., *Architettura. Sostanza di cose sperate. Scritti in onore di Franco Purini* (Reggio Calabria: Irriti Editore, 2017), 191-196.

and as a notational system that organises the enquiry.³⁵⁶ I argue that Purini did not exhaustively 'explain' the 'Classificazione' precisely because of its value as the foundation of his research. The foundation is an event that is, by definition, unrepeatable, irreplaceable, and only affected by its own contingencies; it implies the absence of precedents and the impossibility of predetermining an outcome.

Although Purini's continual reference to the importance of the 'Classificazione' finds no correspondence in any actual in-depth examination of the material, this suggests that the lack of information was his conscious decision. Wittgenstein's famous last line of the *Tractatus Logico-Philosophicus*: 'Whereof one cannot speak, thereof one must be silent.'³⁵⁷ could well explain the decision not to clarify this work, but it would be incorrect to see it as a casual decision.

As I argue here, Purini's response to the 'Classificazione' is not silence but rather a lateral and deferred communication. This is precisely because it is not possible, or is too complex, to say something definitive about the 'Classificazione'; it can only be engaged with through subsequent, dislocated, and fragmented clarifications that are recollections, during which its meaning is continuously rediscovered and expanded.

The following investigation of the 'Classificazione' is legitimised by this problematisation. I will first discuss Purini's description of this work in relation to the content of 'Una ipotesi di architettura', then conduct the examination in two directions:

- the first direction provides the study with a basic structure, consisting of a series of graphic analyses and written descriptions on the document itself. These aim to expound the main characteristics of the drawing and its formative process. I consider the 'Classificazione' both as a unity and as a series of seventy-two drawings, analysing their individual content and the transformative aspects in the development of the series;
- the second direction parallels the formal analyses and discusses both direct references and evidence scattered throughout Purini's writings and in his investigatory drawings and projects, as well as commentaries on his work by other scholars. In particular, inferences obtained from work on the sources are also evaluated and developed in relation to the annexed graphic analyses.³⁵⁸

³⁵⁶ This indissoluble relationship is considered the cardinal aspect for accessing Purini's extensive production, including his approach towards architectural research, and is the aspect this present work intends to address.

³⁵⁷ See Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*, trans. David Pears and Brian McGuinness, 2nd ed. (London: Routledge Classics, 2001), 89.

³⁵⁸ The complete documentation of the graphic analysis can be found in Appendix 1.

2.5.2 The Relationship Between the ‘Classificazione, per Sezioni, di Situazioni Spaziali’ (1968) and the ‘Programma di Fondazione Grammaticale del Linguaggio Architettonico’ (1968)

The ‘Classificazione’ develops the formulation of a grammatical base for architectural language and a corresponding notational system (discussed in the previous section) within the unifying structure of a cube. In ‘Una ipotesi di architettura’, which summarises the research published in *Luogo e progetto* (1976) the first, but meagre, account appears of the ‘Classificazione’: ‘The possibility of spatial subdivision of a cubical section is a further aspect of this research. Seventy-two sections, starting from the most common ones, identify a series of relations between the perimeter of the volume and the elements.’³⁵⁹

This short note enables a number of observations:

- The generic organising support of the linear and surface compositions of cube elements also becomes a cube. This implies a definition of the notion of ‘support of the composition’ with the same formal language adopted for the three-dimensional elements. This reduction enables (and ideally enhances) research within a unified system, namely the relationship between the two main aspects of the composition (elements and support), which were already considered as a complex design problem consisting of the organisation of the degrees of three-dimensionality of the elements in formulating the relation between elements and ground, and, when the support is considered in its vertical position (as a lamellar structure), in investigating the composition’s figurative dimension.
- At the same time, the representation technique that in the previous examples consisted of a freer mix of conventional representation techniques are here united in a single technique. Whereas Purini previously made use of vertical sections, top and frontal views (see, for instance the representation of the three transformational series), sometimes including shadows drawn to increase the volumetric legibility of the object represented, as well as axonometric projections (as in the case of the project of the temple), in the ‘Classificazione’, the role of representing all the characteristics of his hypothesis is now assigned to the section.
- The reduction of all techniques of representation to the section (whose vertical or horizontal orientation is left unspecified) corroborates the aim of the ‘Programma di fondazione grammaticale del linguaggio architettonico’, namely the proposition of a new notational system. The regularity granted by the cube’s boundaries also enables the incorporation of the idea of the frontal view. As I explained in previous sections, this constitutes one of the most distinctive features of the graphic structure in Purini’s drawing.

³⁵⁹ Franco Purini, ‘Una ipotesi di architettura’.

- Another fundamental remark concerns the specification: 'Seventy-two sections, starting from the most common ones, identify a series of relations between the perimeter of the volume and the elements'.³⁶⁰ Therefore, the typical character assigned to the section does not refer primarily to precedents, but must be evaluated within the internal developmental logic of the 'Classificazione'.
- Lastly, I must emphasise that in the 'identification of the spatial subdivision of a cubical section'³⁶¹ (without further specifying its character), Purini assigns the representative role of identifying the architectural project as a whole. This designation implies that the cube form is the reference system maintained throughout the investigation.

2.5.3 **Description of the 'Classificazione, per Sezioni, di Situazioni Spaziali' (1968)**

This paragraph presents a selection of my analyses of the 'Classificazione', aiming to reveal its main characteristics and formative process. Besides Purini's own indications discussed earlier, the investigation was prompted by the title itself: 'Classification, by section, of spatial situations'. It clarifies how the sections represent spatial situations and what types of spatial situations are actually represented.

The word 'situation' is fundamentally important for understanding the meaning of this drawing. In fact, if the situations in the title can also be interpreted as a complement to the word 'spatial', meaning 'types of spaces', then the word 'situation' should also be understood literally as Purini's written description of the moment and condition in which they were drawn. The descriptive act thus becomes a method for accessing the genesis of the drawing in relation to the ideas Purini formulated during his research. Hence, the 'spatial situation' needs to be understood beyond its conventional meaning and associated with the definitions of 'architectural sign' and 'composition' as theorised by Purini.³⁶² Each section identifies a dense compositional device capable of orienting the formal choices of an architectural project or, more generally, an architectural problem.

³⁶⁰ Ibid.

³⁶¹ Ibid.

³⁶² Supporting this extensive interpretation is also the consideration that in the premises of *Una ipotesi di architettura*, Purini claims the need to overcome the conventional idea of architectural drawings and of the way in which they should be perceived. See Franco Purini, (with Gruppo Atrio Testaccio), 'I motivi di fondo – Sulla tecnologia – I problemi della città', in *Grammatica* no. 3 (Rome: Editrice Feltrinelli, 1969), 64-65. English translation 'Fundamental principles – On technology – The problems of the city, (1966)'. (Writer's translation in Appendix 1).

One of the basic characteristics of the 'Classificazione' is that the seventy-two sections are numbered but unnamed; they are arranged in a grid of eight columns by nine rows, which introduces a progression in their development. Furthermore, the sections can be interpreted both horizontally and vertically without any predefined scale or analogy to other building types, since there are no specific indications.³⁶³ Any association with aspects that are external to the data in the drawing, or Purini's technical clarification of the exercise in relationship to his language-system, are only secondary aspects that emerge during the course of the analysis or in its conclusion, but are never in themselves fundamental to the description.

Similar considerations apply when considering the relevance of the 9x9 box grid that anchors the composition of the elements in the section. The 9x9 grid provides a great variety of configurations that not only increases the compositional possibilities but also makes any reconstruction of their genesis or interpretation by direct observation very complex. In synthesis, to rephrase Purini's definition of the exercise, the section aims to represent the possibility of subdividing the internal space of a cube by investigating the relationship between the perimeter and elements arranged within a 9x9 box grid.³⁶⁴

³⁶³ In *Alfabetti di architettura*, Marcello Sestito claims that the sections of the 'Classificazione' represent cubes of approximately six metres. This scale could correspond to a minimal construction, for instance a small house, and may certainly be pertinent, but Purini has not specified it. Furthermore, this assumption could also be misleading in any interpretation of the 'Classificazione'. In fact, it would contradict the notion of the 'a-scalarity' of architectural elements that Purini considers instrumental in instigating the architectural invention. This theme has been clarified by Purini in the proposition of the seven techniques of invention, and in particular in the technique of 'estrangement', discussed in Chapter 2, Section 2. See Marcello Sestito, 'Classificazione per sezioni/regole e prototipi', in *Alfabetti di Architettura* (Rome, Gangemi Editore, 1994), 157.

³⁶⁴ Obviously, the 9x9 box grid can also be interpreted as a 3x3 box grid or as a single square. John Hejduk has fully investigated the didactic qualities of the 3x3 box grid in design research, and they could also be extended to the present case under investigation. However, the combinatorial possibilities are enormously increased in the 9x9 scheme, and this leads to the question of its didactic purpose. In *Mask of Medusa* (1985), Hejduk writes: 'The nine square problem is used as a pedagogical tool in the introduction of the new students. Working within the problem the students begin to discover and understand the elements of architecture. Grid, frame, post, beam, panel, center, periphery, field, edge, line, plane, volume, extension, compression, tension, shear, etc. The student begins to probe the meaning of plan, elevation, section and details. He learns to draw. He begins to comprehend the relationship between two-dimensional drawings, axonometric projection, and three-dimensional (model) form.' See John Hejduk 'The Nine Square Problem', in *Mask of Medusa: Works 1947-1983*, ed. Kin Shkapich (New York: Rizzoli, 1985) 37.

The analysis progresses through various stages. The first is the most basic form of re-description and consists of a detailed survey of the original 'Classificazione' and its redrawing in CAD in order to obtain the basic compositional content and a reliable basis for analysis (FIG. 2.45 Left).³⁶⁵ As a side note, this present survey has also identified numerous inaccuracies in a previous CAD redrawn version of the 'Classificazione' realised by Purini-Thermes's office and used in recent publications, such as in *La città uguale. Scritti scelti sulla città e il progetto urbano dal 1966 al 2004* (2005). More specifically, the imprecisions concern sections: 3, 5, 7, 9, 12, 13, 14, 20, 24, 25, 28, 33, 35, 37, 38, 44, 46, 50, 54, 55, 56, 57, 58 (debatable), 59, 60, and 63. In older publications, such as in the journal *Controspazio* nos. 11-12 (1972), the reproduction is correct even if not all details are legible.³⁶⁶

The second operation consisted of an interpretative analysis of the three-dimensionality of the seventy-two sections of spatial situations. The spatial situations are investigated through the volumetric complexity implied by the sections and rendered legible by shadowing the elements (FIG. 2.45 Right), by indicating the minimum amount of extrusion required to describe the line composition of the section (FIG. 2.46 Left) and, lastly, by regrouping the sections in classes of homogeneous three-dimensional complexity (FIG. 46 Right). This investigation has shown that there is no specific correlation between the progression of the sections and the increment of the volumetric complexity. From this it can be derived that, in some cases, the spatiality of the section can be interpreted through a three-dimensional development implied by the configuration of the signs, while in other cases, the spatiality of the section is conceived within the composition of the section. Furthermore, it was also possible to observe that not all sections have a univocal, clear and unambiguous volumetric description. The volumetric interpretation of Section 58, for instance, is highly indeterminate from a constructive point of view, and even though it can be classified within the "3 modules" category – representing the highest level of spatial complexity among the three identified classes – the interplay of planes implied by the section remains indecipherable.

³⁶⁵ See Appendix 1.

³⁶⁶ See Purini, *La città uguale* and Purini, 'Ricerche di progettazione', in *Controspazio*, no. 11-12, 25.

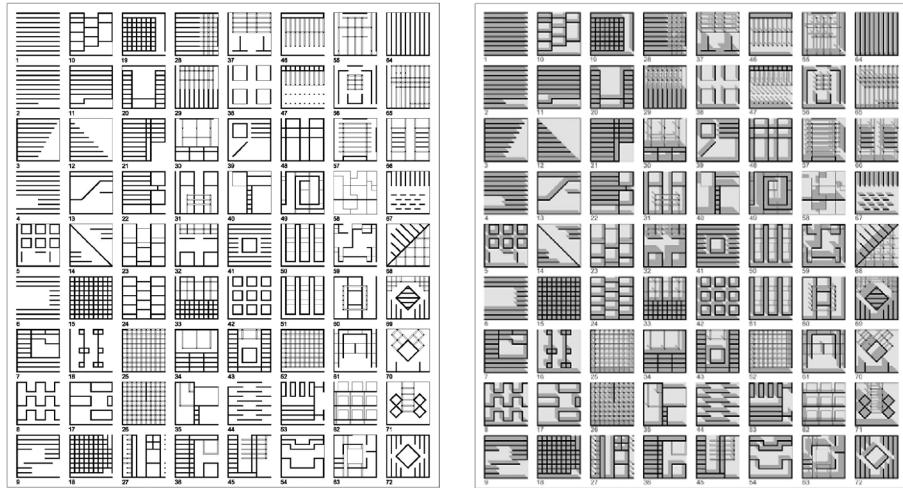


FIG. 2.45 Left: CAD drawing of Franco Purini's original work. Right: 'Interpretative Analysis of the three-dimensionality of the 72 sections of spatial situations'. (Author's images.)

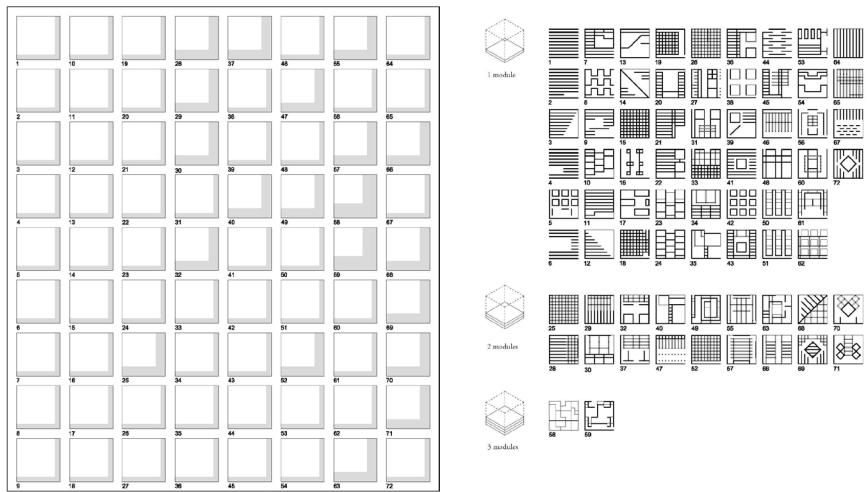


FIG. 2.46 Analyses of the three-dimensional complexity of the spatial situation sections. The spatial situation is investigated through the volumetric complexity implied by the sections. The volumetric complexity is represented by indicating the minimum amount of extrusion required to describe the line composition of the section; 'Classes of homogeneous three-dimensional complexity'. (Author's images.)

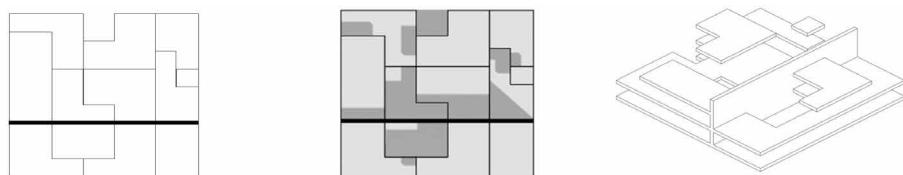


FIG. 2.47 Section 58: Volumetric interpretation. (Author's image.)

Since the specific characteristics of the spatial situations are not given and, since the sections cannot be exclusively and univocally assigned to a corresponding volume, the analysis proceeds by examining the spatiality of the composition. This leads to identifying, at an immediate perceptual level, classes of homogeneous compositional structures (FIG. 2.48).

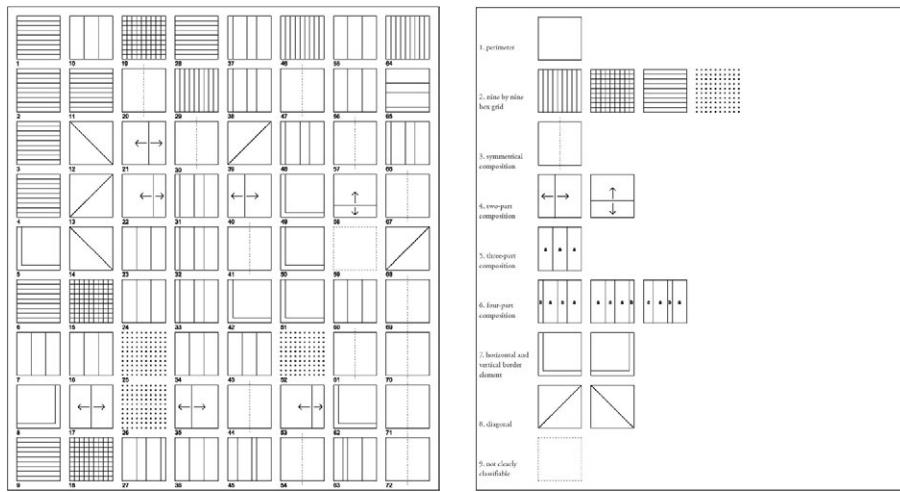


FIG. 2.48 Classes of homogeneous compositional structures. Main compositional themes: 1. The perimeter; 2. The 9x9 box grid, the sequence of vertical or horizontal lines, or the grid points; 3. Symmetrical composition; 4. Two-part composition; 5. Three-part composition (equal); 6. Four-part composition (parts are different); 7. Horizontal and vertical border element; 8. Diagonal; 9. Other configurations that cannot be classified. (Author's image)

The main recurring aspects of the composition are the marking of the complete border of the composition, the marking of a corner of the composition with a horizontal and vertical border element, compositions based on the 9x9 box grid, symmetrical compositions, non-symmetrical two-part compositions, three-part (equal) and four-part (unequal) compositions, and the diagonal element. Note that the composition of the sections is not restricted to the application of a single compositional theme or technique. However, the attribution of a compositional theme or technique to a section serves the purpose of highlighting a dominant aspect of the composition whose generative process will be further specified later.

This third analytical stage leads to several observations regarding the composition of the section. The first highlights the role of the horizontal and vertical border element in disrupting the centrality of the scheme and the simple centre-periphery relationship (FIG. 2.49). This element, which recurs at the bottom and left border in most sections of the 'Classificazione', introduces a left-to-right directionality to the composition while simultaneously serving as its anchor and reference to the basic scheme.

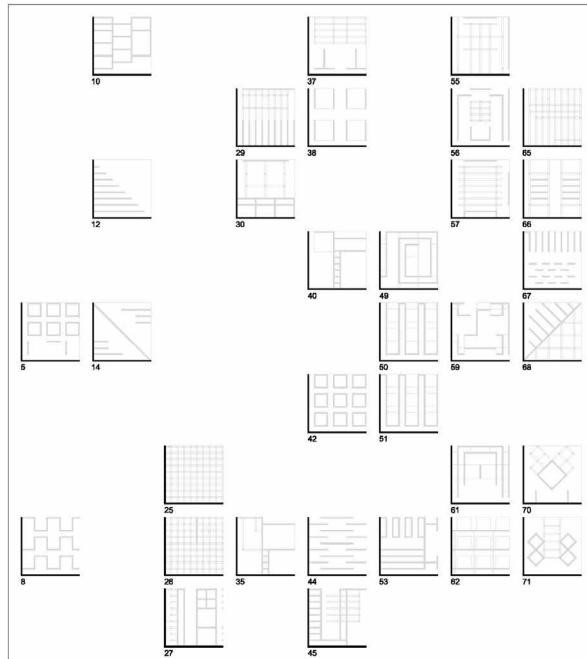


FIG. 2.49 Class of homogeneous compositional structures: the bottom and left border element as generator of the composition. (Author's image.)



FIG. 2.50 Nicolas Poussin, *Paysage avec Diogène* [Landscape with Diogenes], (1647). Oil on canvas.

Furthermore, this specific element enables one to perceive the sections as representations of vertical entities, rather than merely horizontal plans, which an initial evaluation of the drawing might suggest. Consequently, it could be argued that the compositions can also be evaluated as figures, rather than solely as spatial configurations. Marking an edge of the composition is, on the other hand, a typical technique of landscape painting; for instance, the depiction of a tree in the foreground enhances the sense of discovery in the represented scene but also initiates the structuring of the composition.³⁶⁷

Despite their abstract appearance, a further figurative reading of the sections can be made by considering the use of the diagonal in the composition. This technique serves as a rule of thumb in classical painting composition and is employed to position a figure or a particular aspect of it within the compositional field, thereby establishing a narrative among different figures and guiding the observer to focus on the prominent features of the work. The value of this technique lies in creating a dynamic compositional system of balance and counterbalance within the compositional field. In architecture, the diagonal is similarly utilised in the composition of façades, particularly in classical architecture but also in modern buildings, as seen in Le Corbusier's work.³⁶⁸ However, the diagonal finds no explanation in the premises of the exercise, since there are no oblique elements that identify the construction of a cube in space. In light of this, the diagonal represents an exception to the basic principles of Purini's language and so requires further investigation.³⁶⁹

³⁶⁷ The border element and the diagonal progression of the composition is also a feature of Piranesi's 'Carceri d'Invenzione' [The Prisons] (1750, 1761), and a formal analysis could reveal the structural role of these features in achieving their unsettling character.

³⁶⁸ Here, it is sufficient to signal the fundamental work by Matila Ghyka, *Le nombre d'or. Rites et rythmes pythagoriciens dans le développement de la civilisation occidentale* (Paris: Librairie Gallimard, 1931). [*The Golden Number: Pythagorean Rites and Rhythms in the Development of Western Civilization*] (Rochester, VT: Inner Traditions, 2016).

³⁶⁹ Useful to this focus on the diagonal in architecture and the relation between figurative and functional aspects of a composition is John Hejduk's investigation of the diamond composition, considered by him a neglected technique in modern architecture. Hejduk considers the diagonal not only as an organising device for designing a façade but also as a generator of the architectural plan. See Hejduk, 'Frame 3: 1963-1967', in *Mask of Medusa*, 47-55, and 241-252.

2.5.4 Description of the Seventy-Two Sections of Spatial Situations

The next step consists of the close reading of a selection of the seventy-two sections.³⁷⁰ The aim is to attempt to characterise the ‘spatial situations’ from the series of elaborations that are drawn within the boundary of a cube. In addition, given the serial character of the ‘Classificazione’, I will also examine the transformational quality of the sections – a property of the grammar that Purini envisioned. Therefore, each section will be scrutinised as both a separate and related entity. It should be recalled that an investigation of the individuality of the basic architectural construction and its relational aspects already constituted the aim of Purini’s ‘Ricerche di transizione’ (1967), discussed in Chapter 2, Section 3. In the ‘Ricerche di Transizione’, Purini isolates the generative element of the ‘Città compatta’ urban fabric and investigates both its individual constructive and figurative logic and its relation to the homogeneity of the urban fabric.³⁷¹ By extension, the association between the first and the last phase of Purini’s research can be hypothesised, namely between the project of the ‘Città compatta’ and the drawing of the ‘Classificazione’. In fact, since I have already indicated a metaphorical relation between drawing and the ‘Città compatta’ project that began Purini’s research, one could also argue by inversion that a relationship exists between the ‘Classificazione’ and the ‘La città compatta’ and, more generally, between drawing and the city. Furthermore, with specific reference to the ‘Ricerche di transizione’, the investigation of the individuality of the basic architectural element in relation to the homogeneity of ‘La città compatta’ urban fabric is precisely the problem proposed with other means and a more abstract language by the ‘Classificazione’. More generally, scholar Marcello Sèstito already proposed relating the ‘Classificazione’ to the plan of a city. In *Alfabetti di Architettura*,³⁷² Sèstito sees the ‘Classificazione’ sectioned cubes as the ‘houses of an ideal city’, and also as micro-architectures of ‘stiff and a-contextual version of Piranesi’s ‘Campo Marzio’’,³⁷³ thus associating the meaning of the variety in ‘Campo Marzio’s plan with the ‘Classificazione’, which is certainly a pertinent connection. However, these associations remain undeveloped and unsubstantiated suggestions, while the real value for the development of a discourse that could further the understanding of both projects merits a more explicit and in-depth examination.

³⁷⁰ The complete series of description can be found in Appendix 1.

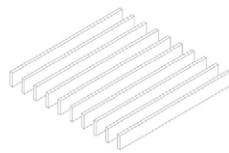
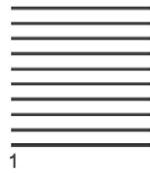
³⁷¹ Purini, ‘Ricerche di transizione’, 52-54.

³⁷² Marcello Sèstito, ‘Classificazione per sezioni/regole e prototipi’, in *Alfabetti di Architettura* (Rome: Gangemi Editore, 1994), 157-162.

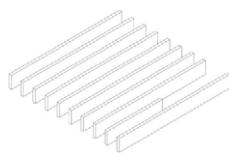
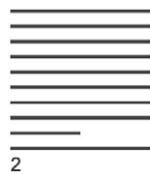
³⁷³ Ibid.

This theme was taken further in the formulation of the 'Programma di fondazione grammaticale del linguaggio architettonico' (1968) by defining these singular elements as 'dense blocks': rough compositional 'material' capable of polarising design choices or defining an architectural problem. My research, while not focused on a specific project or architectural issue, aims to analyse 'preformed' entities through the concept of drawing. The study of formal transformations in the sections serves as a crucial indicator of the degree of individuality exhibited by each section.

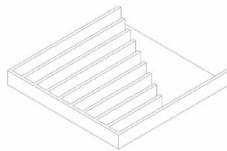
The following description focuses on the first two columns (Sections 1 to 18) of the 'Classificazione' and outlines the step-by-step procedure employed for all seventy-two sections in Appendix 1. My investigation also examines specific classes of sections where the emergence and development of a particular aspect can be assessed, such as the relationship between compositional procedure and spatiality. Lastly, a number of sections will be selected to emphasise characteristics that I consider particularly pertinent for understanding Purini's scheme.



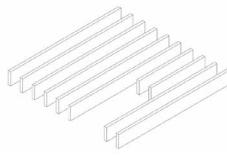
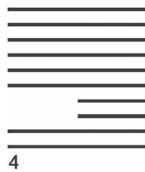
- *Section 1* presents ten identical parallel elements. The spatial complexity is found in the simple iteration of the elements, with equal intervals determining a series of spaces, all identical and identically oriented. In this section, there is no relationship between the architectural elements and the boundary of the cube, which is only implied here. This characteristic leads to the assumption that the spatial construction is achieved by simple iteration.



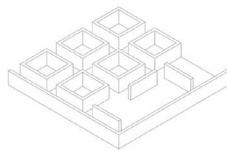
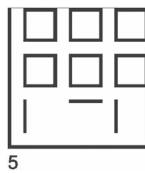
- *Section 2* presents the sudden interruption of one element determining an area within the homogeneity of space by the introduction of a double depth (double span, double height). This operation enables an enhanced reading of the spatial iteration of identical elements by qualifying it with a conceptual component: it is by engaging the conceptual not the perceptual dimension that enables the completion of the missing part.



- *Section 3* is composed of two sets of elements: one identifies the border of the cube, the other the iteration of the linear elements, which in this case are being cut through in an oblique direction. The spatial complexity is achieved through the relationship between the cube boundaries and the iteration of a series, in this case enhanced by the shortening of its elements. This in turn identifies another spatial region open to the outside through the elimination of the right border, in addition to the one established by the regularity of the iteration.

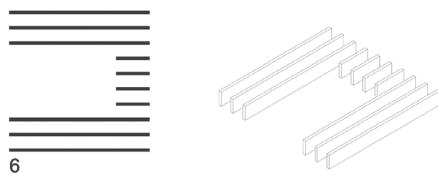


- *Section 4* can be compared to Section 2. However, here the composition introduces another category: the 'double'. The complexity of the spatial situation is created by the relationship between the iteration of the linear element and the class established by the two shorter elements.



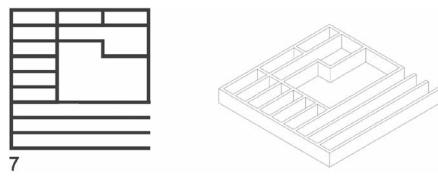
- *Section 5* presents a variety of spatial situations determined by the scalar relationship between the bottom-left border element of the square and the class established by the series of linear constructions inside it. In this relationship, the category of the interior space is rendered ambiguous, since the interior of the square would correspond to the exterior space of the series of closed linear constructions in the mid-upper region of the compositional field. Moreover, the three upper elements of the interior set coincide on one side with the upper element of the border, thus establishing a spatial region where their scalar relationship can be qualified architecturally (see, for instance, the relationship between the elements of the transformational series and the case). Lastly, the constituents of the inner set can also be further interpreted by their disarticulation and rarefaction at the

bottom of the compositional field. Overall, the spatiality represented in this section does not have any relationship with the previous ones, because it is conceived as internal relationship of more compositional themes: the border element, the class of squared structures, their internal transformation into a basic linear element, and the ambiguity of the inner space.



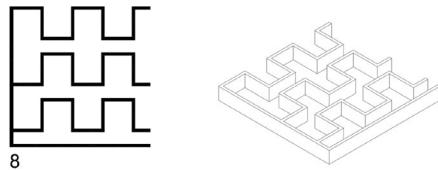
- *Section 6* reduces the spatial complexity described in Section 1, to support the definition of a large void in the mid-left region of the square. Here, therefore, the spatial situation identified by the iteration of identical linear elements is transformed into a method of framing an empty space.

Before proceeding to the following sections, a number of specific observations need to be made. Whereas the spatial situation in Section 1 is established by the simple iteration of elements, in Sections 2, 3, 4 and 6 the iteration of elements is no longer the characterising aspect in identifying spatiality. Instead, it is established by the relationship between two distinct regions of the compositional field, and by assigning a different semantic meaning to the linear elements of the composition. These aspects are the first examples of the generative and transformative character of the notation, but also a manifestation of its ambiguous character.

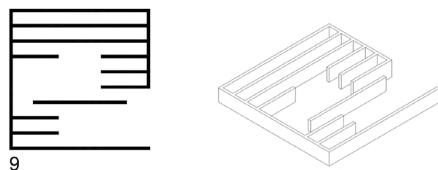


- *Section 7* presents a series of embedded transformations that renders the description more complex than the previous ones. The main theme of the composition is generated by the relationship between the linear boundary of the square and the iteration of a horizontal linear element, as in Section 3. Here, however, the spatial complexity is established along the upper and right borders, and a large square structure situated in the upper right corner. The latter, in fact, introduces a destabilising tension that renders the composition unsteady, thus determining a prevalent vertical reading of the section. The upper corner appears reinforced, as if carrying the weight of the square, while the bottom-right corner is

freed and open to the outside. This theme will appear in its radicalised version in other sections of the 'Classificazione', such as Sections 9, 10, 17, 18, 36 and 54. Together, these form a subclass.



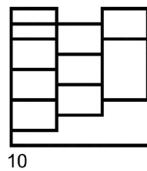
- *Section 8* is established by the relationship between the bottom and left linear border and three identical structures anchored on the left border element. The three linear structures present a regular and periodic transformation that is suddenly interrupted by the edge of the composition. The upper element is inverted in line with the horizontal and can be evaluated as part of the external border. The spatial complexity is to be found in the compression-dilation and alternation of spaces generated between the horizontal elements. This theme of constructing linear forms appears again in other sections of the 'Classificazione' in both a horizontal and vertical direction. A first subtle analogy to Section 8 is found in Section 44, and again in Sections 50 and 51. This similarity shows that both generative and transformational aspects of the sections lead to multiple developments, both formal and compositional; for instance, one section develops the theme of the periodic constriction, but with a different solution in the drawing (see Section 44), whereas another section maintains the basic graphic theme introduced in Section 8 (see Sections 50 and 51).



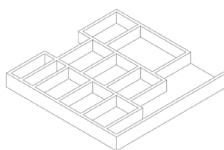
- *Section 9* is defined by the relationship between the border and the iteration of horizontal elements. The spatial complexity is to be found within the progressive thinning out of the horizontal elements in the lower region of the square. This spatial situation provides an analogy with Heidegger's concept of space, which implies the gesture of 'clearing' in order to make the occupation of space possible. In this sense, 'space' would become something 'that room has been made for',³⁷⁴ which occurs

³⁷⁴ Martin Heidegger, 'Building, Dwelling, Thinking', in *Poetry, Language, Thought*, trans. Albert Hofstadter (New York: Harper Collins, 1971), 152.

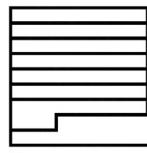
here in only two regions of the square: at the centre and at the periphery. One of the elements of the composition is detached from the border, thus introducing an element of instability in the compositional field, while at the same time playing a determining role in distributing the compositional tensions between the centre and the bottom-left corner.³⁷⁵



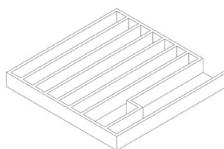
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- **Section 10** The composition is determined by the relationship between the border and an irregular configuration of horizontal and vertical linear elements. The spatial situation is the result of a series of translations of the horizontal linear elements, namely in two regions of the composition: at the bottom-left corner (see the progressive widening of spaces) and in the centre-top area. The instability of the composition produced by clearing the bottom space is re-equilibrated by the base, or, when seeing the section vertically, by the wall element in the background of the composition.

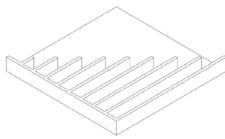
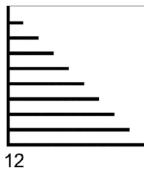


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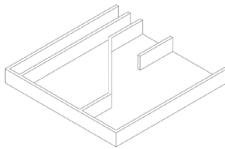
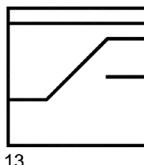


- **Section 11** The composition is established by the relationship between the border and the vertical iteration of horizontal linear elements. The spatial situation is the result of the connection of two linear elements in the lower region of the compositional field, generating two analogous spaces: one enclosed, the other (at the bottom) open to the exterior. Here, it is the latter space that establishes the spatial situation by also incorporating the representation of the composition's enclosed space.

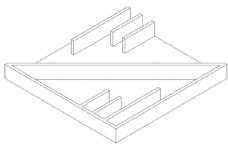
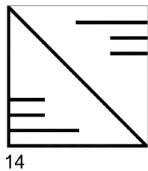
³⁷⁵ The interpretation of this section can also be compared with Purini's drawing *Diradare* [Thinning Out] in the series 'Come si agisce. Dentro l'architettura' [How to act: Inside architecture] (1993). See Franco Purini, *Una lezione sul disegno*, 77.



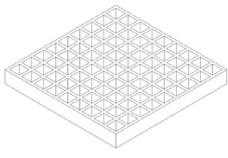
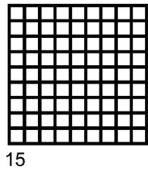
— **Section 12** The composition is established by the linear border element and by the sequence of parallel lines. As in Section 3 on the left of the plate, a progressive shortening of all the linear elements occurs, revealing at the top and right border the presence of a background structure. Here, however, the shortening follows the diagonal of the square, and the resulting two spatial regions cover an equal surface. Therefore, in relation to Section 3 a clear dialectic is established between the spatial situation generated by the linear elements and the opposite spatial situation, which is free and open to the exterior. As a consequence of interpreting Section 12 as a transformation of Section 3, the diagonal can be hypothesised not as a new organising technique but as a logical resultant of a previous composition. The theme of the diagonal will be advanced and interpreted after examining Sections 13 and 14 and taking into consideration other sections where this theme appears.



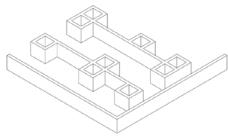
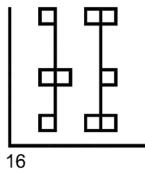
— **Section 13** The diagonal is no longer implicit, but has become a real element. This operation - consequent to the transformations in Section 12 - could be regarded as a first derogation to the compositional rules established by Purini for the language of architectural elements. More specifically, Section 13 presents a spatial situation that could be regarded as intermediate between those in Sections 9 and 11, namely the spatial situation defined by a progressive thinning out of the parallel horizontal elements, and the spatial situation as the dialectic between the two analogous spaces of the composition, which in the present section is identified precisely through the diagonal connection of two linear elements.



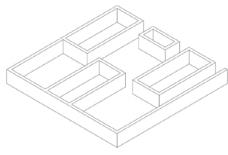
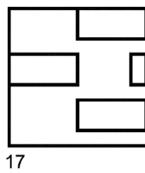
- *Section 14* demonstrates how earlier reflections concerning the diagonal are equally applicable here. In addition, the consideration formulated for Section 12 also finds resonance in this case. The diagonal no longer connects parts of linear elements inside the composition but stretches from two opposing corners of the square. The horizontal elements inside the composition are evidence of the compositional transformations that occurred in the square and also characterise the two triangular regions created by the diagonal line. As a result, the composition presents a dialectic between two analogous spaces: the first is contained by the diagonal, the base and the left border element (where horizontal linear elements are anchored); the second is open to the exterior, where the elements are 'held' in place by the base/wall structure projected in the background.



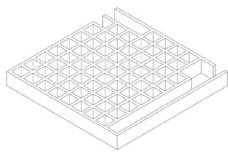
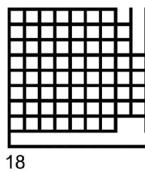
- *Section 15* The composition is established by the relationship between a regular pattern of horizontal and vertical linear elements. It could be argued that this section presents the most radical interpretation of the premises of this investigation into the 'Classificazione' by presenting a total contraposition between the border of the square and the internal reference grid. With this operation, the border of the composition, understood as an autonomous element, is rendered ambiguous since it could also be interpreted as part of the grid that fills the compositional field. The new spatial situation of the grid is identified by the iteration of enclosed spaces, all equal and covering the entire compositional field, and by the spatial tension generated by the crossing of two linear elements.



- *Section 16* is established by two distinct themes. The first comprises the relationship between the bottom and left linear elements of the border, and two vertical linear elements floating on the compositional field. The second consists in the relationship between a number of cells and two vertical elements that serve them as a spine. Thus, an ambivalent role emerges from the two spatial situations coexisting in this composition: the two vertical elements are at the same time an anchoring structure for the cells and an unstable element in the compositional field.



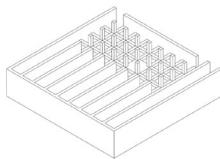
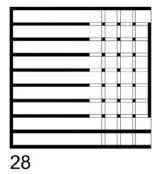
- *Section 17* presents a development of the theme that emerged in *Section 16*. The cells here do not correspond to the minimal enclosure identified by the 9x9 box grid but occupy larger portions of the compositional field in various configurations, either anchored at the border by their longer or shorter side or floating inside the compositional field. As in *Section 16*, there are again two spatial situations: one inside the cells and one created between the cells. A fourth cell, different in shape, appears to close the composition and make the in-between spatial situation readable. Furthermore, this section also introduces a second exception to Purini's language rules: the edges of the larger cells sit on the central axis of the square, an option that is excluded by the 9x9 box grid.



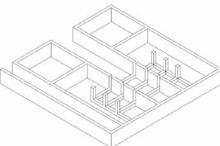
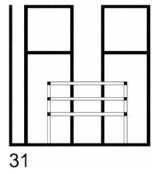
- *Section 18* develops the theme of the grid-border relationship (initiated in *Section 15*) with a transformation similar to that of *Section 9*, in that its composition is established by 'thinning out': in this case the grid in the upper right corner and at the bottom of the square. The incompleteness of the grid pattern produces two spatial niches:

the first is located at the upper-right corner, the second at the bottom of the square, which also reveals the presence of a border element in the composition.

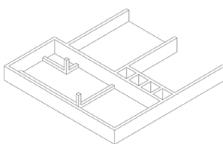
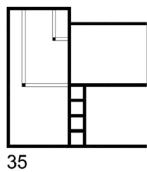
At this point, I will interrupt the sequential investigation of the sections in order to examine a number of representative cases.



- *Section 28* is relevant because it presents all the classes of architectural elements in Purini's language: the closed figure of the cube represented by the four border elements and the base/wall element in projection, the iteration of horizontal linear elements, and the elements of the cube reduced to a wireframe structure. Introduced in neighbouring Section 19, the composition presents the relation between the border element and the iteration of the horizontal lineal element. This simple relation is challenged on the right side of the composition by the introduction of the spatial situation generated by the wireframe structure. This operation also reveals the presence of a base/wall element.

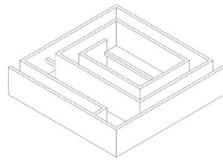
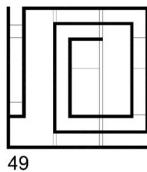


- *Section 31*, inspired by adjoining Sections 22 and 30, presents the relationship between two identical line constructions and the border that comprises the bottom and left linear elements. The theme of the double is introduced here by two identical line constructions, superimposed by wireframe elements partially detached from the generative grid. This third construction, which connects the two identical parts, would create a symmetrical construction were it not for the left border element. The theme of the double also appears in a simplified form in Section 48.



35

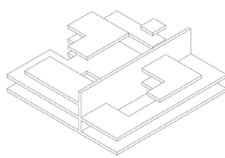
- Section 35 has no apparent rule. All classes of elements seem to participate directly in the construction of the composition: the customary bottom and left border elements, a vertical linear element in the mid-left region of the square, a number of cells enabling the reading of the 9x9 box grid, a wireframe construction anchored to the vertical element and, lastly, an element in the background connecting two horizontal lines on the right side. The middle construction comprising the vertical element and the adjacent cells creates two spatial regions: one on the left side that is enclosed, vertically oriented and occupied by two similar wireframe structures that connect the upper border with the central element; and one on the right that is horizontally oriented and open to the exterior. The middle structure absorbs the heterogeneous tensions within the two sides, maintaining a delicate compositional equilibrium. This graphic theme also recurs in Sections 36, 40 and 45.



49

- Section 49 presents a spiral linear element held by the canonical bottom and left border elements, and by other elements set in projection. The immediately recognisable spatial theme is 'wrapped space'³⁷⁶ and can be considered an intuitive interpretation of the basis of the exercise: the relationship between the border and the inner space of a cube beyond the generative aspect. Noticeable in this section is the relationship between the border and interior and that of the class comprising Sections 48–51, which also reappears in Section 61.

³⁷⁶ Analogously to Section 9, Purini investigates this configuration in his drawing series 'Come si Agisce. Dentro l'architettura' [How to Act. Inside Architecture] (1993), and specifically in the drawing *Avvolgere* [Wrapping], the inspiration for which is clearly based on the scheme in Section 49. According to Purini, 'wrapping' expresses the physical meaning of the architectural space. He explains how on the one hand the construction surrounding the body has aesthetic value, and how on the other, wrapping also implies a separation from the surrounding context. He therefore concludes that this spatial situation establishes a subtle negation of visual depth and represents an extreme and alternative form of space. See Franco Purini, *Una lezione sul disegno* (1993), 80.



— Section 58 presents a horizontal linear element crossing a mosaic of fragmented surface structures. The composition has no rule beyond the hierarchy established by the linear element, which determines an upper and a lower spatial region. A further development of Section 58 appears in Section 59; it presents the relationship between the border of the square and a number of both linear and small surface structures. The resulting configuration is a fragmented composition where the elements participate reciprocally in the construction of a space. Although it is difficult to identify a compositional rule in this case, there are reciprocities among the linear constructions distributed in the four corner regions of the square.

2.5.5 Interpretation of the ‘Classificazione, per Sezioni, di Situazioni Spaziali’ (1968) and the Meaning of the Grammatological Exercise

The investigation of the compositional process of the ‘Classificazione’ can be further advanced by an in-depth consideration of the theme of the diagonal, which, as was previously observed, is extraneous to the basic principles of the experiment.³⁷⁷

The way the diagonal appears in the ‘Classificazione’ cannot be understood by simply evaluating the sections in which it appears, but requires a broader evaluation of its transformation in different sections; specifically, Sections 3, 12, 13, and 14. The role of the diagonal in these sections is not clearly and univocally established by the composition but can be interpreted in various ways: as the result of another transformation (see Section 12); as a connecting element emphasising an already established compositional scheme (see Section 13); and as an actual transformative element that generates the composition (see Section 14). This consideration of the diagonal can also be extended to Sections 68-72, which were not included in the overview.³⁷⁸ In these cases, the diagonal becomes the actual base of an elemental construction. In Section 68, the diagonal originates two separate line constructions that correspond to two distinct spatial situations: at the bottom-right side is a wireframe structure, while in the upper-left area, a series of parallel lines depart

³⁷⁷ The complete series of description of the seventy-two sections of the ‘Classificazione’ can be found in Appendix 1.

³⁷⁸ The description of the Sections 68-72, can be found in Appendix 1

perpendicularly from the diagonal. In the following sections (69–72), the generative role of the diagonal as the base of an elemental construction is reinterpreted in the similar theme of rotation. In Section 69, a central square element rotated 45° and containing a series of horizontal linear elements drives the configuration of wireframe elements at the top and the vertical lines at the bottom. Section 72, on the other hand, presents a simplified version of the theme developed in Sections 69, 70, and 71, but can also be clearly associated with Section 41. In the latter, in fact, there are only linear structures, and the rotation of the central square element results in a regular symmetrical composition.

The multiple possibilities for interpreting the diagonal that result from the investigation become an opportunity for evaluating the individual and relational character of the sections. As has been shown, the seventy-two sections of the 'Classificazione' are not (or not quite) the result of progressive logical reasoning, but in most cases they are informed either by an internal logic or random circumstances, or they are influenced by other neighbouring sections that do not uphold the linear advancement of the compositional theme (for example, see the relationship between Section 3 and Section 12 for the development of the diagonal). In other words, the investigation of the formative principles of the sections has revealed the ultimate indeterminacy and open-ended nature of the exercise. For instance, it has shown the impossibility of identifying not so much the genesis of a theme (which in some cases is evident, such as in Section 1 and Section 15) but its actual completion. Indeed, in most cases the termination of a compositional development appears as a sudden decision by Purini (see, for instance, the interruption caused by Section 5 in the logical sequence of Sections 1–6, or the relationship between the sequence of Sections 12–14 and Section 15, which introduces a completely different investigation). Moreover, cases also recur in the 'Classificazione' where a particular compositional theme unexpectedly appears in a different area of the plate and is inspired by different logic (see again the theme of the diagonal in Section 68 and the transformation in the rotation in Sections 69–72).

All these examples give rise to a series of considerations concerning the graphic analysis of the 'Classificazione':

- 1 the inconsistency of the syntactic description of the formal relationships, both constructive and figurative. Hence, the consideration that a syntactic approach is inadequate for ordering the architectural language – a hypothesis which was already included in Purini's formulation of the language, and therefore here finds a plausible confirmation;

- 2 the consequent interpretation of the 'Classificazione' as seventy-two discrete entities, each corresponding to a specific grammatical rule. The title and the progressive numbering would be in agreement with this interpretation;
- 3 from the grammatical rules of the seventy-two sections it is impossible to identify any ordering criteria of the architectural language. As a consequence, the architectural language appears as ungovernable.

In order to develop these considerations, I shall introduce and discuss two accounts by Purini that can be regarded as ex-post clarifications on the 'Classificazione', even if he does not refer specifically to it. An examination of these accounts will eventually lead to exposing the role of drawing, which at this stage still appears in the background as an evident, but not decisive, aspect of a speculation involving language, composition and representational techniques; in other words, all the components that in Chapter 2, Section 2 have been regarded as underlying the idea of drawing, but not transcending it.

I shall reaffirm that Purini's research also involves writing (extreme syntheses and exaggerated details), and therefore the following passages should not be considered as straightforward explanations but characterised by a dense and elliptic style, since they are themselves variations on a theme in the endless effort to re-describe 'Una ipotesi di architettura'. However, variation does not apply to the first text under examination since it is an aphorism, and so supposedly expresses what the author considers a general truth. In aphorism no. 10 of the publication *Aforismi di architettura* [Architectural aphorisms] (1995),³⁷⁹ Purini addresses the significance of the grammatical approach in the architect's work. Purini writes:

There is no architecture without grammatology. Grammatology reveals architecture's inadequacy to organise language, which is too resistant and random, and, fundamentally, too cruel. At the same time, grammatology makes architecture sense the mathematical beauty of the rule. As a collective form, grammar shows the architect his absence as an individual from the scene of architecture³⁸⁰

Unquestionably, by claiming that the relevance of grammatology resides in the disclosure that architectural language cannot be governed – an observable outcome in the last phase of Purini's analysis – he aims to generalise the problematics met in 'Una ipotesi di architettura' and in the 'Classificazione'. For him, in fact, it is the

³⁷⁹ Franco Purini, and Laura Thermes, *Aforismi Architettonici* (Milan: Giancarlo Politi Editore, 1995), unnumbered, Aphorism n. 10.

³⁸⁰ Ibid.

overall research into language that determines the premises of architecture: a language based on the possibility of being described by an *ad hoc* notational system, including the ultimate acknowledgement that, in reality, language cannot be fully controlled. Therefore, as was discussed earlier, it is within the field of representation that architecture originates, and not in the actual construction.

The second, more detailed clarification of the grammatical approach in the 'Classificazione' can be found in 'Un'assenza irrevocabile' [An irrevocable absence], a commentary in Marcello Sèstito's book *Alfabeti d'architettura* [Architectural Alphabets] (1993),³⁸¹ which investigates the architect's tendency to conceive a meta-linguistic apparatus as a guide to formal design processes. In this note, Purini uses a dense chain of interconnected thoughts to explain the need and the meaning of the self-defined rules and characteristics of the specific type of research this approach leads to. The text begins with an obscure statement comparing the grammatical operation to a ceremonial act of removal:

Any grammatical approach always hides an exorcist objective. Frightened by the complexity of the world and the endless sequence of materials that structure it, the formalising activity carries out an act of supreme simplification. The elements are subdivided into coherent ranks. Subsequently, they are subjected to further division into networks of identities and differences, recognised by means of amplifications and diversions. Lastly, a system of privileged polarisations capable of orientations and discrimination is assigned to the collection of listed terms.³⁸²

Purini sees the grammatical exercise as the answer to the architect's need to confront the complexity of reality through a proposal – a project. The architect addresses the complexity through an act of formalisation by decoding it into classifications, typological analyses, and so forth, established through progressive stages of elaboration and organisation of the design proposal, ultimately defining a notational system capable of producing an architectural object. But in this struggle with reality, Purini also recognises the defeat of any coherent attempt to grasp reality by means of its own reduction, which is what the process of formalisation inevitably does. The architect's acknowledgement of this failure leads to the *tabula rasa* of the architectural structure. The significance of the grammatical exercise consists in the need to distance this negative outcome by providing a new hypothetical foundation for the architectural work through a series of discrete elements whose indeterminate character requires continuous specification and verification:

³⁸¹ Franco Purini, 'Un'assenza irrevocabile', in Marcello Sèstito, *Alfabeti d'architettura* (Rome: Gangemi Editore, 1993), 9–10.

³⁸² Ibid., 9.

In this process, which reiterates the birth of the sign as the place of an implosion of meaning, the definitive abandonment of syntactic perspectives occurs. Grammar versus syntax means the foundation versus the narration, the beginning versus evolution. The exorcism that occurs when faced with the ungraspable nature of reality, or of the imaginary, actually produces a 'zero degree of the structure', even before the writing; a vertiginous void that opens before the creator – the painter, sculptor, architect – precisely due to the plurality of the combinatory possibilities: a terrifying desert landscape which, perhaps because of this very totality, is destined to a continuous reconfirmation.³⁸³

The 'zero degree of the structure' – in other words, the reset of the principles governing architectural conception – also signifies, in a more substantial way, the zero degree of the architect as an author who is deprived of even a basic writing system. In this state (which Purini asserts the architect shares with two fellow creators: the sculptor and the painter), the architect is drawn into a linguistic void, where the necessity for language arises for establishing a new system of rules for creation.³⁸⁴ But prior to that, there is also the need to establish a new type of notational system – an operation that is implicit in the grammatical exercise. It is precisely in this place-before-language that the architect discovers the truly fundamental role of drawing. However, Purini's explanation must first be completed, as it introduces additional aspects that aid in understanding the 'Classificazione', which comprises the seventy-two sections that result from the grammatical exercise:

The grammatical attitude constantly renews itself in a 'celibate' paroxysm in which the elements remain in an original intermediate state between 'sign' and 'thing'. The alphabet³⁸⁵ remains like this, in a refined, indeterminate state. As if confined to the limbo of an unexpressed condition, the elements, arranged in a carefully planned progression, neutralise their own emergence, which begins with the accuracy of an impeccable calculation, whose elegance transcends the pure abstraction of a rhetorical peregrination.³⁸⁶

³⁸³ Ibid., 9.

³⁸⁴ In accordance with Konrad Fiedler's ideas presented in Chapter 1, it could be argued that the notion of autonomy in architecture and in the arts in general originates in this loneliness of the author, in the absence of language, and in the rediscovery of the meaning of the work of art.

³⁸⁵ As I noted earlier, the term 'alphabet' refers to the meta-linguistic apparatus devised by the architect as a guide to formal design processes.

³⁸⁶ Purini, 'Un'assenza irrevocabile', 9.

Purini further explains the characteristics of the entities that compose the notational system.

The 'elective affinity' that holds together the central principles of these perfect alphabets amplifies their ambiguity. The indecision between the elements being just as much 'signs' as 'things' ceases to be a potentiality or a promise. As the place where language is negated, and by means of the virtual compilations it generates, the grammatical exercise reveals its character as a recessive, censorial and estranging device. Motivated by the need to confront an emergency – the infinite complexity of the world – in almost every case this exercise is resolved by a substantial inaction.³⁸⁷

For Purini, the condition of these entities' suspension between 'sign' and 'thing' can lead to the creative paralysis of the architect. This can be overcome by representing (in the 'Classificazione', but also in specific architectural projects, as it will be shown in the next section) the contradictions that emerge when an attempt is made to create an abstract organisational system that is capable of reducing the complexity of reality. If this meta-dimension of architectural representation might seem to some extent a paradoxical operation, for Purini it is the premise for a specific type of research characterised by subsequent attempts to validate the controversial aspects intrinsic in the grammatical operation and exemplified, in this specific context, in Marcello Sèstito's contribution:

As a flawless example of a-posteriori study – which is not the same as a historical study, in that the author temporarily identifies with the object of his investigation – the work of Marcello Sèstito succeeds in bringing a coherence and a necessity to a constructive process of notational registers, which was actually undertaken in a situation of a dangerously conjectural nature and of adventurous self-referentiality.³⁸⁸

The 'Classificazione', therefore, can be regarded as the initiation of Purini's progressive attempt to validate his research hypotheses through a formalised re-description, which he portrays as follow:

These tabulations are 'formalised series' of a thought. They find their essence, and with it the basis of their figurative versatility, above all in the rhythmic that organise the signs. Visually, the grammatical repertoires are presented as

³⁸⁷ Ibid. 9

³⁸⁸ Ibid., 9.

sequences split between the 'autonomous' appearance of the signs – a symbolic, or rather an auto-symbolic appearance – and their reference to external, unchangeable and unquestionable entities, such as the existence of conventions, or the 'remains' of a negotiation.³⁸⁹

Purini concludes by confessing that this foundational research is not only distressing and not simply ambiguous, but also requires a tenacious and truly hostile attitude towards it and detachment from any external influence or exchange:

In fact, any exorcist rite must be accomplished in aggressive solitude, in an irrevocable absence of communication.³⁹⁰

Therefore, according to Purini, the grammatical approach responds to a necessity: the architect's need to reduce the complexity of reality into a practical abstract material that enables him to perform a task. For a specific understanding, this 'necessity' should be clarified within the context of 'Una ipotesi di architettura'. In the programmatic, manifesto-like collective text 'I motivi di fondo - Sulla tecnologia - I problemi della città' (1966),³⁹¹ Purini argues for the need to overcome the established approach to design which he claims still operates within the logic of the classical architectural order. He also sees traces of the classical object-based paradigm and its regulating principles in modernist architecture. This critique was further developed by a series of design investigations that revealed inconsistencies in the conventional approach to design, such as figurative paradoxes ('Ricerche di transizione', 1967), indistinctness between architecture and infrastructure, ('Progetto per strada "costruita" tra Roma e Latina', 1967), and typological indeterminacy ('Progetto di biblioteca a Roma', 1968). These speculative designs were conducted in parallel with research focused on a new conception of the grammar of architecture, by formulating a new system of relationships for creating architecture by means of experimental research into its language.

In fact, by questioning the basis of architecture, Purini positions himself outside the interpretative structure of the real and outside the interpretative structure of architecture. This has led to research directed towards the formulation of a new language system (Programma di fondazione grammaticale del linguaggio architettonico, 1968) and is included in its final verification in the 'Classificazione'.

³⁸⁹ Ibid., 10.

³⁹⁰ Ibid., 10.

³⁹¹ 'I motivi di fondo - Sulla tecnologia - I problemi della città (1966): 64-68. English translation in Appendix 1.

As the graphical analysis shows, and as we can infer from Purini's writing, the 'Classificazione' reveals the impossibility of governing the formal proliferation of and within the sections. In the 'Classificazione', the proliferation of formal solutions and compositional themes never reaches fruition. The production of forms is constantly interrupted by Purini's peremptory decisions, ultimately ending with Section 72. This final act corresponds to the eventual recognition (the apparition) of the impossibility of controlling language because it is 'too random' and 'too cruel', which, by extension, also implies the illusory nature of the attempt to reduce the complexity of reality through language.³⁹²

The 'Classificazione' stages and crystallises this experience, and by doing so it establishes the original landscape of Purini's future architecture: a Wasteland, a Promised Land, but also a generic land in which Purini identifies the meaning of a project.³⁹³

In other words, the 'Classificazione' re-describes the content addressed in 'Una ipotesi di architettura' and originates research to be continued, while at the same time giving rise to endless interrogations and clarifications of its very basis. By doing so, the 'Classificazione' acquires the status of a transitional system that governs Purini's approach to architecture and connects future investigations to his original reflection. To recapitulate Tafuri's reflection on the 'Classificazione', which was introduced in Chapter 2, Section 2, it can be argued that the architectural content of this work is programmatically maintained in 'a state of waiting'³⁹⁴ in order to enable the possibility of future developments (methodological and technical) in the architectural research.

³⁹² Purini and Thermes, *Aforismi Architettonici*, Aphorism no. 10.

³⁹³ The metaphoric association of the 'Classificazione' with these three images of thought, which link at the same time a sense of despair, desire and indifference, is derived from an analogous association formulated by Purini describing the three contexts of the original condition of the architect's work. See Franco Purini, 'Il paesaggio della storia/The landscape of history', in *Sette paesaggi/Seven landscapes*, in *Quaderni di Lotus International*, no. 12 (Milan: Electa, 1989): 70.

³⁹⁴ Manfredo Tafuri, 'L'architecture dans le Boudoir', in *La sfera e il labirinto: Avanguardie e architettura da Piranesi agli anni '70* (Turin: Einaudi, 1980), 341. (Writer's translation). For the complete translation of the cited passage see Chapter 2, Section 2, *Elucidation of Purini's Concept of Classification*.

It is precisely in this hiatus that the difficulty of outlining and fully defining the content of the 'Classificazione' resides. The seventy-two 'architectural entities'³⁹⁵ can be considered both as discrete/individual line constructions resulting from the compositional process, and as signs incorporating the memory of this experience (its history) through its representation.³⁹⁶ In this ambivalence, the semantic status the seventy-two sections shifts, their interpretative code is obscured, and their genesis and definition are concealed.

2.5.6 'Pictures that Never Coincide with "the Frames)": On Cutting Up and Framing the 'Classificazione, per Sezioni, di Situazioni Spaziali' (1968)

In this section I will present a final graphic analysis in order to interpret in greater detail the completeness/incompleteness of the 'Classificazione' and, more specifically, the act of interrupting and concluding the research with Section 72.

I propose that the layout structure of the seventy-two spatial situations can also be seen as a repetition of the basic grid of the single sections. This act would produce the *mise en abyme* of the section and the totality of the 'Classificazione', and therefore indicate the conceptual expansion of the work *ad infinitum*. The nine rows by eight columns of the 'Classificazione' could be interpreted, in fact, as the recurrence of the nine-by-nine grid. The missing ninth column, or its deliberate removal, could be interpreted as the signal for arresting the formal proliferation, and as a sign of the author's decision to consider the work completed and his detachment from it.

³⁹⁵ Purini, 'Un'assenza irrevocabile', 9.

³⁹⁶ In the process of extrapolating the intermediate entities from their specific research context, their semantic status shifts, their interpretative code is obscured, and this process becomes an operation that tends to objectify the compositional model: the epistemological essence of the compositional model translates from the constructive aspects of the research to a perceptive, phenomenal essence. In this operation the genesis of the entities and its definition is concealed.

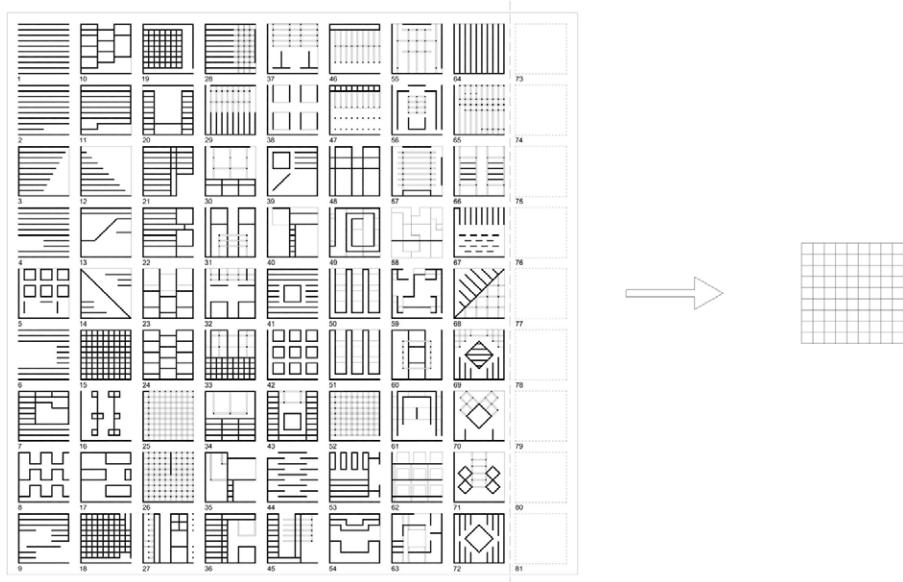


FIG. 2.51 CUT-UP (Author's image.)

The explanation of the 'Classificazione' interruption, instigated by a drawn conjecture of a suggested, and yet absent/missing ninth column, finds further elucidation in Purini's writing, and in particular where he addresses the meaning of the architectural composition. For instance, he has written that an analytical work on architectural composition always leads to a 'science of errors', to 'erratic meanings', to results that never coincide with the objectives, and, as he paraphrases from a passage by poet Alfredo Giuliani to 'pictures that never coincide "with the frames"', (a claim that can certainly be applied to the 'Classificazione').

Further elucidation can be derived from an essay on Peter Eisenman's work.³⁹⁷ Here again, as in many other writings, the work of Eisenman becomes a pretext for Purini to reflect on his own work. In his essay, Purini considers the central question of foundational research as a problem that 'consists in deciding how and when to interrupt the deductive chain that starts from a postulate, usually impossible to prove, and generates language.'³⁹⁸

³⁹⁷ Franco Purini, 'Eisenman e l'Italia', in Area no. 74, *Eisenman, History, Italy* (Milan: Federico Motta Editore, 2004), 8.

³⁹⁸ Ibid.

Furthermore, and outside the language metaphor, Purini claims the interruption of the compositional proliferation produces four conceptual consequences, corresponding to four research objectives:

- 1 the act of stopping the free and concatenated emission of compositional solutions grants the configurations produced the character of necessity, which the architect needs to recognise;
- 2 once the generative process has been arrested and the compositional instances recognised, the next step consists in assigning a unitary character of the work as a whole to the set of configurations produced, i.e., to consider them as representative of the compositional language that generated them;
- 3 the identification of the compositions as individual signs;
- 4 the act of interruption also confers a specific temporality to the compositions: they are contextualised within a specific moment in time and historical period, therefore subtracting the *scrittura architettonica*³⁹⁹ from a serialisation that could be potentially endless and permanently decontextualised.⁴⁰⁰

The third and fourth objectives have been already discussed in this section, whereas the first and the second directly address the interruption of the work and substantiate the graphic hypothesis presented here.

In addressing the significance of interrupting and framing the work, Purini references the work of John Cage and Georg Simmel.⁴⁰¹ Purini indicates John Cage's interest in the use of chance and indeterminacy for their capacity to produce radical alternatives to the working method. With particular regard to John Cage, this approach attempted to overcome Schönberg's principles in the 'Composition with

³⁹⁹ The notion of *scrittura architettonica* could be associated at the same time with the notion of architectural composition and that of the autography of drawing.

⁴⁰⁰ Franco Purini, 'Eisenman e l'Italia', in *Area* no. 74, *Eisenman, History, Italy* (Milan: Federico Motta Editore, 2004), 8.

⁴⁰¹ 'The decision to interrupt the deductive chain with modalities that refers to John Cage's techniques, would have the effect of the frame in relation of the painting elaborated by Simmel, granting to the [formal] emission a recognisable and stable order, and retrospectively, a degree of completeness.' Franco Purini, 'Eisenman e l'Italia', in *Area* no. 74, *Eisenman, History, Italy* (Milan: Federico Motta Editore, 2004), 8.

Twelve Tones' method.⁴⁰² Furthermore, John Cage's aleatory approach to musical composition continues a creative approach that was initiated in the historical avant-garde and originated from the ideas of the poet and artist Tristan Tzara in the field of literature. In fact, in 'Dada Manifesto On Feeble Love And Bitter Love (1920)', Tzara provides indications for writing a random poem and suggestions for cutting up newspaper stories, then reassembling them to create new ones.⁴⁰³

However, although the involvement of chance can certainly be recognised in the development of the 'Classificazione', exemplified by Purini's sudden interruptions in developing a compositional theme, it does not provide a more satisfactory explanation for ending at Section 72 than the simpler graphic interpretation suggested here.

'Cutting up' is also associated with the problem of framing in the work of art, which Georg Simmel developed in 'Der Bildrahmen: Ein ästhetischer Versuch' (1902).⁴⁰⁴ Simmel sees the frame as performing a double role: by excluding the surrounding context (including the observer) from the work of art, the frame introduces the necessary distance to enable the aesthetic experience. Moreover, Simmel distinguishes between the idea of 'totality' in which the work of art is established by its very existence and also self-concluded, and the idea of 'part', according to which the work of art is understood as a connective element with an external totality that grants meaning and strength. The 'Classificazione' shares this ambivalence: it is a totality that, on its termination, also becomes a part or fragment.

⁴⁰² Arnold Schönberg, 'Composition with Twelve Tones', in *Style and Idea* (New York: Philosophical Library, Inc., 1950), 102–143. In the dialogue established by Schönberg's work and John Cage's reaction, one can also trace the relation between the relevance of Schönberg's 'Composition with Twelve Tones' with regard to the definition of the 'Programma di Fondazione grammaticale del linguaggio architettonico' (1968) and the attempt to further it in the context of the 'Classificazione'. Arguably, with reference to John Cage, Purini refers in particular to the work *Music of Change* (1951) composed for pianist David Tudor, in which Cage translated the divinatory technique of the *I Ching* to create chance-controlled compositions. John Cage, *Silence: Lectures and Writings* (Middletown, CN: Wesleyan University Press, 1973) (1961). See in particular 'Experimental Music', 7–12; 'Composition as Process: I. Changes; II. Indeterminacy; III. Communication', 18–56; and 'Composition: To Describe the Process of Composition Used in Music of Changes and Imaginary Landscape No. 4; To Describe the Process of Composition Used in Music for Piano 21–52', 57–61.

⁴⁰³ See Tristan Tzara, 'Dada Manifesto On Feeble Love And Bitter Love (1920)', in *Seven Dada Manifestos and Lampisteries*, Barbara Wright trans. (London: Alma Books Ltd., 2013), 31–48. Worth noting is that this technique was revived in the so-called cut-up writings of William Burroughs and in the work of Brion Gysin and found a large diffusion in many experimental art fields, from the work of the writer Jon Dos Passos to the confrontational and extreme work of the music and performance art group Throbbing Gristle.

⁴⁰⁴ Georg Simmel, 'Der Bildrahmen: Ein ästhetischer Versuch', in *Der Tag* no. 541 (Berlin, Verlag August Scherl, 1902), 18. Reprinted in *Zur Philosophie der Kunst: Philosophische and Kunsthistorische Aufsätze* (Potsdam: Kiepenhauer, 1922).



FIG. 2.52 John Cage, *Music of Changes* (1951). Music Notation.

This is ultimately the 'cut' that removes the 'Classificazione' from an 'endless serialisation',⁴⁰⁵ assigns it its historical context, and places it 'in a state of waiting'⁴⁰⁶ to inspire future developments. Finally, it is this arrest that establishes a new and more detached relationship between Purini and his work, thus ensuring the 'Classificazione' availability for both periodical clarifications and external critiques.

⁴⁰⁵ Franco Purini, 'Eisenman e l'Italia', in *Area* no. 74, *Eisenman, History, Italy* (Milan: Federico Motta Editore, 2004), 8.

⁴⁰⁶ Manfredo Tafuri, 'L'architecture dans le Boudoir', 341. For the complete translation of the cited passage see Chapter 2, Section 2, *Elucidation of Purini's Concept of Classification*.

2.5.7 The Drawing: Image of Memory, Form of Architectural Thinking

It is precisely in the inextricable duality of the material and figurative aspects of the sections and the completeness and incompleteness of the 'Classificazione' experiment that the concept of drawing appears as the *deus ex machina*, which resolves the 'tragedy' of language staged in the 'Classificazione'.

In fact, acknowledging the impossibility of governing the proliferation of compositions, combined with the decision to interrupt them, implies a continuous return to a proto-linguistic moment: to a state where architectural thinking cannot rely on abstract categories but only on their representation. Like archaeological ruins placed in a 'state of rest'⁴⁰⁷ the seventy-two entities incorporate their history through their representation, and in this history, their embedded meaning by means of a visual recollection.

To clarify this aspect, it is useful to return to my initial reflection on Pliny's description of the mythical origin of drawing. Indeed, Purini's 'Classificazione' can be regarded as both a reinterpretation of Pliny's story and also as the iconographic translation of its exposition:

- Diboutades' act of tracing the profile of her departing lover to mark the moment of separation can be equated to the border of the square: the architectural reference Purini adopted for all the phases of his investigation;
- Boutades' act of recording the soldier's features so that his daughter will preserve the memory of her lover and her love for him, corresponds to the internal compositional content of the section, and thus also crystallises the meaning of the compositional act, an act that in Purini's case also represents a moment of sudden separation.

⁴⁰⁷ Georg Simmel, 'Two Essays', in *The Hudson Review*, Vol. 11, No. 3 (New York: The Hudson Review Inc., 1958), 371-385

Furthermore, the association between these two actions finds correspondences in the interpretations of Pliny's story proposed in Chapter 1:

- In Pliny's story the profile of the soldier is a metaphor for the distance between a sign and its referent. In the 'Classificazione', the soldier's outline can be equated with the border of the square, indicating the space that separates it from the cube – the cube' space, structure, and architecture – the profile of the soldier as a metaphor for the distance between a sign and its referent, can also be compared to the square boundary of each section acting as a substitute for the cube;
- conversely, the shadow of the drawer's hand beside the shadow of the beloved soldier is a metaphor that identifies the represented object with the artist through the act of drawing;
- lastly, the resulting inextricable, coterminous nature of drawing as both an instrument of expression and one of representation, and both an 'arm' of architectural invention and a conventional form of communication.⁴⁰⁸

In his 1983 essay 'Dodici frammenti per disegnare il disegno. ... lettera romana a Margherita De Simone' [Twelve Fragments for Drawing the Drawing ... Letter from Rome to Margherita De Simone], Purini offers a detailed explanation of the relationships between drawing, representation and architectural thinking that can be applied to the 'Classificazione', or rather, which are instigated by the 'Classificazione'. According to Purini, 'architectural thinking' does not originate from 'verbal thinking' because it is not established through deduction and translation. Nor can it be developed through abstract categories, such as hierarchy, rhythm, measure or proportion. For Purini, these categories can only be represented, 'staged according to an "architectural landscape" composed of three-dimensional objects, memorised by a procedure and by a fundamental "visual recollection". Therefore, by establishing the conception of space and, in particular, space as localised in a place and in a time, which is the subject and the object of the architecture being contemplated, these representations can be considered the genetic core of the formative process [of architecture].'⁴⁰⁹ Consequently, for Purini, if architectural thinking is established through representation, then the drawing is the descriptive procedure that embodies its 'historicity'.⁴¹⁰

⁴⁰⁸ See Chapter 1, Section 2, *The Mythical Origin of Drawing*.

⁴⁰⁹ Purini, 'Dodici frammenti per disegnare il disegno... lettera romana a Margherita De Simone', 342. (Writer's translation.)

⁴¹⁰ Purini, 'Dodici frammenti', 342.

This descriptive approach corresponds precisely to the propositions of this present research: to reveal the characteristics of the extensive nature of architectural drawing as it emerges in the phases of 'Una ipotesi di architettura', which are ultimately all simultaneously present in the 'Classificazione':

- 1 The unifying analogy between the city, architecture and drawing. In fact, in the plan of 'La città compatta', both architecture and city merge in the proposition of a large square/plinth corresponding to the flatness of the drawing's surface. This merging becomes the starting point of an investigation to be conducted inside an architectural representation. It is through the investigation of this drawing, and through its description, that the content of the city, and of its architecture, is established: a drawing, therefore, to be questioned, deciphered, and revealed. The unitary field of the drawing is ultimately proposed again in the 'Classificazione';
- 2 the systematic use of drawing to reveal the inherent contradictions of architectural conventions as they emerged in the 'Ricerche di transizione' (1967), in the project for the 'mechanised' road between Rome and Latina, and in the project for a library in Rome. This characteristic emerged in the 'Classificazione' in the interpretation of the formal process of the seventy-two sections;
- 3 drawing as a notational system, therefore as a new convention that structures architectural language as developed in the 'Programma di fondazione grammaticale del linguaggio architettonico' (1968);
- 4 the reappearance of the systematic characteristic of drawing as a tool for critically assessing a proposition, and, more precisely, drawing's role in disrupting any attempt to identify a rational and coherent organisation of the formal language in the 'Classificazione';
- 5 the resurfacing of drawing's fundamental role in the 'Classificazione' as a visual memory of the research experience, while marking at the same time the historicity of the research experience. In other words, drawing establishes the simulacra of architecture: of the architecture's underlying principles, of its creative process, and ultimately of its object.

The following, final section I will assess the content of 'Una ipotesi di architettura' and the 'Classificazione' based on a series of experimental architectural projects. More specifically, the principles of the 'Programma di fondazione grammaticale del linguaggio architettonico' (1968) will be evaluated in two design investigations: the 'Progetto di un edificio lamellare' [Project for a lamellar building] (1968), which develops the theme of the frontality, and the 'Ponte a San Giovanni dei Fiorentini a Roma' [Bridge at San Giovanni dei Fiorentini in Rome] (1968), which develops the theme of the base, in other words, the two types of supporting structures Purini devised for the composition. The content of the 'Classificazione' will be used in interpreting the design for a 'Casa nella campagna romana' [House in the Roman countryside] (1971), and for an original interpretation of one of the most distinctive of Purini's projects, namely the 'Progetto per un padiglione in cemento e vetro' [Project for a concrete and glass pavilion] (1976).

2.6 **The Description of Drawing and the Description of Architecture: 'Progetto di Edificio Lamellare' [Design for a Lamellar Building] (1968); 'Progetto di Ponte a San Giovanni dei Fiorentini a Roma' [Design for a Bridge in San Giovanni dei Fiorentini in Rome] (1968); 'Casa nella Campagna Romana' [House in the Roman Countryside] (1971); 'Padiglione in Cemento e Vetro' [Concrete and Glass Pavilion] (1976)**

2.6.1 **Introduction**

The conclusive section of the research presents an investigation of four experimental designs by Purini, and it is directed to identify and evaluate the relationship between drawing and architecture, inherent in 'Una ipotesi di architettura'. This enquiry is based on the analytical procedures devised for the re-description of the 'Classificazione' and its interpretation.

The projects examined are the following:

- ‘Progetto di edificio lamellare’ [Design for a lamellar building] (1968);
- ‘Progetto di ponte a San Giovanni dei Fiorentini a Roma’ [Design for a bridge in San Giovanni dei Fiorentini in Rome] (1968);
- ‘Casa nella campagna romana’ [House in the Roman countryside] (1971);
- ‘Padiglione in cemento e vetro’ [Concrete and glass pavilion] (1976).

The first two projects, both from 1968, are contextual to the abstract research on the architectural language, and develop Purini's notion of support of the composition, – the vertical lamellar-structure, and the horizontal base-structure – extensively discussed in Chapter 2, Section 4, *Supports for the Composition: the Base and the Wall and their Metaphorical Relationship to the Drawing*. The flat and homogeneous structures characterising the two design proposals establish a convergence between the characteristic three-dimensionality of architecture and the bidimensionality of the drawing and, consequently, a metaphorical association between the architectural object and its image that will be the specific subject of the present interpretation. The frontal view of the ‘Edificio lamellare’ and, in the second case, the top view of the ‘Ponte a San Giovanni dei Fiorentini’, will be interpreted in fact as a comprehensive description of the project.

In the ‘Casa nella campagna romana’ (1971) Purini introduces in his formulation the theme of the architecture's materiality. More specifically, this project tests the instability generated in the architectural form by assigning numerous building materials to the composition. Here, both the frontal view and the plan of the house establish the basis for evaluating the instability of the form. Furthermore, as a result of its very definition, the unstable character of the architectural form also emerges as a design principle, enabling the expansion and, consequently, the advancement of the theoretical domain established by the relationship between drawing and architecture as formulated by Purini.

The first three projects will lead to a more in-depth analysis of the 'Padiglione in cemento e vetro' (1976). Conceived eight years after the 'Classificazione', this design can be regarded, on the one hand, as a subtle summary of the experimental phase of 'Una ipotesi di architettura' (1966-1968), and, on the other hand, as a pivotal moment in which Purini's research deliberately confronts the possibility of being contextualised into a wider and established architectural discourse. However, in Purini's case, the contextualisation of the research, does not occur through the vulgarisation of its content and ambition – as often occur when considering highly individualised and radical approaches to architecture –, but by proposing a critical reassessment of the very discourse it engages, namely, that of the relationship between architectural design and history.

In synthesis, the aims of this conclusive investigation can be categorised as follows:

- to demonstrate how the connection between autonomous and heteronomous aspects of Purini's research is specifically elaborated through the design of the 'Padiglione in cemento e vetro';
- to demonstrate how the link between internal and external references of the project can be specifically identified and furthered through the analysis of its genesis – an analysis which is enabled by the procedures devised for the investigation of the 'Classificazione';
- to demonstrate the specific relevance, introduced by the 'Padiglione in cemento e vetro', in relation to the characterisation of the architectural drawing, that, as I have hypothesised, can be expounded from 'Una ipotesi di architettura'. Therefore, the interpretation of this project can be considered as the proof of concept and conclusion of my research;
- lastly, the comprehensive and, arguably, innovative interpretation proposed for the 'Padiglione in cemento e vetro', subsequently will demonstrate the validity of the research approach advanced in my research.

2.6.2 'Progetto di un Edificio Lamellare' [Design for a Lamellar Building] (1968)

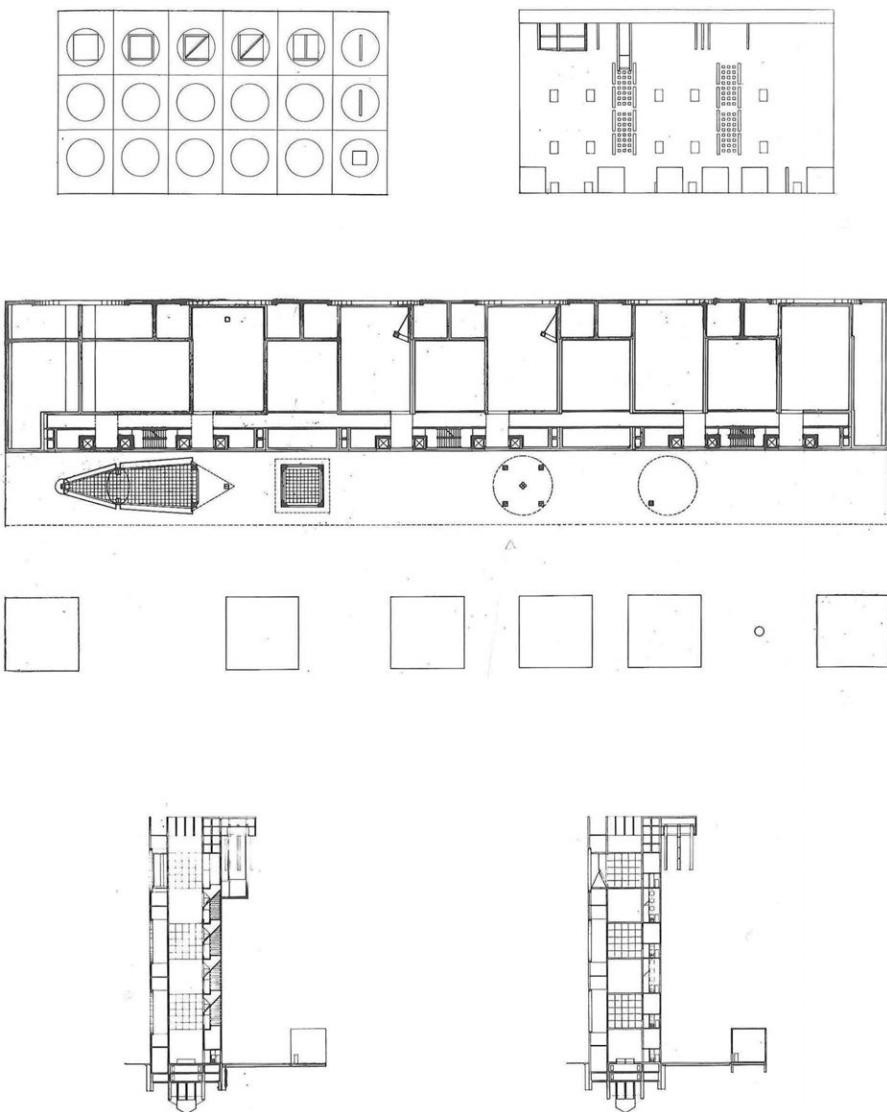


FIG. 2.53 Franco Purini, 'Progetto di un edificio lamellare' [Design for a lamellar building] (1968). From top to bottom: rear and front façades; plan at the level of the hanging structures; cross sections.

The 'Progetto di un edificio lamellare' [Design for a lamellar building] (1968) presents a reflection on the tall and flat lamellar building type. With this structure that has been already introduced in the 'Progetto di biblioteca a Roma' (1968), in Chapter 2, Section 3, and in the studies for the vertical support of the composition, in Chapter 2, Section 4, Purini presents a metaphorical relationship between the building and of the theme of the façade. Ultimately, the lamellar building consists of an architectural configuration which is defined by a surface structure and therefore leads to the evaluation of the correspondence between the building and its image – its drawing.⁴¹¹

Before discussing this design, it should be restated that at the base of Purini's investigation is the research of an alternative conception and description of architecture. In 'Una ipotesi di architettura', Purini questions the canonical architectural narratives – including the ways in which a building is experienced and inhabited –, to research another base for architecture, and more specifically, an architecture that can be described only by the compositional logic of its elements, that is through the creative act of the project. Therefore, in the 'Progetto di un edificio lamellare', no conventional architectural approaches apply: there is no context, no historical or typological precedents, nor is there a functional program or a stylistic character.

In presenting the project in *Luogo e Progetto* (1976) Purini writes:

This project has been conceived as an abstract composition and is outside any functional program. It is an architectural experiment on the [architectural] grammar and syntax, where a number of primary [architectural] elements have been reformulated. [In the Progetto di un edificio lamellare], design process and output, generative grid and sculptural effects, tend to coincide. The reduction of the intermediate span of the design process, which normally progressively settles on the initial ideas and choices, is adopted as a modality for questioning the nature of the instrument of the architectural work and the primary constructive actions.⁴¹²

In fact, a basic observation of the design's drawing reveals no immediate association between the unusual configuration proposed by Purini and a specific architectural type. The design appears to be a collection – or a classification – of isolated architectural fragments, spatial situations, and effects derived from Purini's language, yet the overall architectural logic seems indiscernible. Furthermore, this alternative conception at the

⁴¹¹ Analogously to the 'Classificazione' aiming to investigate the relationship between border of the cube and the internal composition, the definition of the architecture in this project, therefore, is established by the relationship between the limits of the structure and its internal composition.

⁴¹² Franco Purini, 'Progetto di un edificio lamellare', in *Luogo e Progetto* (Rome: Edizioni Kappa, 1976), 68. (Writer's translation).

base of the project also influences the way in which architecture is presented through writing. Purini's written account on this work, published in *Luogo e Progetto* (1976), is very peculiar and replicates the unconventional nature of the design. The text, in fact, does not provide a linear reading of the building, but consists mainly of a collection of separate descriptions of building parts. These fragments are, however, fundamental for triggering insights for the interpretation of the drawings, and from these, then reconstruct the architectural idea.⁴¹³ At the same time, it can also be observed that an overall coherence among the building parts is already ensured by the very drawings, as they replicate the characteristic flatness of the architectural structure proposed by Purini.

The 'Progetto di un edificio lamellare' comprises two double wall structures. The first double wall structure, which for practical reasons I will henceforth refer to as the front of the building, contains the horizontal and vertical circulation, the lavatories, and a series of large volumetric skylights inclined at 45 degrees, providing the interior with indirect light. The second double wall structure – the rear of the building – features, on the exterior, a six-by-three grid of modular elements with large circular openings at the centre, and on the interior, a discontinuous wall structure. The hollow space between the two edge structures is occupied by cubical volumes connecting the two sides.

The rear façade. On the rear façade, furthermore, there are a series of structures connected to the cubical volumes, and overhanging towards the outside. These protruding three-dimensional structures are positioned at the centre of the circular openings of the façade and derive from the three transformational series identified by Purini in the 'Programma di fondazione grammaticale del linguaggio architettonico' (1968). According to Purini, this rear façade should be understood '(...) as a page onto which are placed a number of three-dimensional signs'.⁴¹⁴ The façade, therefore, is presented literally as a support for an inscription of architectural elements. Purini, further clarify the compositional rule of the elements:

The elements of this sequence are volumes, planes and lines. The initial elements [of each corresponding transformational series] appear in the last [circular] openings [of the façade] in the first and second horizontal row. [The elements] are vertically aligned because the last element of each sequence coincides with

⁴¹³ See: Franco Purini, *Ibid.*, 68-70. See also Franco Purini, 'Progetto di un edificio lamellare, 1968', in Franco Purini, *Le opere, gli scritti, la critica*. Gianfranco Neri ed. (Milan: Electa, 2000), 30-31. The 'Progetto di un edificio lamellare' was previously presented in the first published contribution of Purini's work, in *Palatino. Rivista Romana di cultura* no. 2, (1968). However, in this publication, the project is only briefly discussed and serves more as an illustration of the research's aims proposed by Purini. See: Franco Purini, 'Programma di fondazione grammaticale del linguaggio architettonico', in *Palatino. Rivista Romana di cultura* no. 2, (April-June) (Rome: Edizione Palatino 1968), 225. English translation in Appendix 1.

⁴¹⁴ Franco Purini, *Ibid.*, 68. (Writer's translation).

the initial elements of the following series. The sequence of elements of the upper row is completed, while the bottom and middle sequences present only the initial elements. The theme of the upper series of the cube is evoked by a rhythmic succession of volumes, hanging under the moulding in the opposite wall.⁴¹⁵

However, the association between the elements of the façade and the three transformational series of the 'Programma di fondazione grammaticale del linguaggio architettonico' (1968) that can be derived from Purini's words, it is not sufficient to grant a particular significance to this configuration in relation to the project as a whole, and, therefore, the meaning of this series of cubical volumes placed on the façade should be further investigated. More specifically, the hypothesis advanced here is that in the catalogue presented in the façade are also encrypted all the elements, and their combinatory, representing the lamellar building. In this sense, the façade would be associated with a drawing representing the architectural information from which it is possible to decode the architectural content of the building. For example, it can be argued that the signs emerging from the façade intermediate the spatial character of the interior of the building to the exterior – that is, through its image.

However, the hanging cubical elements also establish other types of associations. Purini, in fact, introduces an additional connection with the opposing façade, as if to amplify the relational character of the proposed architectural organism.

In the front façade, the double wall structure supports a large continuous moulding that holds a system of steel wireframe structures suspended below. Furthermore, the plan and the cross-section on the left side (see FIG. 2.53) also reveal that two of these structures are accessible. Yet, no conventional functions can be associated with these birds' nest-like features. Their significance and logic should instead be identified within the figurative aspects of the building, particularly in the shadows of the elements (and the shadows of their possible occupants) marking the span of the flat façade.⁴¹⁶ It could therefore be argued that the protruding structures in the back façade and the hanging structures in the front present two different types of inscriptions characterising the flat surface. Moreover, between these two parts of the building exists a perceptual association triggered by the analogous primitive character conveyed by both their constrictive techniques and their figurative effects.

⁴¹⁵ Franco Purini, *Ibid.*, 68. (Writer's translation).

⁴¹⁶ Franco Purini, *Ibid.*, 68. In the plan it can be also observed that the third and the fourth hanging structures present a configuration based on the relationship between the square and circle that is reminiscent of the 'Ricerche di transizione' (1967). In that exercise the relationship square/circle was introduced to investigate the figurative instability of the architectural form. See: Franco Purini, 'Ricerche di transizione', in *Luogo e Progetto* (Rome: Edizioni Kappa, 1981), 50-52. See also in the present dissertation Chapter 2, Section 3, 'Ricerche di transizione' [Transitional research] (1967).

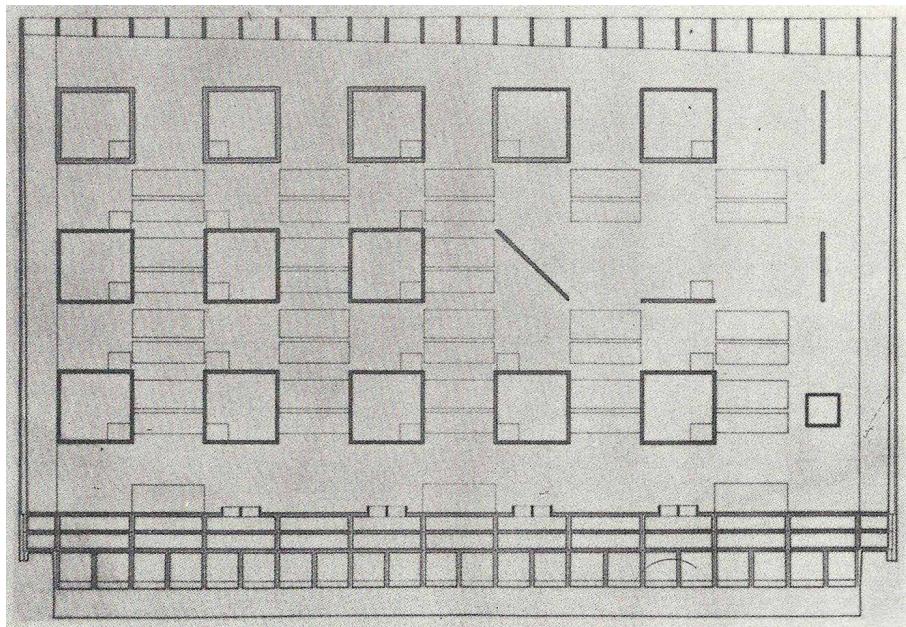


FIG. 2.54 Franco Purini, 'Progetto di un edificio lamellare' (1968). Longitudinal section.

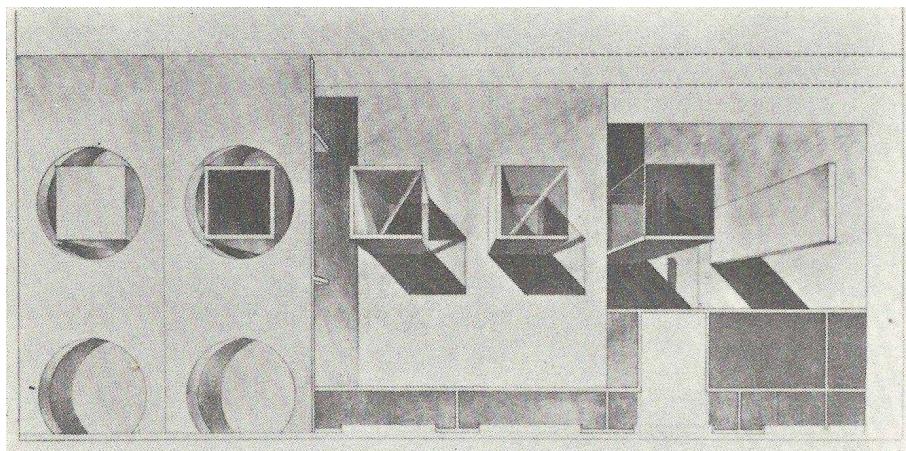


FIG. 2.55 Franco Purini, 'Progetto di un edificio lamellare' (1968). Series of cubic structures (detail).

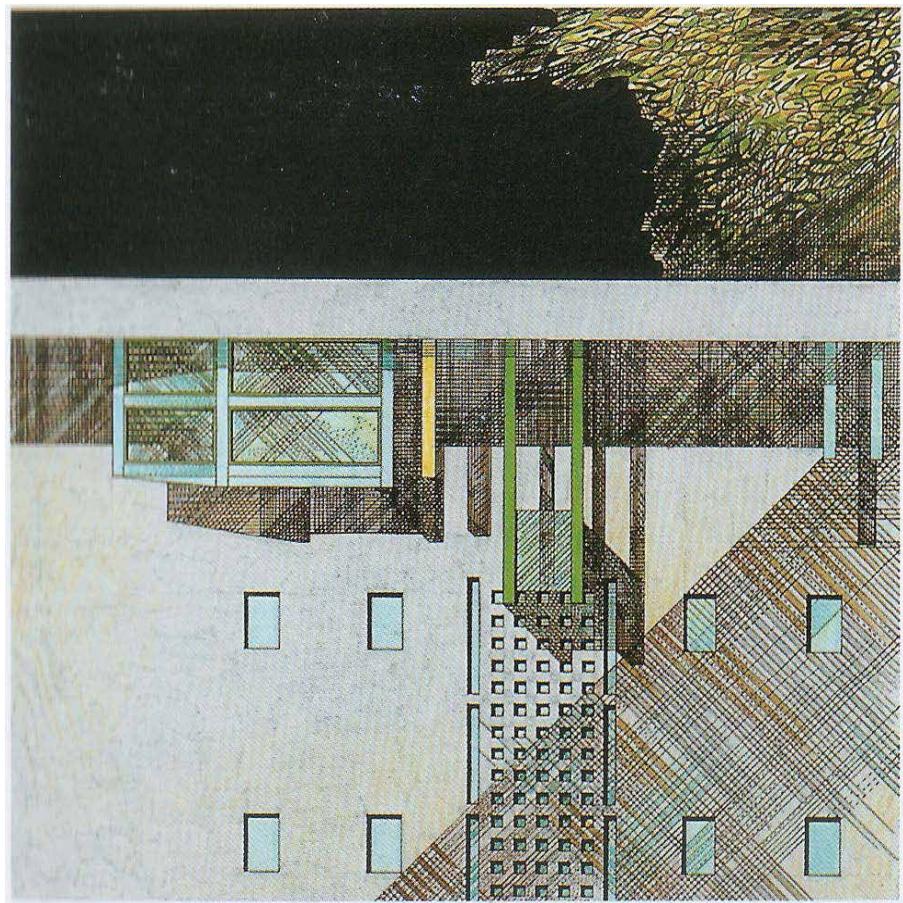


FIG. 2.56 Franco Purini, 'Progetto di un edificio lamellare' (1968), Elevation (detail). It is not clear if this drawing was realised contextually with the project or at a later stage. It was first published in *Franco Purini. Le opere, gli scritti, la critica* in 2000 and presents the distinctive iconographic structure of Purini's drawing series that, as I state, begins with the series 'Angoli' [Corners] in 1976. This drawing, therefore, should be considered an anticipation of the drawing series generated by the concrete need to frame a significant aspect of a building, rejecting the conventional principle and conceived instead by a series of architectural situations relating to one another according to the new rules established by Purini in the 'Programma di fondazione grammaticale del linguaggio architettonico' (1968).

Interior. The interior of the building is defined by a grid of lamellar structures connecting the two facades. The absence of fixtures leaves the building completely exposed to the outside. It can therefore be argued that the very categories of interior and exterior – practical notions that structure the conception and description of a building – lose definition, as the interior space is, in reality, an exterior that simultaneously contains other interior spaces. Purini associates this configuration with a reproduction along the vertical direction of the typical street-block relationship found in a city. Yet again, this association with the urban organism can be regarded only as a derivative aspect, enriching the meaning of the design rather than serving as one of its inspiring principles.⁴¹⁷ Instead, these principles are simply the construction of a relationship between the surface and the configuration of architectural elements, through which Purini will progressively define the seven creative techniques that have been thoroughly illustrated in Chapter 2, Section 2. For instance, in this project, Purini tests the technique of the ‘Enstrangement’: the big moulding in the rear façade, establishes a scalar transformation and, at the same time, a conceptual amplification of the classical theme of the crown, resulting in a new interpretation and experience of this conventional architectural element.⁴¹⁸

Further crucial elements for the design interpretation include the sudden presence of six cubical structures and one column placed between the fifth and sixth cubes, positioned in front of the building. I will argue that these elements introduce an additional relational level in the project, compared to that established by the two façades; more specifically, they delimit the area of the building and define its context (see FIG. 2.53, main plan). These external cubical structures have the same size of the structures connecting the two sides of the building. Also in this case, the definition of these elements remains unspecified; however, they can be associated with the totem-like element in the project for the temple, discussed in Chapter 2, Section 4, and interpreted as “signs” introducing the spatial experience of the building and, more specifically, of its interior. In other words, these elements add another interpretative level to the project by:

- communicating the character of the architectural space in the interior through an external feature;
- while also delimiting its area, thereby defining a more enriched understanding of the notion of context.

⁴¹⁷ Franco Purini, ‘Progetto di un edificio lamellare’, in *Luogo e Progetto* (Rome: Edizioni Kappa, 1976), 68.

⁴¹⁸ See Laura Thermes, ‘Appunti su alcune tecniche d’invenzione’, in *Controspazio* no. 3. (Bari: Edizioni Dedalo, 1975), 82-85, and Purini, *Luogo e Progetto*, 35. See also Chapter 2, Section 2, *Purini’s Seven Techniques of [Architectural] Invention*.

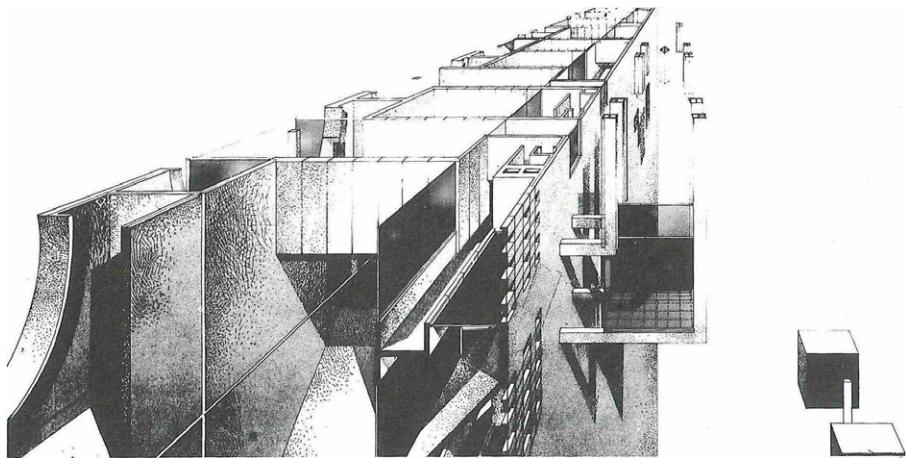


FIG. 2.57 Franco Purini, 'Progetto di un edificio lamellare' (1968). Perspectival section: the relationship between the two linear structures (the double and perforated wall) and the internal volumes. This image also shows the relation between the internal space of the building and its external representation in the placement of the cube elements outside the building. In this drawing, the cubical structures and the column not only enable the measuring of the building, but they also provide its very context.

These particulars of the design lead to confronting the very consequence of Purini's hypothesis of architecture, namely, the evaluation of the architectural object implied by it, whose definition was left programmatically suspended to facilitate the preliminary research of its governing principles based on the relational quality of elements – a context in which I have hypothesised the fundamental relevance of the concept of drawing. Once the principles and their limits of Purini's ideas are defined, the focus necessarily shifts to the results they produce, and the 'Progetto di un edificio lamellare' allows for a basic but fundamental observation also at the level of architecture. Indeed, if Purini's architectural hypothesis explores the possibility of identifying a direct relationship between architectural objects and their images, and thus within the project documents themselves,⁴¹⁹ then a logical implication can be hypothesised: if the object has a direct relationship with the project, then the project also has – or can have – a direct relationship with the object. In other words, the architectural object would also contain an immediate description of its project. Therefore, what emerges is an architecture that describes and, at the same time, is described only by its elements and by the relationships among them. Its value should be researched first and foremost within these – very basic – elements and

⁴¹⁹ 'The reason for this research is the desire to achieve a direct and immediate relationship between architectural objects and the project', in Franco Purini, 'Programma di fondazione grammaticale del linguaggio architettonico', in *Palatino. Rivista Romana di cultura* no. 2, (April-June) (Rome: Edizione Palatino 1968), 225. (Writer's translation)

within the relationships established by them, and nowhere else.⁴²⁰ Other aspects of the building, such as the material, technical and functional components, as well as the typological relationship with other buildings, become secondary developments following this basic idea, as will be shown in the following projects presented in this section.

In conclusion, in the 'Progetto di un edificio lamellare', drawing and architecture, by incorporating the description of its elements, appear conceptually unified. More specifically, in this design, the notation not only illustrates an object but also enables visual recollection of its composition. Furthermore, as was observed early in the 'Progetto di biblioteca a Roma' (1968), here the façade acquires the function conventionally assigned to the plan.⁴²¹ Consequently, the organisation of the building and the relationships among its parts overlap with the organisation and the figurative effects of the façade, thus with the image of the building.

⁴²⁰ Purini, will later define his architecture as *architettura autodescritta* [self-descriptive architecture]. See: Franco Purini, 'Per un'architettura "autodescritta"', in *Assenza/Presenza: un'ipotesi di lettura per l'architettura*. Exh. Cat., Fulvio Irace ed. (Bologna - Ascoli Piceno: Galleria Comunale d'Arte Moderna and D'Auria Editrice, 1978). Reprinted in *Del Progetto. Scritti teorici di Franco Purini 1966-1991*, Francesco Moschini and Gianfranco Neri eds. (Rome: Edizioni Kappa, 1992), 41-42. In a broader sense the theme of the "self-descriptive" character of architecture should be contextualised in the analytical approach to art and architecture that have been presented Chapter 1.

⁴²¹ The implications contained in this inversion could be further advanced when considering that Purini sees the lamellar building as a metaphor of an urban plan.

2.6.3 'Progetto di Ponte a San Giovanni dei Fiorentini a Roma' [Design for a Bridge in San Giovanni dei Fiorentini in Rome] (1968)

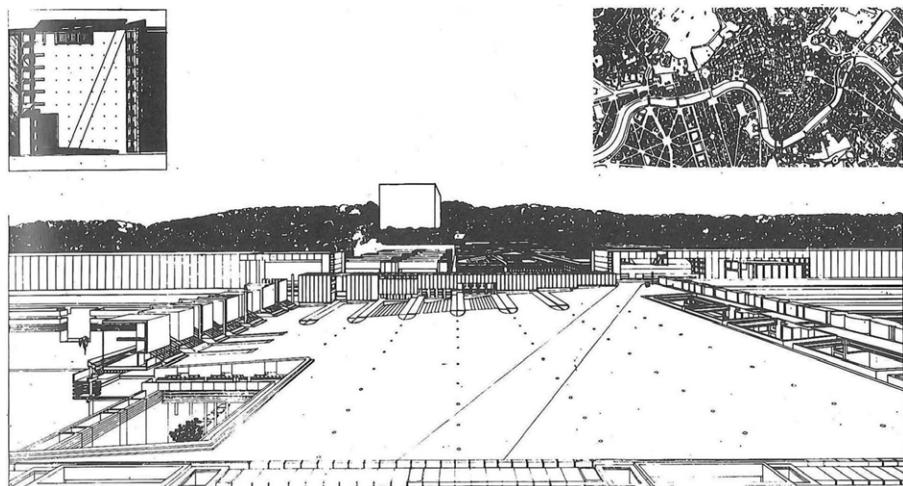


FIG. 2.58 Franco Purini, 'Progetto di ponte a San Giovanni dei Fiorentini a Roma' [Design for a bridge in San Giovanni dei Fiorentini in Rome], 1968. Perspective view from San Giovanni dei Fiorentini (the white cube standing in the horizon represent the volume of the Pontifical North American College).

A bridge, with closed accesses, with the geometry of a square - therefore, also a "square" - which is also the roof of a large hypostyle room, standing on the streaming water of the river, and where a series of small, interconnected bridges leads to a luxuriant concrete island. In the 'Progetto di ponte a San Giovanni dei Fiorentini in Rome' [Design for a bridge in San Giovanni dei Fiorentini in Rome] (1968), Purini investigates architecture as a fountainhead of events.⁴²² This hyperaccumulation of architectural situations is researched according to two directions: the first develops the relation between the theme of the project - a bridge - and its context - San Giovanni dei Fiorentini's area - and the second, the elaboration of the project itself. The design presents a radical formal solution aiming to consolidate the Tiber's River bend in the Campo Marzio area. More specifically, for Purini, the design aims to re-

⁴²² See: Franco Purini, 'Ricerche di progettazione', in *Controspazio*, nos. 11-12 (Bari: Edizioni Dedalo, 1972), 27; and Franco Purini, 'Ponte a San Giovanni dei Fiorentini a Roma', in *Luogo e progetto* (Rome: Edizioni Kappa, 1976), 71. In this context, the notion of architectural event, is associated both to the construction of a concrete form, and to the construction of a figurative theme.

establish a new, and enduring relationship between architecture and the river, which is considered as a built structure: 'a street crossing the city'.⁴²³

Purini proposes a large, inclined platform measuring 120 x 120 m that crosses the Tiber and connects the monumental sites of San Giovanni dei Fiorentini, the Porta di Santo Spirito, and the old Ospedale. The platform is supported by 132 pillars arranged in a 12 x 12 m grid, along with an additional configuration on the hillside measuring 6 x 12 m. These geometrical features suggest that this extensive bridge-street structure may also be interpreted as a square on the river.

Developed within the context of Ludovico Quaroni's course in Architectural Composition at the Faculty of Architecture of the University of Rome in 1968, the design elaborates on the horizontal dimension, the approach adopted for the 'Edificio lamellare'. In this instance, it is the plan that establishes a metaphorical relationship with the page onto which the architectural description is inscribed. Additionally, Purini's concept of the base mediating between the composition of architectural elements and the ground is further developed here. In fact, by proposing the groundless building type of the bridge, the tectonic aspects are no longer situated on the surface but at the two edges, corresponding to the embankments.

It should also be noted that, compared with the previous case, this design confronts a specific urban situation – the San Giovanni dei Fiorentini area in Rome – and therefore it should not be evaluated solely through the premises of his research. It could be argued, in fact, that a direct reference for this project is the old Ponte dei Fiorentini, also known as *ponte de fero* [iron bridge], an unusual suspension bridge built in 1863 and demolished in 1941, to be replaced in the same year by the current Ponte Principe Amedeo. Purini also indicates wider and more complex thematic references for this work: 'this design is a reflection on the theme of the monument in the city and an addition to the theme of the inhabited bridge proposed by Palladio for Rialto'.⁴²⁴

However, none of these external relations seems to inspire or fundamentally influence the actual proposal. It could be argued, in fact, that any bridge is somewhat a placeless structure estranged from its context. Furthermore, apart from the oddity that Purini's proposal shares with the former *ponte de fero*, there are no additional elements in the project to support the relevance of this association. Lastly, Purini's indications of the relationship between monument and city indeed suggest a precise link with the then-contemporary discourse that assigned significant importance to

⁴²³ Franco Purini, 'Ponte a San Giovanni dei Fiorentini a Roma', in *Luogo e progetto* (Rome: Edizioni Kappa, 1976), 71.

⁴²⁴ Purini, *Ibid.*, 71.

the study of monuments, particularly regarding their 'characteristics of permanence' within the urban phenomenon.⁴²⁵ However, in this specific case, Purini could have referred more simply to the premises of his 1966 project for 'La città compatta,' which precisely investigates the relationship between urban fabric and monumental emergences, as well as the relevance of this relationship as elaborated by Quaroni in his analyses of historical centres.⁴²⁶

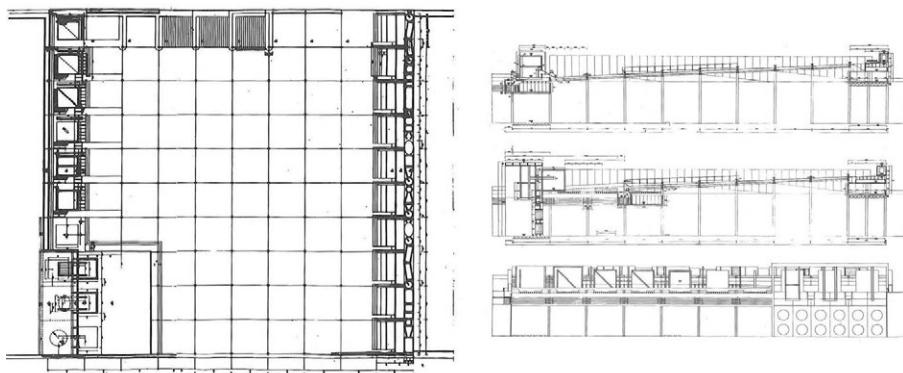


FIG. 2.59 Franco Purini, 'Progetto di ponte a San Giovanni dei Fiorentini a Roma', 1968. Left: Plan of the square bridge on the River Tiber. Right: Sections of the inclined square; Downstream façade: the pedestrian tunnel is composed of a combination of the spans and the great portal with the dam.

In the following notes, the design will be discussed through the principles of 'Una ipotesi di architettura' – an approach that, by examining the specifics of Purini's drawings, will enable us to reveal the layered content and design while emphasising its particular significance within the context of the present research. To achieve this and to overcome the insidious indications provided by Purini in the written description, I propose an interpretative scheme based on the analysis of the composition, inspired by the principles that underpinned the 'Classificazione' (1968), which arguably remain applicable to this design.⁴²⁷ The 'Progetto di ponte a San Giovanni dei Fiorentini' (1968) can indeed be seen as the outcome of two fundamental operations: the first operation, concerning the square, consists of considering the

⁴²⁵ See: Massimo Scolari, 'Avanguardia e nuova architettura', in *Architettura razionale*, Ezio Bonfanti, Rosaldo Bonicalzi, Aldo Rossi, Massimo Scolari, and Daniele Vitali eds. (Milan: Franco Angeli Editore, 1973), 179. English translation 'The New Architecture and the Avant-Garde', in *Architecture Theory since 1968*, K. Michael Hays ed. (Cambridge, Ma.: The MIT Press, 1998), 190.

⁴²⁶ Ludovico Quaroni, *La torre di Babel* (Padua, Marsilio, 1967).

⁴²⁷ In order to do so, and to overcome the insidious indications provided by Purini in the written description, I propose an interpretative scheme based on the analysis of the composition and inspired by the basic compositional principles that arguably this design shares with the 'Classificazione' (1968).

series of elements contributing to the delineation of the border; the second operation views the platform as a stratification of spatial situations and themes. In other words, the 'Progetto di ponte a San Giovanni dei Fiorentini' (1968) will be presented by first describing the characteristics of the four edges and then detailing the stratification of the surface, commencing from the square and extending down to the river.

Edge on Porta di Santo Spirito and Ospedale. Here, Purini erases the built fabric of the modern section of the Ospedale and replaces it with a dense juxtaposition of tower-like structures made from prefab concrete elements and steel. This construction system is repeated with a height of up to 6 m from the street level on the riverbank 'for reconstructing a significant relationship between the urban environment and water'.⁴²⁸ The square is defined by a double wall structure that accommodates the entrance ramps to the square, the connection with two pedestrian galleries crossing the river at the two opposite edges, and by a large step system linking the platform to the riverbank.⁴²⁹

Edge on the San Giovanni dei Fiorentini. The edge of the San Giovanni dei Fiorentini presents an analogous double wall structure enclosing a ramp system and the access at the level of Largo dei Fiorentini.⁴³⁰

*Northern (lower) edge of the square.*⁴³¹ The lower edge of the platform, corresponding to the northern side, is characterised by a pedestrian gallery. This element is defined by a series of structures formed by the progressive subtraction of elements from a cubic volume into a plane and by an analogous series that, starting with a column, gradually completes a wireframe structure identifying the volume of a cube.⁴³² These structures are suddenly interrupted on the San Giovanni dei Fiorentini side by a large pit on the platform. This hole is crossed by a portal supporting a series of steel structures, some of which are clad in glass surfaces. The edge of the platform at the hole is defined by a dike-like wall with circular openings designed to

⁴²⁸ Franco Purini, 'Ponte a San Giovanni dei Fiorentini a Roma', in *Luogo e progetto* (Rome: Edizioni Kappa, 1976), 71. See the set of published drawings in Appendix 1.

⁴²⁹ Purini, *Ibid.*, 71.

⁴³⁰ It can be argued that the double wall structure defining the two main edges of the square/bridge is a very specific element from which it is established a relationship with the 'Progetto di un edificio lamellare' (1968)

⁴³¹ In the drawings the orientation is upside down therefore, the North is located at the bottom.

⁴³² In this configuration, Purini applies the principles of the second, and third transformational series established in the 'Programma di fondazione grammaticale del linguaggio architettonico' (1968). Like in the previous project for the lamellar building, Purini seems to test the field of literal application of the element of the transformational series at different scale: for the construction of the place, and as architectural elements.

generate turbulence in the water that, depending on the river's level, forms a large fountain controlled by a system of locks.⁴³³

Southern (upper) edge of the square. The opposite edge, on the upper side of the platform, presents a covered walkway conceived as a sequence of small elementary spaces built on a square, circular, rectangular, and elliptical plan. According to Purini: '[t]his series of volumes, [hypothesised as built with] various materials and painted with primary colours, introduces the smaller contextual scale of the project'.⁴³⁴ The car traffic crossing the river runs below the surface on this edge.

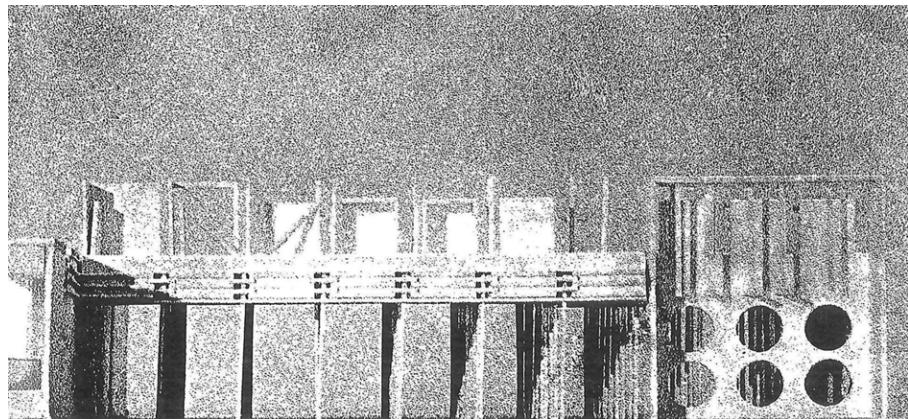


FIG. 2.60 Franco Purini, 'Progetto di ponte a San Giovanni dei Fiorentini a Roma', 1968. Model (detail of the North elevation).

Corners. Supporting the platform boundaries are four steel structures positioned at the corners of the square, which serve as markers (reference points).⁴³⁵

Stratification of the square. The relationship between the even elevation of the edges, and the inclination of the surface, determined a latent state of indeterminacy of the platform which results at the same time as an enclosure, and as link between the

⁴³³ Purini, Ibid.

⁴³⁴ Purini, Ibid.

⁴³⁵ See: Purini, Ibid: 71. Paradoxically, these corner structures are not clearly recognisable on the drawing but according to Purini 'the first is a square structure built with L - profile, painted in yellow welded on a black painted hollow profile, the second is a circular structure and is built with steel spiral sections, the third an equilateral triangular structure in stainless steel, and the fourth a cross-shaped structure formed by four L-profiles cladded with a red painted sheet'.

new urban configuration proposed for Santo Spirito with Largo dei Fiorentini on the other side of the river (see the plan and the cross-sections of the inclined square). Moreover, these two conflicting characteristics are also marked on the very surface of the platform. In fact, as the perspective view from San Giovanni dei Fiorentini shows, both the position of the pillars supporting the platform and the diagonal link are literally drawn on the surface.⁴³⁶ Here, therefore, the drawing appears also as a material sign of the architecture, as if to indicate the original connecting purpose of the structure. This rhetorical operation further qualifies the hypothesis of the unification between drawing and architecture raised in the discussion of the 'Progetto di un edificio lamellare' (1968).

The ambiguous characteristic of the square/bridge structure is further emphasised when considering the counter space beneath the platform. For instance, beneath the pedestrian passage is an ample area occupied by a series of services and multipurpose rooms that serve as places of permanence, contrasting with the movement space of the gallery. Moreover, under the empty semi-enclosed square, insists a space occupied the dense pattern of concrete pillars that – as Purini argues – could be associated with a large hypostyle room on the Tiber.⁴³⁷ The association of this space as an interior space is further reinforced by the presence of small steel bridges set on concrete piers, enabling the crossing of the river during the low tide. Suddenly, again, Purini informs us – nearby to the dike-like wall, these paths also reach a small 'concrete island (...) covered by lush vegetation'.⁴³⁸

The concrete island mentioned by Purini can be regarded as the design's ultimate event and its interpretative key. This island is not recognisable in the drawings, nor is it mentioned in the first publication of the project in *Controspazio* nos. 11-12 (1972)⁴³⁹, and appears instead only later in *Luogo e progetto* (1976).⁴⁴⁰ It could be hypothesised, therefore, that the island is a late add-on to the project and possibly a reference to the numerous islands of the river. However, and more significantly, this lyrical addition to the project, which is not present in the drawings, triggers two suggestions that, in my opinion, can further clarify Purini's formulation and architectural approach. My first suggestion is to consider the association of Purini's island with Arnold Böcklin's *Die Toteninsel* [Isle of the Dead] (1880), which is prompted by a sense of mystery and by the contrast created by the relationship between solidity and vegetation. It should be remembered that, in *Luogo e progetto* (1976), Purini specifically identifies *Die*

⁴³⁶ 'The grid of the structure is projected on the surface of the square and signed with cast iron disks painted in red'. Purini, *Ibid.*

⁴³⁷ Purini, *Ibid.*

⁴³⁸ Purini, *Ibid.*

⁴³⁹ Franco Purini, 'Ricerche di progettazione', in *Controspazio*, nos. 11-12 (Bari: Edizioni Dedalo, 1972), 27

⁴⁴⁰ Purini, *Ibid.*

Toteninsel as a reference for explaining his concept of ‘apparition’, which is discussed in this research in Chapter 2, Section 2, where it is exemplified and further advanced by the absence/presence of the concrete island.⁴⁴¹

The second suggestion connects the island to J. G. Ballard’s 1974 novel, *Concrete Island*,⁴⁴² which narrates the vicissitudes of the architect Robert Maitland. On a quiet spring afternoon, the explosion of a tire propelled Mr. Maitland and his car down an escarpment. It landed in a strange and surreal place: a sort of traffic island where a delirious, outlandish, puzzling story pivots on the indomitable will of survival and domination of a man over the surrounding environment. Purini’s project and the themes it inherently addresses, such as the relationship between place and placelessness established by the river, the state of decay of the embankments that the author considers central to re-establishing a durable relationship between the river and the city, the prominence of the concrete bridge-square, and the uncanny character of its multiple events, provide a subtle reinterpretation of the ambience of Ballard’s novel. Ultimately, all could be represented in the imagination – and only in the imagination – of a “concrete island.”

These subsequent re-descriptions of the projects through writing – as in this case – or drawing investigations (see, for instance, Purini’s drawing series) are not intended to address a lack of information presented by the project, for example, to complete what the drawings, whether consciously or unconsciously, do not show, but to further verify the design, disclose potential developments, and expand its interpretative scope.⁴⁴³ However, it should also be clarified that this activity never led to the redefinition of the bases and the situation in which the project was conceived – a condition preserved solely by the project’s documents, specifically the drawings. In particular, the drawings of the experimental projects presented are conceived and characterised as accumulators of themes and the questions they intrinsically contain. To disclose these themes and questions, which enable further investigations, it is necessary to navigate through them in an attempt to reconstruct their generative experience.

In the ‘Progetto di ponte a San Giovanni dei Fiorentini a Roma’, it can be observed, for instance, that if we exclude the urban scheme showing the relationship of the project at a large scale of the city, Purini provides no actual site plan, which is the document

⁴⁴¹ Franco Purini, ‘Luogo e progetto’, in *Luogo e progetto* (Rome: Edizioni Kappa, 1976), 13.

⁴⁴² See: J. G. Ballard, *Concrete Island* (London: Jonathan Cape, 1974). The reference to Ballard’s novel can be plausible when considering that the project was realised in 1968, that the book instead is from 1974, and that Purini first mentions the presence of the island in the project only in the publication *Luogo e Progetto* from 1976.

⁴⁴³ As it has been frequently repeated the whole of Purini’s work can be interpreted as an on-going series of description of the bases established in in ‘Una ipotesi di architettura’.

that typically illustrates the relationship between the design and its context. Similarly, the perspectival view of the bridge does not serve this function since the edge of the bridge/square platform is entirely defined by a continuous structure that prevents the identification of the connections with its immediate surroundings. Instead, the overall design description is summarised by its plan. This choice can be viewed as a logical consequence of the design proposal, which specifically consists of the architectural definition of its four boundaries. This does not necessarily imply a lack of relation with the context but suggests that this relation should be interpreted at a different scale and examined through alternative criteria and through the analysis of the particulars of the proposed architectural structure. As demonstrated, the plan of the bridge also presents a description of the spaces beneath, while serving as the basis for exploring the figurative dimension of the proposal. Therefore, it is possible to conclude that this design questions the conventional role of both the site plan and the perspectival view in describing the relation between the project and its context, which is instead integrated into the drawing identifying the project – the plan. In other words, this implicit critique does not advocate for the abandonment of the site plan and the perspective view but calls for a reconsideration of their conventional roles. Moreover, it can be added that the critique of the conventions assigned to these drawings is also a logical consequence of Purini's theoretical formulation, which binds a specific idea of drawing and architecture – a drawing that incorporates the construction of the architectural proposition, and an architecture that is self-descriptive, meaning that it literally incorporates its drawing – but, most importantly, also a relation that requires an actual project to be exemplified in its highest form.

2.6.4 Casa nella Campagna Romana [House in the Roman Countryside] (1971)

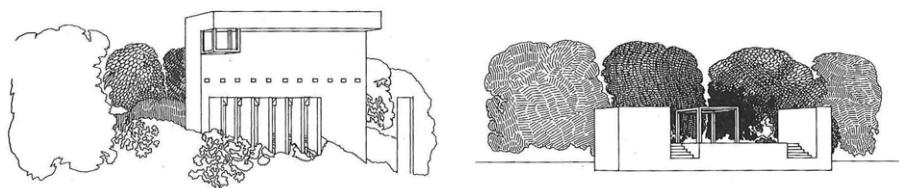


FIG. 2.61 Franco Purini, 'Case nella campagna romana' [Houses in the Roman countryside]. Left: Project for a lamellar building built on a series of volumes, lines and planes, 1966-1968, 1971. Right: Study for a building block. 1966-1968, 1971.

Between 1966 and 1968, Purini initiates the so-called 'Case nella campagna romana' [Houses in the Roman countryside], a research annex of 'Una ipotesi di architettura' consisting of a series of design investigations on the theme of the isolated house in the landscape. This study aimed to develop ideas on architectural composition in relation to the dominant aspect of the landscape and, more specifically, of the Roman countryside. By reiterating the original experience of the primitive huts, these exercises for Purini became a procedure for exploring the meaning of architecture in relation to the place and vice versa, as well as a mode for developing new architectural ideas and testing the possible applications.

This research line, which is still ongoing, consists mainly of incidental drawings and, more specifically, of foreshortened perspective views, which in some cases are further developed, and after many years, into more detailed design proposals. The lamellar building discussed earlier in this section can also be understood as part of these investigations.⁴⁴⁴

For Purini, the Roman countryside incorporates both the meaning of an ideal and mythical place, but at the same time, it is also a very concrete context, and eventually the place in which he was born and grew up, before moving to Rome. Although in the post-war period the Roman countryside underwent intense transformations, according to Purini this territory still maintained its distinctive character and definition in relation to the city: 'in the sixties the city of Rome still retained a *forma urbis* [urban form] expressed through precise limits that characterised it as a recognisable body in relation to the Roman countryside that still preserved almost intact the suggestion of its deserted spaces'.⁴⁴⁵ Therefore, the relevance of this location resides not only in idealised characteristics as an immutable original landscape but also in the conflictual tensions produced by the transformations in the urban and territorial scale. More generally, this research can also be associated with the tradition of studies, initiated in the thirties by Giuseppe Pagano, that recognises in the rural architecture the field in which the seeds of

⁴⁴⁴ An overview of the 'Case nella campagna romana' can be found in: Franco Purini, *Esercizi di composizione. Case nella campagna romana* (Melfi: Libria, 1993), and, here in Appendix 1. Analogous and, in some case, indiscernible to 'Case nella campagna romana', is the exercise 'Torri' [Towers] (1976; 1982-1992; on-going). Instances of this work can be found in: Franco Purini, *Luogo e progetto* (Rome: Editrice Magma, 1976), in Roberta Albiero, ed. *L'invenzione di un linguaggio. Franco Purini e il tema dell'origine 1964-1976* (Siracusa: LetteraVentidue Edizioni, 2021), 124-128; 164-172.

⁴⁴⁵ Franco Purini, 'Roma e l'età dell'oro', in *La grande svolta – Anni '60. Viaggio negli anni Sessanta in Italia*. Virginia Baradel, Ennio Ludovoco Chiggio, and Roberto Masiero eds., Exh. Cat. (Genève - Milan: Skira, 2003), 171. (Writer's translation.).

the transformations occurring at the level of the architectural language can be investigated.⁴⁴⁶

In this section, I will present one of the first design experiments imagined in the Roman countryside, and more specifically, in the south of Rome, near the town of Castel di Decima. According to Purini, the composition of this house was inspired both by the idea of material stratification suggested in the countryside by the superimposition of ruins, towers, and farmhouses and also by the mythological recollection triggered by these objects in the landscape.⁴⁴⁷

The project aims to test the limits of the formal legibility of a primary building scheme in this context. Consequently, Purini imagines a small house built with as many materials as possible. According to Purini, the instability generated by the heterogeneity of the building materials in the compositional scheme 'alludes to "intermediate orders", acquired, through the centuries, by the rural constructions of the *agro romano* area - namely a rural area, which is partly flat and partly hilly - and the effect of growth/transformation through time'.⁴⁴⁸ Purini sees these architectural constructions as both tangible permanence and intransitive signs encoding the intrinsic characteristic of the place's settlement principles, and their transformation.

Purini proposes a formal structure consisting of a series of adjacent volumes, namely cubical elements and sections of cubical elements. Concerning Purini's language system, it can be argued that this project proposes an elaboration of the first transformational series – the progressive thickening of the surface into a cube volume. Each volume is conceived as an autonomous element, identified by a specific building material and by the variation in the thickness of the volume. Four volumes measure 7.2 x 7.2 m, one measures 2.4 x 7.2 m, while the distance between two elements measures 1.2 m. The average height of the volumes is + 3.60 m, reaching + 8.4 m at the two extremities and in the middle section.⁴⁴⁹

The building materials chosen for the experiment are tuff, stone, concrete, steel, wood, ceramics and glass. Purini further explains that some of the materials are also painted: the wide vertical wooden boards used at the bottom of the central element, are painted in white; the building fixtures, such as frames, railings and sheet

⁴⁴⁶ See: Giuseppe Pagano, 'Architettura rurale in Italia', in *Casabella*, no. 96, (Milan: 1935); also published in Giuseppe Pagano, *Architettura e città durante il fascismo*, Cesare De Seta ed. (Milan: Editoriale Domus, 2008), 116-119. See also: Giuseppe Pagano, and Guarneri Daniel, *Architettura rurale italiana* (Milan: U. Hoepli, 1936).

⁴⁴⁷ Franco Purini, 'Casa nella campagna romana', in *Luogo e progetto* (Rome: Editrice Magma, 1976), 91.

⁴⁴⁸ Purini, *Ibid.*, 91

⁴⁴⁹ Purini, *Ibid.*, 91

claddings are in steel, and painted with primary colours. Again, inserts in blue-painted ceramic mark the shifting between the laying in tuff and stone (see the fourth element, from left to right), and the large skylight in the central block is screened by a tall L-shaped framework structure whose surfaces are closed with a pattern of wooden boards (see the top section of middle element).⁴⁵⁰

⁴⁵⁰ Purini, *Ibid.*, 91

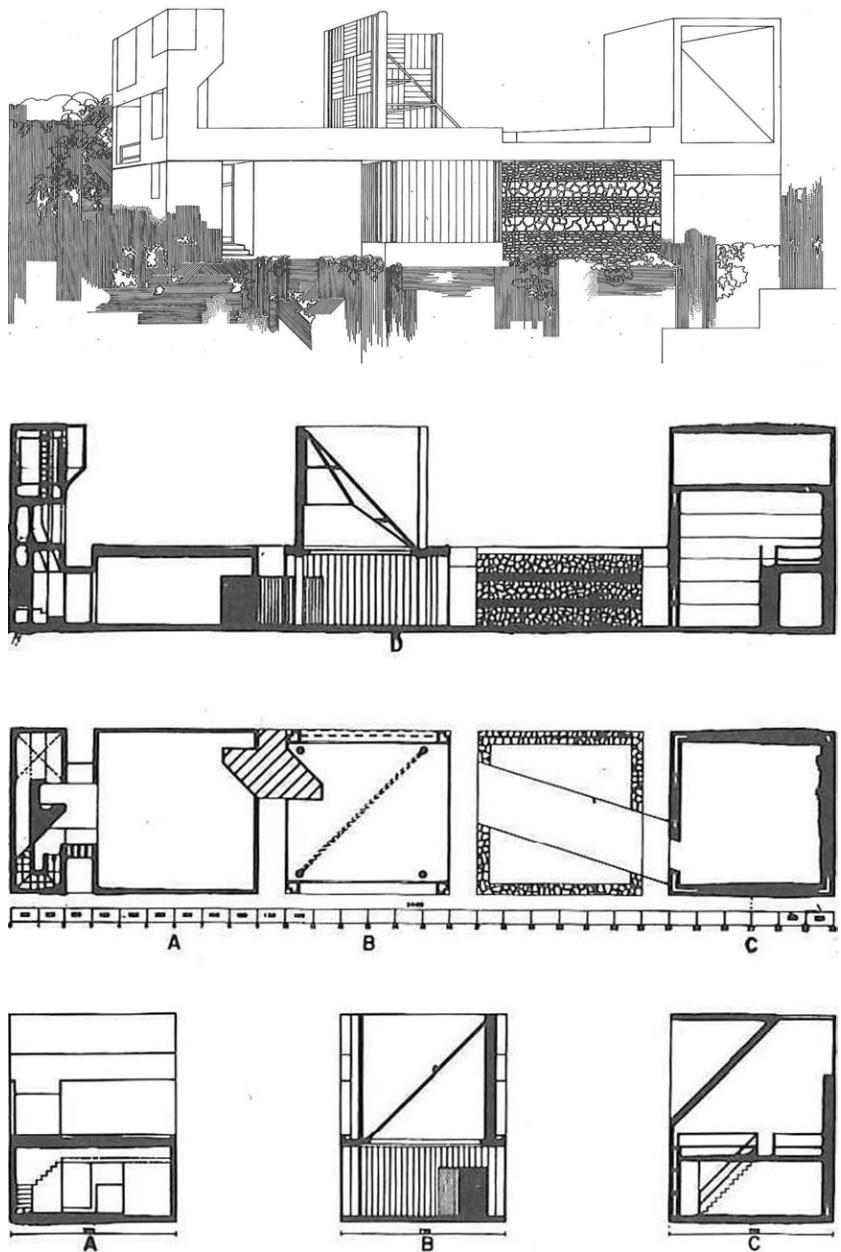


FIG. 2.62 Franco Purini, 'Casa nella campagna romana' [House in the Roman countryside], 1971. Above: View. Below: Plans and sections.

According to Purini, the configuration of the house and the heterogeneity of the materials variously assigned to its elements, produces a series of figurative ambiguities denoting the formal instability of the building. Below, a commented version of Purini's account of the controversial aspects generated by the project:

- The first, evident, ambiguity resides on the fact that the building can be understood simultaneously as a series of detached volumes, and as unity, granted by the podium structure.
- The second, subtler ambiguity concerns the relationship between the serial character of the building and, simultaneously, the ability to identify several symmetrical correspondences within the project that would suggest an interpretation of the building as a unity, thereby contrasting with that of the series. The sequence of five volumes establishes the building as a series but also assigns a symmetric axis to the central – third – element of the configuration. This symmetry is further reinforced by an implicit relationship binding the central element with the neighbouring second and fourth elements, creating a semi-autonomous cell. A more unstable symmetry also organises the third, fourth, and fifth elements. This is introduced by associating the two cubical structures – one dematerialised, presenting only two surface elements, the other fully defined – on top of the third and fifth volumes. Yet, when excluding the first volume, which is thinner than the subsequent ones, the sequence of volumes, from left to right, could also be represented by the arrangement a, b, a, b, thus conflicting with any notion of a symmetrical axis.⁴⁵¹

A last consideration involving the relationship between drawings and the architectural object should be added to this list. If in the 'Progetto di un edificio lamellare' (1968) I argued the pre-eminent role of the frontal view for describing the design proposal, and in the 'Progetto di ponte a San Giovanni dei Fiorentini a Roma' (1968), this role was conversely identified in the plan, here the description of the project is assigned to both frontal view and plan. However, in this project, these two bases, supporting the description of the architecture, also become the base for introducing elements of instability, further problematising and challenging the relationship "drawing-architecture". Here, the frontal character of the building is contradicted by the diagonal of the skylight. At the same time, the horizontal alignment of the elements in the plan is disrupted by the introduction of the inclined course of the inner walls of the volume in tuff (the fourth element). Therefore, the elevation and the plan lose the role of granting stability to the composition, becoming the subject of architectural design research.

⁴⁵¹ Purini, *Ibid.*, 91

If in the 'Ricerche di transizione' (1967), the figurative analysis of a series of architectural configurations reveals the instability of the form, thus prompting a questioning of the foundations of architectural conception and a search for new principles of architectural language, and if the 'Classificazione' (1968) ultimately demonstrated the impossibility of language fully controlling architectural forms, then in the 'Casa nella campagna romana' (1971), the formal and figurative ambiguity is already inherent in the very premises of the project, aimed at studying the underlying implications of this creative condition. The operative context of this investigation is again based on the frontal view, the plan, and their relationship. Considering particularly the relationship of this project with 'Classificazione', it is evident that this association is not only conceptual but also literal and procedural. Indeed, each project component can be regarded as an individual spatial situation and a part of a series. In this respect, the advancement of this specific design consists of incorporating architecture's material aspects - the physical concreteness of a building - into research conducted at the level of representation and centred on the theme of composition.

But in the 'Casa nella campagna romana' (1971), there is a further addition that, as in the previous 'Progetto di ponte a San Giovanni dei Fiorentini' a Roma, cannot be identified in the drawings. Purini states that a series of drawings of the surrounding landscape is engraved on the skylight of the third volume, projecting onto the inner walls and the floor.⁴⁵² The building, therefore, incorporates a representation of the context in which it was conceived - hence also a representation of its original motivations. There is no decorative intent in this operation. Instead, this element of the project - similar to the traces engraved on the square/bridge of San Giovanni dei Fiorentini - can be interpreted as an exemplification of Purini's hypothesis, according to which architecture inscribes its very description in its body, thus becoming a didactic proposition. From this, it is possible to argue that the concreteness of the building itself is not sufficient to convey its logic but requires the presence or absence of its description - its drawing.⁴⁵³ Hence, in this project, not only are the architectural material aspects conveyed inside the realm of representation, but the representation also becomes a concrete aspect of the architecture.

⁴⁵² Purini, 'Casa nella campagna romana', 91.

⁴⁵³ It could be observed that this drawing incorporated by the architecture is not represented in the design drawings.

2.6.5 'Padiglione in Cemento e Vetro' [Concrete and Glass Pavilion] (1976)

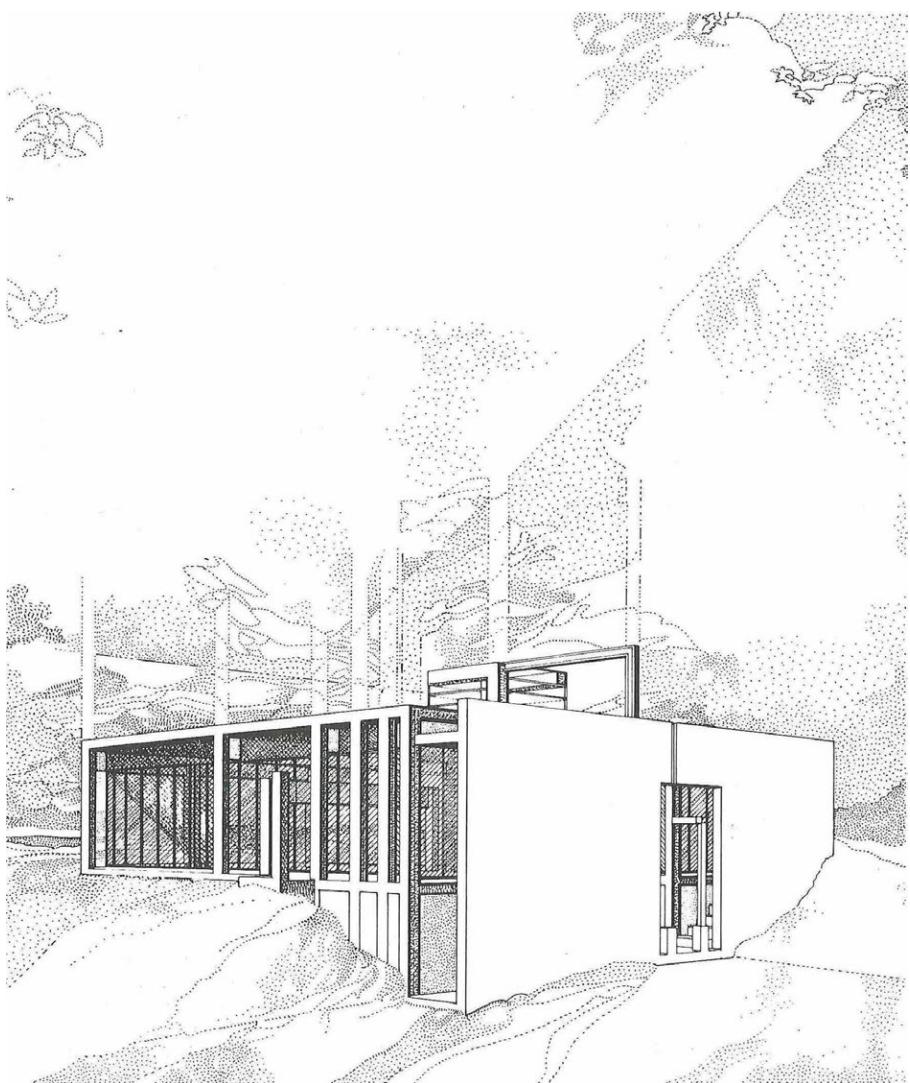


FIG. 2.63 Franco Purini, 'Padiglione in cemento e vetro' [Concrete and glass pavilion] (1976). View

Introduction

The design for the 'Padiglione in cemento e vetro' [Concrete and glass pavilion] was conceived in 1976 for an exhibition organised by the *Inarch - Istituto Nazionale di Architettura* [National Institute of Architecture] and held at *Palazzo Taverna* in Rome in January 1977.⁴⁵⁴ The project, which consists of a square pavilion set on an imagined landscape – presumably the Roman countryside – aims to summarise Purini's architectural research and crystallise a series of ideas for future investigations. As we have seen in previous examples, for Purini, architectural design is the place 'where the language represents itself'; hence, it serves as the field for testing the convergence between the research hypotheses on architectural language and concrete architectural solutions. Scholar Francesco Moschini, in the postface for the second edition of *Luogo e progetto* (1981), has emphasised this aspect even further by claiming that the 'Padiglione in cemento e vetro' inaugurates a new phase of Purini's research characterised by a more explicit didactic component in the projects.⁴⁵⁵ If it can be argued that a didactic aim is also present in the previous investigations, what particularly distinguishes this work is the connection to a series of historical precedents. In other words, here, there is a deliberate attempt to link the abstract characteristics of the research to a broader context of references.

In this section, I will propose an analysis of the composition of the 'Padiglione' based on my study of 'Una ipotesi di architettura'. This approach will elucidate the specific type of relationship established with the references and reveal the architectural discourse they conceal. I will also demonstrate how this in-depth approach advances the premises of this project.

⁴⁵⁴ See: *Franco Purini*, Exh. Cat. (Rome – Florence: In-Arch Istituto Nazionale di Architettura – Centro Di, 1977), unnumbered. Although the project was realised in 1976, it is not included in the first edition of *Luogo e Progetto* and appears only in the second expanded edition in 1981. Compared to the first publication in the exhibition catalogue, the presentation of the project in the second edition of *Luogo e Progetto* includes a slightly revised version of the presentation text, three additional drawings – two perspective views and a perspective section of the pavilion – and the omission the roof plan. See: Franco Purini, 'Progetto per un padiglione in cemento e vetro', in *Luogo e Progetto* (Rome: Edizioni Kappa, 1981), 189–193. The design for the 'Padiglione in cemento e vetro' is also included, among others, in *Franco Purini. Le opere, gli scritti la critica*. See: Franco Purini, 'Padiglione in cemento e vetro', in *Franco Purini, Franco Purini. Le opere, gli scritti la critica*. Gianfranco Neri ed. (Milan: Electa, 2000), 12–15, and in Roberta Albiero, ed. *L'invenzione di un linguaggio. Franco Purini e il tema dell'origine 1964–1976* (Siracusa: LetteraVentidue Edizioni, 2021), 116–123.

⁴⁵⁵ Francesco Moschini, 'Cinque anni dopo', in *Luogo e Progetto* (Rome: Edizioni Kappa, 1981), 309. The emphasis on the didactic aim of the projects should also be linked to a series of Purini's essays on this subject in the second part of the seventies, such as, for instance, 'Per un'architettura "autodescritta"', in *Assenza/Presenza: un'ipotesi di lettura per l'architettura*. Exh. Cat., Fulvio Irace ed. (Bologna – Ascoli Piceno: Galleria Comunale d'Arte Moderna and D'Auria Editrice, 1978), 92–95, and: *L'Architettura Didattica* (Reggio Calabria: La casa del Libro, 1980).

I will submit the discussion of the project's references to the graphical analysis and the figurative interpretation of the elements of the composition inspired by the previous investigation of the 'Classificazione'. This procedure will enable the disclosure of the project's genesis, the interpretation of the relationship between the intentional and accidental appearance of the elements of the composition, the organisation of the architectural themes and ideas, and the evaluation of the specific connection established with the precedents and the architectural discourse it addresses. Ultimately, this investigation aims to demonstrate the validity of the hypothesis proposed in this dissertation and the research approach: the focus on drawing as the underlying concept of 'Una ipotesi di architettura' and, more generally, as a means of conducting theoretical architectural research.

The following two paragraphs will elucidate the ambivalent programmatic intent of the 'Padiglione' – the first linking the project with the internal aspects of Purini's research, and the second with the references. These two preliminary steps will facilitate the identification of the specific premises for the subsequent analysis.

The Link Between the 'Padiglione in Cemento e Vetro' and 'Una Ipotesi di Architettura'

The link between the 'Padiglione in cemento e vetro' and 'Una ipotesi di architettura' can be observed in the evolution of the relationship between rational and accidental aspects of architectural composition. More specifically, the theme of the accidentality of the composition that, as I have previously demonstrated⁴⁵⁶, emerged in the analysis of the 'Classificazione', becomes here the base of a design experiment: '[this] project dwells on the border separating the rule from the arbitrary, the whole from the fragment, and the error from the correct solution.'⁴⁵⁷ At first glance, the composition of the 'Padiglione' appears to be thoroughly thought through, rationally conceived, and characterised by a straightforward architectural system of pillars and beams typical of Purini's architectural language. However, a closer look reveals that the elements of the composition lack actual logic: the facade is detached from the building; the entrance is slightly shifted from the central axis; a beam descends from the roof level; a series of pillars is abruptly interrupted before reaching the ceiling, while another, shorter post is positioned outside the building.⁴⁵⁸ Here, the

⁴⁵⁶ See Chapter 2, Section 5, The Drawing: 'Classificazione, per sezioni, di situazioni spaziali' [Classification, by section, of spatial situations] (1968).

⁴⁵⁷ Franco Purini, 'Progetto per un padiglione in cemento e vetro', in *Luogo e Progetto* (Rome: Edizioni Kappa, 1981), 189. (Writer's translation)

⁴⁵⁸ Purini, *Ibid.*, 190-193.

straightforward interpretation of the composition of the ‘Padiglione’ as an interplay of rationality and irrationality is considered unsatisfactory and potentially misleading, as it may obstruct a thorough investigation. I will argue instead that (ultimately) this project has “a logic” – a logic that can be elucidated when adopting the conceptual framework developed for the investigation of ‘Una ipotesi di architettura’.

The link between the ‘Padiglione in cemento e vetro’ and the historical references

Purini elucidates the project’s connection to a series of historical precedents to clarify the relationship between design and architectural history, articulated in a concise programmatic statement that concludes the project’s report:

‘The design summarises several procedures of the architectural avant-gardes revitalised within the concept of history as a history of themes rather than events. This history remains open and can only be deciphered by the imagination, thereby eliminating the explicit “citation” in favour of a seemingly less direct and precise choice. [This selection of references is] grounded in the challenge of identifying the unchanging nature of architectural problems alongside their definite formal solutions.’⁴⁵⁹

If Purini’s ideas on the relationship between design practice and architectural history have already been presented in Chapter 2, Section 4, *Franco Purini and the ‘Uselessness of Architectural History’ to the Project* to clarify the assumptions of foundational research on the architectural language, which was not based on a relationship with an established corpus of precedents, this project instead facilitates a definition of these ideas by establishing a very particular and indirect relationship with other architectural examples: the Farnsworth House (1946-1951) by Mies van der Rohe, the project for the *Kraft durch Freude*, Prora Hall (1936) by Heinrich Tessenow, the installation for the Sala della Vittoria [Hall of Honour] at the VI Triennale, Milan (1936) by Edoardo Persico, Marcello Nizzoli, Giancarlo Palanti, and Lucio Fontana, and the article ‘Poesia di Architettura (Appunti per una casa)’ by Luigi Figini, published in *Quadrante* (“mensile di arte, lettere e vita”) no. 33 (1936), in which the author presents a programmatic memorandum inspired by his project for a glass house.⁴⁶⁰

⁴⁵⁹ Purini, *Ibid.* 189. (Writer’s translation)

⁴⁶⁰ See: Werner Blaser, *Mies van der Rohe: Farnsworth House-Weekend House* (Boston: Birkhauser-Publishers, 1999); Ewald Bender, ‘Wettbewerb für ein K.d.F. – Seebad auf Rügen – Entwürfe Heinrich Tessenow und Bauabteilung der DAF’, in *Baugilde* no. 18 (Berlin: Berlin Pusch, 1936), 819-823; Raffaello Giolli, ‘VI Triennale di Milano. La “Sala della Vittoria” (M. Nizzoli, G. Palanti, E. Persico)’, in *Casabella* nos. 102-103 (Milan: Editoriale Domus, 1936), 14-21, Luigi Figini, ‘Poesia di Architettura (Appunti per una casa)’, in *Quadrante* no. 33 (Rome: Soc. An. Editoriale Quadrante, 1936), 19. See also Luigi Figini, ‘Una casa di Luigi Figini’, in *Quadrante* nos. 31-32 (Rome: Soc. An. Editoriale Quadrante, 1936), 20-25 presenting the design inspiring ‘Poesia di Architettura (Appunti per una casa)’.



FIG. 2.64 Ludwig Mies Van Der Rohe, Farnsworth House, Plano, IL (1946 design, 1950 completion). View. Hendrich Blessing Photographers

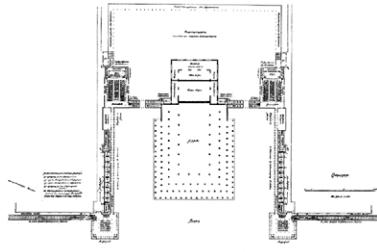
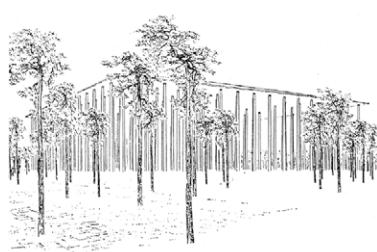


FIG. 2.65 Heinrich Tessenow, Competition entry for the Kraft durch Freude, Prora Hall (1936). Sketch and plan of the festival hall.

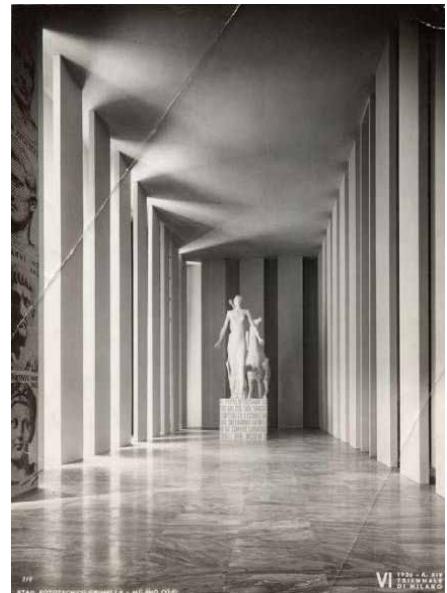


FIG. 2.66 Edoardo Persico, Marcello Nizzoli, Giancarlo Palanti e Lucio Fontana (sculpture), Sala della Vittoria al Palazzo dell'Arte, VI Triennale di Milano (1936). View. Foto Crimella. Triennale Milano

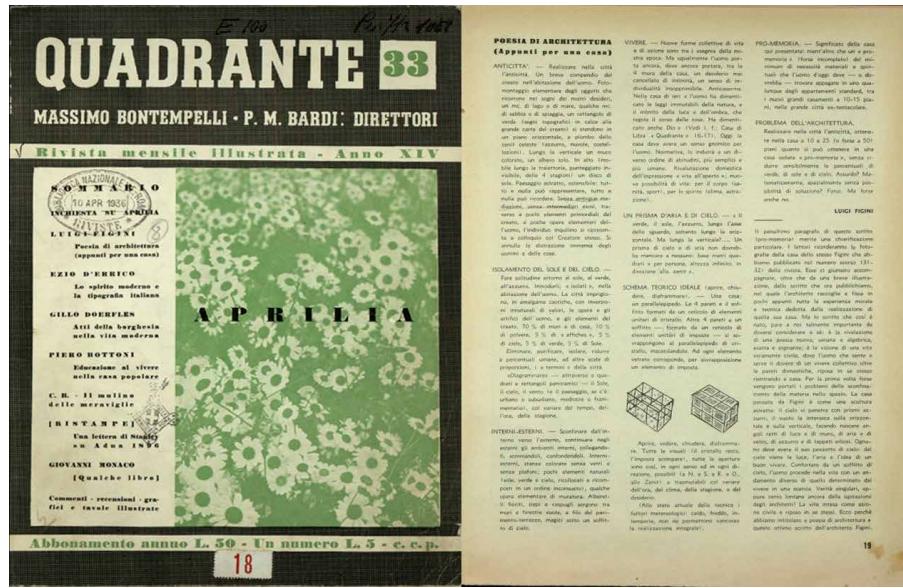


FIG. 2.67 Luigi Figini, 'Poesia d'architettura: appunti per una casa', in *Quadrante* no. 33 (Milan: Modiano, 1936). Cover and reproduction of the original publication.

To some extent, a primary connection between the 'Padiglione' and this rather heterogeneous selection⁴⁶¹, including a realised building, an unbuilt project, a temporary installation for an exhibition, and a text, can be immediately recognised without requiring a detailed analysis of the design techniques. For instance, it could be argued that Purini's design shares the following themes:

- with the Farnsworth House, the notion of the isolated building framing the surrounding landscape;
- with the Festhaus, the idea of a forest of columns in its off-grid setting, serving as a powerful metaphor for the relationship between architecture and landscape, reinterpreting the ‘Thersilion’ of Megalopolis, which was completed in 368 BC and could accommodate almost 10000 people.
- with the Sala della Vittoria, the concept of architecture as a light machine is explored through the diaphragmatic use of the structure to filter light – artificial in the case of Persico’s work and natural in Purini’s.
- while the relationship with Figini’s ‘Poesia di Architettura. Descrizione di una casa’ can be linked to the programmatic role of abstract architectural language and materiality (concrete and glass).

461 It is possible to observe that each reference corresponds to a different mode of architectural conception: built, drawn, temporary, and written description.

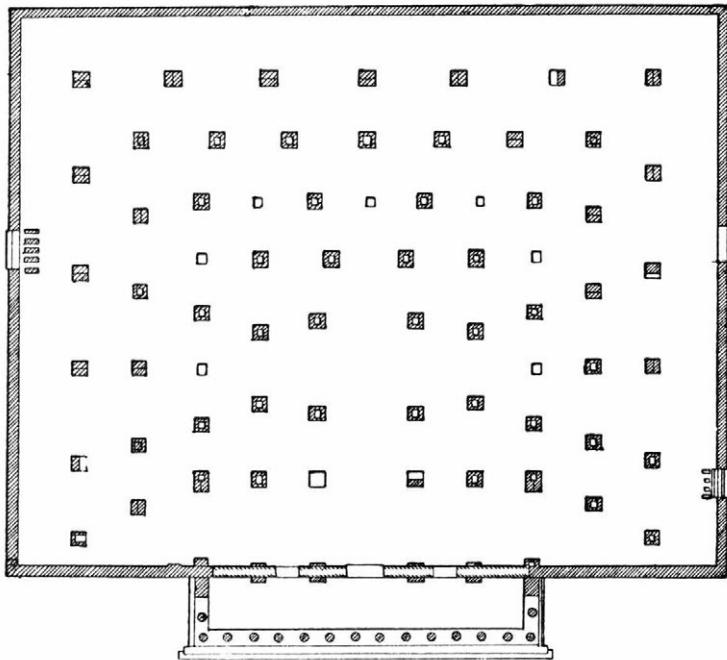


FIG. 2.68 Plan of the Thersilion of Megalopolis (368 BC)

However, once again, these early evaluations can be misleading when we consider the design motivations. Although these thematic associations may already open up various avenues of investigation, they provide no indication of the alleged architectural discourse and procedures linked to a specific 'idea of history as a history of themes'.

Once more, the hint comes from the project report.⁴⁶² Here, Purini explains that the underlying idea binding the 'Padiglione' with the references is the theme of the temple as a principle of architecture: the avant-garde design techniques of the references can all be ascribed to this primary source. However, Purini's understanding of this architectural *topos* is not centred on the conventional idea of the temple as an ideal object to imitate, but rather on the themes associated with it, namely: the perspectival space based on the geometry of the square, seriality, symmetry, rhythm, and the figurative dimension of architecture established by the equation of columns to the human figure.⁴⁶³ For Purini, these principles of the temple establish a historical

⁴⁶² Purini, *Ibid.*, 189.

⁴⁶³ Purini, *Ibid.*, 189

discourse that the four references somehow crystallise and that the design for the 'Padiglione' aims to continue – and, in so doing, expand the understanding of the notion of architectural order, and perpetuate the idea of the classic.

Analysis of the Documentation

The documentation of the 'Padiglione', at the base of my investigation, includes the following drawings collected from various publications:

- A schematic plan illustrating the modules and the proportional relationships of the elements of the composition.
- A schematic plan illustrating the rhythm of the vertical structures (i.e., the pillars and the continuous element of the façade).
- The main plan of the pavilion.
- A plan sectioning the sequence of the beams supporting the roof structure.
- Four cross sections (two in each direction).
- The four elevations.
- Two foreshortening views of the front (one is a detail of a larger unpublished drawing) and one central perspective of the left side of the pavilion.
- A colour drawing that highlights the protruding of an unspecified architectural element on the left side.
- Three perspective cross sections (two in the perpendicular direction to the main façade and the third in the parallel direction).
- The site plan.⁴⁶⁴

⁴⁶⁴ This collection comprises the drawing published in the following sources: Franco Purini, Exh. cat. (Rome – Florence: In-Arch Istituto Nazionale di Architettura – Centro Di, 1977), unnumbered; Franco Purini, 'Progetto per un padiglione in cemento e vetro', in *Luogo e Progetto* (Rome: Edizioni Kappa, 1981), 189–193; Franco Purini, *Sette Paesaggi/Seven Landscapes. Quaderni di Lotus International*, no. 12 (Milan: Electa, 1989), 50–57; and Franco Purini, 'Padiglione in cemento e vetro', in Franco Purini, *Franco Purini. Le opere, gli scritti la critica*. Gianfranco Neri ed. (Milan: Electa, 2000), 12–15. Compared to the first publication in the 1976's exhibition catalogue, the presentation of the project in the second edition of *Luogo e Progetto* includes a slightly revised version of the presentation text, three additional drawings – two perspective views and a perspective section of the pavilion – while it does not have the roof plan. The exhibition *L'invenzione di un linguaggio – Franco Purini e il tema dell'origine*, 1964–1976, held at the IUAV Venice in 2019 presented the opportunity to examine the original drawings of this project. This documentation includes the full foreshortening view of the pavilion and a site plan. See: Franco Purini, 'Progetto per un padiglione in cemento e vetro', in *Luogo e Progetto* (Rome: Edizioni Kappa, 1981), 189–193, and Roberta Albiero ed., *L'invenzione di un linguaggio. Franco Purini e il tema dell'origine 1964–1976* (Siracusa: LetteraVentidue Edizioni, 2021), 116–123. The design for the Padiglione in cemento e vetro is also presented in the monographic book *Franco Purini. Le opere, gli scritti la critica*. See: Franco Purini, 'Padiglione in cemento e vetro', in Franco Purini, *Franco Purini. Le opere, gli scritti la critica*. Gianfranco Neri ed. (Milan: Electa, 2000), 12–15. The complete set of drawings and my analyses can be found in Appendix 1.

Analogously to the procedure adopted for the 'Classificazione', the preparatory phase of the analysis consisted of the retracing of plans, sections, and elevations in CAD. Furthermore, to obtain a more comprehensive graphic description of the intended architecture a new series of drawings were added:

- A plan sectioned at +2.50m height.
- Three cross sections - two in the parallel direction to the main façade, a third in the perpendicular direction.⁴⁶⁵

The examination of the documentation also led to the discovery of imprecisions and discrepancies in the original design, sometimes revealing crucial features for interpreting the project. The first discrepancy arises in the skylight element: initially, the skylight appears connected to the internal façade of the building, whereas in other drawings published later, the skylight connects with the external – detached – façade. Another inconsistency concerns the presence of a fixture for the entrance door to the 'Padiglione', linking the internal façade to the nearby external one. This element is visible in the two foreshortened views of the front, in one of the perspectival cross sections, and in the main plan. However, in other cases, this element is not depicted. A more notable anomaly pertains to the obscure cut-off pillar element protruding outside the 'Padiglione' on the left side, which serves no apparent function. In most drawings, this element is shown as a solid component, thereby linking it to the materiality that defines the building and recalling the other cut-off pillar inside the 'Padiglione'. However, in one of the perspective views (see Appendix 1, FIG. APP.1.62), this same element is illustrated as a steel I-beam. Here, the connection is with the I-beam feature placed on a base and aligned with the main axis inside the 'Padiglione'. Thus, these two versions lead to radically different figurative interpretations of this ambiguous component. In the first case, the element would represent externally a characterising spatial situation of the interior, where a pillar does not reach the beam, weakening the pavilion's structure and thereby questioning its significance. The vertical elements of the pavilion lack their conventional function (denoting the building's structure), which can only be recalled through their actual representation. These elements become mere signs awaiting a new meaning or, arguably, a renowned significance of the very primitive idea of the column, which was not exclusively associated with structural performance but more notably as a metaphor for the human figure, either inhabiting the space of the pavilion or overlooking the landscape. The second solution, with the alternative association to the vertical I-beam profile detached from any structure within the pavilion, makes this particular figurative interpretation of the column even more

⁴⁶⁵ See Appendix 1.

explicit. These conjectures lead to the exclusion of the hypothesis of an oversight. Instead, they present as two alternative solutions to one of the design principles of the temple: the equation column-human figure. Moreover, we can observe that this theme resonates with Mies' I-beam column solution for Farnsworth House (which can simultaneously be considered the ultimate development of the column designed for the Barcelona Pavilion (1929) and that for Tugendhat House (1929), along with Tessenow's forest of columns as a metaphor for an assembly of men; with the absolute presence of the statue of the Vittoria in Persico's installation, and with Figini's radical reduction of the figurative character of architectural elements, where their algebraic expression acquires a poetic dimension.⁴⁶⁶

The Analysis of the Composition

The design originates from one identifiable and straightforward action. Given the basic geometry of the square, the first decisive operation involves subdividing the square into four quadrants. This subdivision can be viewed as both the compositional and conceptual idea of the design. More specifically, it generates the entire design process, evolving in two directions:

- The first direction examines the two symmetrical axes concerning the original square.
- The second direction elaborates on the four quadrants or compositional situations identified by the two axes.

In other words, the main idea of the analysis involves reading the composition of the 'Padiglione' as a "classification of spatial situations". More specifically, the first direction considers the total area of the pavilion as one spatial situation, while the second direction identifies four relatively independent spatial situations. Furthermore, I conduct an analogous investigation of the relationships among the four spatial situations and between individual sections and the total plan, as previously identified in the 'Classificazione'. I hypothesise that each of the four spatial situations represents a specific design aspect of the four design references. At the same time, these references can also be recognised at a more general level.

The second idea is to apply another principle at the base of the 'Classificazione': investigating the relationship between internal composition and perimeter. The following schemes show a hypothetical step-by-step reconstruction of the design process, or its re-description.

⁴⁶⁶ See: Figini, 'Poesia di Architettura (Appunti per una casa)', *Ibid.*, 19.

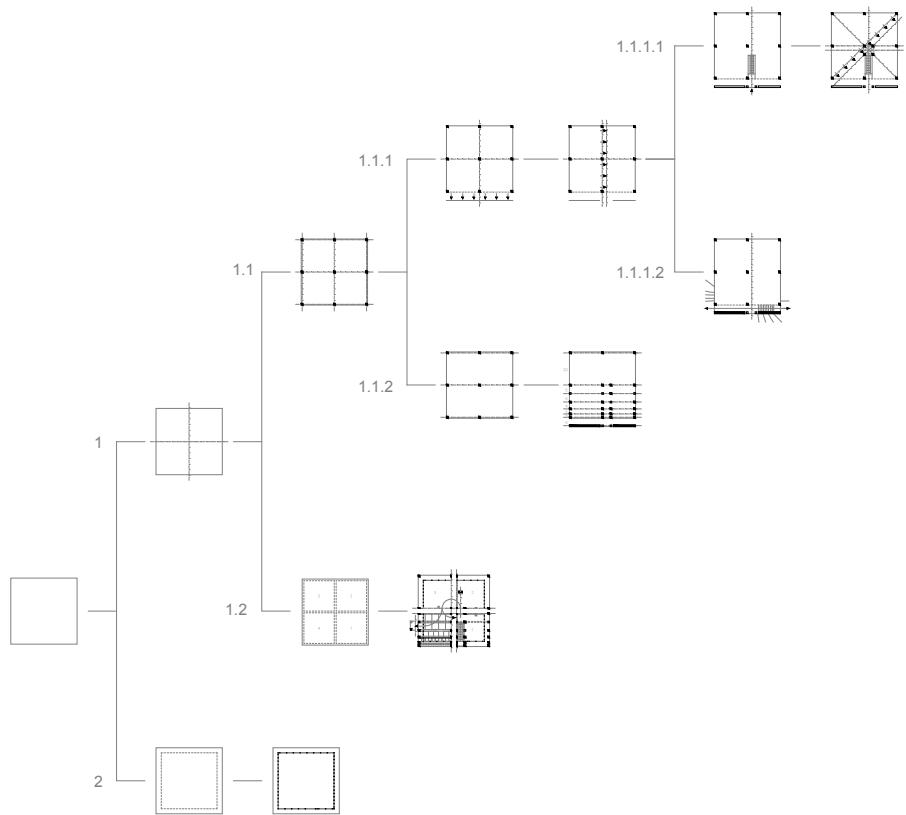


FIG. 2.69 The genesis and composition of the 'Padiglione in cemento e vetro' interpreted as a sequence of spatial situations. Author's image.

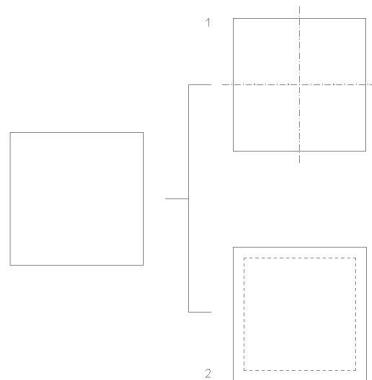


FIG. 2.70 Scheme 0>1/2

0 – The composition begins with a square and extends in two directions: one towards the interior of the square and the other focusing on the perimeter.

1 – The subdivision of the square into four quadrants fosters the evolution of the compositional themes. On one hand, the composition proceeds as a unified whole by exploring the implications of this subdivision. On the other hand, each quadrant follows an independent development, configuring its own spatial situation.

2 – The identification of the geometry of the square is further reinforced by the glass fixtures that mark the perimeter.

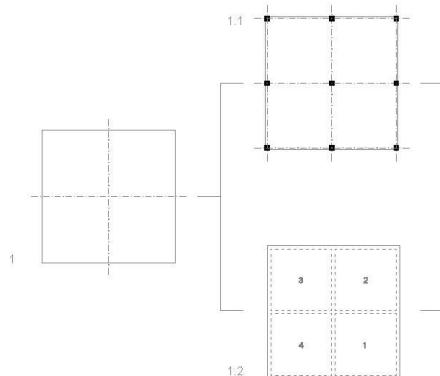


FIG. 2.71 Scheme 1>1.1/1.2

1.1 – The pillars that insist on the nine vertices of the grid identify four areas. The development of the themes of symmetry and rhythm, as indicated by Purini, begins after this design step.

1.2 – The definition of the four quadrants of the square introduces the theme of seriality, which can be associated here with the autonomous compositional variation inherent in the design process and as the mode of citation for the design references.

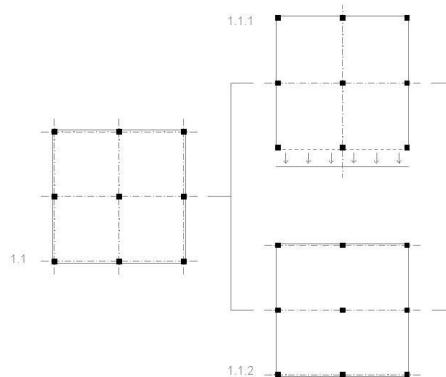


FIG. 2.72 Scheme 1.1>1.1.1/1.1.2

1.1.1 introduces the development of the theme of symmetry. Here, one side is shifted outside the compositional frame, breaking the integrity of the square, which consequently can only be evoked by the structure.⁴⁶⁷

1.1.2 introduces rhythm. This theme can be expanded upon in a vertical (bottom-to-top) direction. The axes from left to right have been removed.

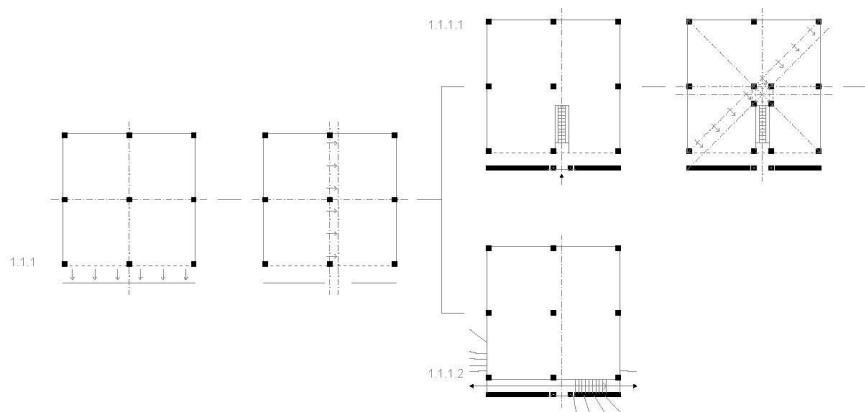


FIG. 2.73 Scheme 1.1.1>1.1.1.1/1.1.1.2

⁴⁶⁷ In *Comporre l'architettura* [Composing architecture] (2000), Purini discussed the meaning of shifting an element in the composition: '[this] operation derives from *De Stijl* and represents the ideal centre of its theory. It consists of the dissociation of an element, such as a wall, understood in its physical concreteness and conceptual image. This perfect separation between two entities that pre-modern architecture maintained united is analogous to that in [the realm of] physics with the atomic scission, which liberated the matter's constitutive elements. This separation generated all the compositional energy of Twentieth-century architecture, enabling (...) the composition – or decomposition – of complex spatial sequences animated by lucid analytic intentionality and enhanced by poetry. See: Franco Purini, *Comporre l'architettura* (Bari: Laterza, 2000), 44 (Writer's translation).

1.1.1.1 illustrates the disruption of symmetry by shifting the central axis to the right side. Adjusting the lower edge of the square and the central axis results in a redefinition of the composition's centre. The ex-centric opening in the detached wall-façade element emphasises this alteration. This separate front serves as a gate, initiating the experience of the 'Padiglione'. The two boundary stones depicted at the threshold reinforce the concept of primary access. The new centre of the composition is marked by the landing of the access stair, which intersects the base of the 'Padiglione', and by the tall skylight element that characterises the rooftop (see Appendix 1, FIG. APP.1.60).

1.1.1.2. The shifting of the lower side of the frame creates a narrow space in between, generating alternative access to the 'Padiglione'. Above all, it establishes a connection in the landscape via a stair, overcoming a sudden height difference of the site. This link can be seen as the only actual function of the 'Padiglione', but most importantly, it is a foundational act that establishes a settlement principle in the landscape.

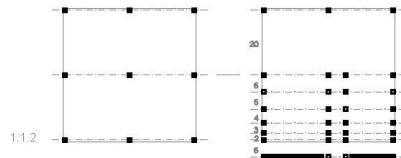


FIG. 2.74 Scheme 1.1.2

1.1.2 clarifies the theme of rhythm. The two boundary stone elements drawn on the gate introduce the pillars' rhythmic progression. In the lower part, the dense sequence of posts follows the progression A – A – A – 2A – A – 3 A – A – 4A – A – 4A, where A represents the dimension of the grid unit, which also corresponds to the side of the pillar. The rhythmic progression concludes in the middle at the entrance to the pavilion. This elaboration is further enriched by translating the same sequence into the design of the flooring in the fourth quadrant, providing an alternative interpretation through a bi-dimensional representation of the spatial progression generated by the pillars, which is further emphasised by the exposed beams of the ceiling (see Appendix 1, FIG. APP.1.60, and FIG. APP.1.63).

The sophisticated architectural system of the entrance to the 'Padiglione' along the new (shifted) axis, consisting of the sequence of gate, crossing landscape connection, access stair, skylight, and the progression of pillars, culminates in the gradual emergence of the I-beam element placed in the second quadrant. This element collects all the intensity of the spatial experience, thus acquiring a precise figurative character. The journey proceeds into the third, slightly elevated quadrant, which is empty and marked only by light filtered through a small circular hole in the ceiling – the presence of the absence (see Appendix 1, FIG.APP.1.66). The architectural experience reaches its peak intensity in the heavily charged space of the fourth quadrant. Here, the rhythm of the posts, beams, and floor inscription defines the architectural space at its highest intensity. The annexed protrusion to the last spatial situation provides an exit to the outside, liberating the spatial experience toward the landscape. The low column in the projecting element of the pavilion arguably signifies the journey's end. This aspect is also emphasised by a compelling drawing by Purini, framing the detail of this architectural situation (see Appendix 1, FIG. APP.1.64).

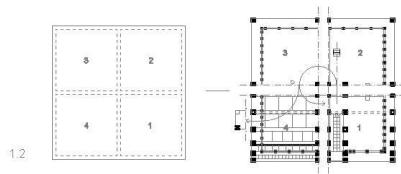


FIG. 2.75 Scheme 1.2

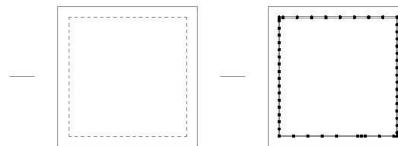
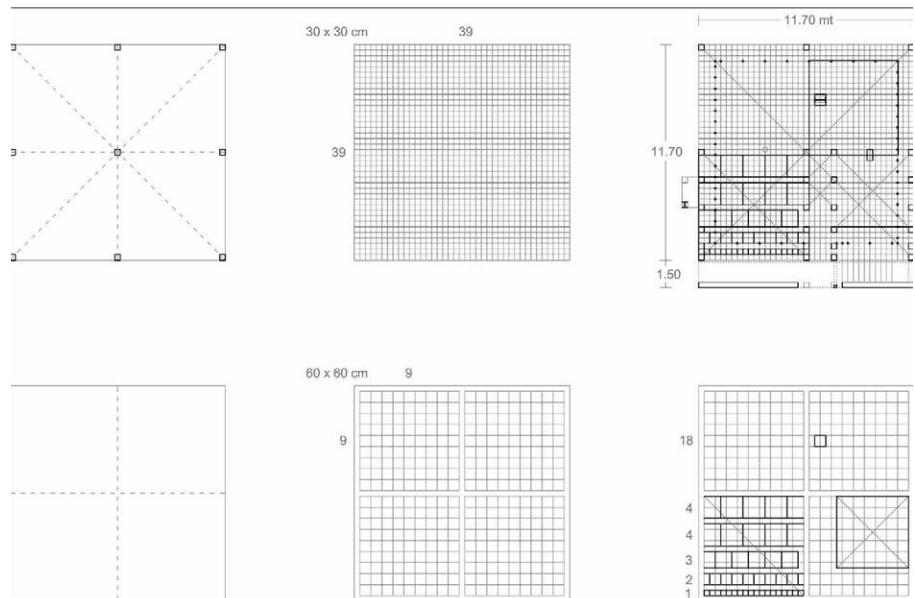


FIG. 2.76 Scheme 2

2. Identification of the geometry of the square through the glass fixtures around the edge. If the previous compositional operations question the basic geometry of the square, the marking of the boundaries with the glass elements reinforces it.

The Link Between the Spatial Situations of the 'Padiglione' and the References

The schemes in FIG. 2.77 and 2.78 illustrate the four spatial situations of the 'Padiglione' and reveal its association with the case studies, providing a parallel reading of the underlying architectural experience. The first spatial situation can be associated with Figini's concrete and glass house; for instance, consider the stair element. This spatial situation extends into the second quadrant, which arguably reinterprets the 'Sala della Vittoria'. However, while the timeless and lyrical space of the 'Sala della Vittoria' is achieved by marking a separation from the outside space through a series of diaphragmatic elements defining the enclosure, in the 'Padiglione' this separation occurs only at the entrance, while the other three sides are open to the outside view. Therefore, in the 'Padiglione', the poetic characteristic of the space is not confined to the interior (which is never emphatically represented in Purini's drawing) but lies in the connection with the landscape. Hence, the architecture becomes a device enabling the experience of the landscape – a characteristic that the 'Padiglione' shares more directly with the 'Farnsworth House', the 'Festhaus', and Figini's glass house. The association with the 'Sala della Vittoria' also leads to the establishment of another direct link between the group sculpture realised by Lucio Fontana, featuring a woman representing Athena Nike and two horses, and the unspecified I-beam element positioned within the 'Padiglione'. The third quadrant clearly refers to the 'Farnsworth House'. This connection is subtly rendered through the emptiness of space and the slight raising of the floor – both elements that also characterise Mies's house. In the fourth spatial situation, the element marking the connection with the 'Festhaus' features an actual proliferation of pillars, represented thematically on the floor.



4 Spatial Situations

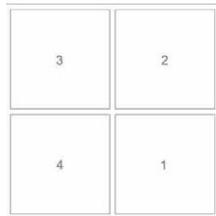


FIG. 2.77 The four spatial situations of the pavilion. Author's images.

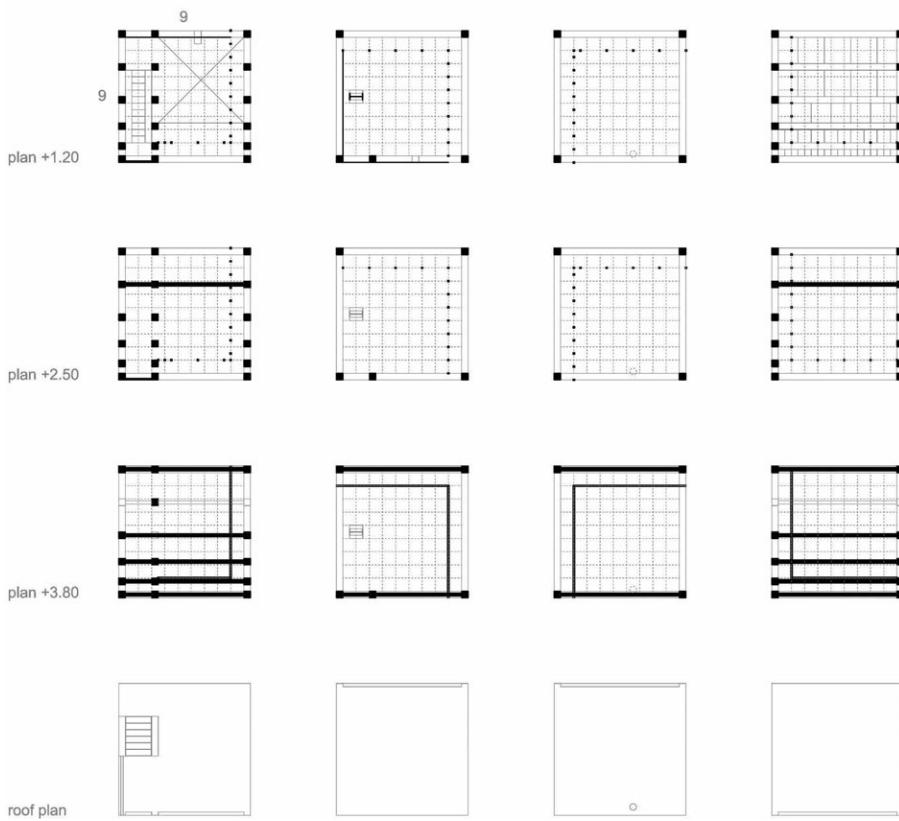


FIG. 2.78 Variation of the four spatial situations of the pavilion. Author's images.

An Additional Reference for the 'Padiglione in Cemento e Vetro': Terragni's Danteum

The analysis and reflections conducted so far have led to another suggestion for this project. In addition to the dissimulation of the rational rule of the composition, Purini also dissimulates the order of the project's references. While the references indicated by Purini are undoubtedly motivated, they arguably conceal a stronger link with an additional one: Giuseppe Terragni's design for the Danteum (1938). The theme of the detached façade, which mediates the relationship with the context and serves as the generator of the building experience, alongside the four spatial situations identified by the analysis, is just too evident: see in the Danteum the *selva oscura* [dark wood] at the entrance, and the sequence of Hell, Purgatory, and Paradise.

Purini appears to involve the Danteum in a game of analogies and differences. The analogies include:

- the previously mentioned detached façade and the four-part thematic subdivision of the building are strongly reflected in the compositional schemes; the infill of pillars characterising the Impero section in the Danteum and the analogous theme in the entrance of the 'Padiglione'; and the subtle elaboration of the forest of columns and its references.
- the absence of the function – which, in the case of the Danteum, generated considerable controversy both between Terragni and co-author Pietro Lingeri during the design process and in the critical reception.⁴⁶⁸
- the association with the theme of the temple, so the Danteum was described by Terragni.⁴⁶⁹
- a similar approach towards history, as a history of themes. See, for instance, Terragni's elaboration of the forest of columns.

Indeed, there are also fundamental differences between the two projects, but paradoxically they establish an even stronger connection. The differences are logical steps of analogous reasoning and consequences of the fundamentally different context in which they are conceived, namely the charged urban context of the Danteum and the isolated location in an imagined landscape for the 'Padiglione'. Both solutions configure an ideal condition for the architectural conception.

⁴⁶⁸ The Danteum did not receive positive reviews. For a long time, it has been at the centre of critiques questioning its rhetorical approach compared with other, more rational approaches. Giulio Carlo Argan, for instance, speaks of a 'huge mistake: the idea of the correspondence of the plan distribution of the building with the structure of a poem is almost funny; but not funnier of the idea to express victory, motherland, and the eternity of the empire architecturally'. Bruno Zevi considers it as 'the work that most seems to yield to the academia, under the double impulse of the location on the Via dell'Impero, and the allegorical trap'. Ada Francesca Marcianò defines it as an 'urban paradox'. Lastly, Cesare De Seta sees in this project the sign of the final crisis of Terragni's work and its rhetorical and symbolical involution. See: Giulio Carlo Argan, 'Relazione', in *L'architettura. Cronache e storia*, no. 163, Atti del Convegno *L'eredità di Terragni e l'architettura italiana 1943-1968*, May 1969 (Rome: Etas Kompass, 1969), 6-7, Bruno Zevi ed., *Giuseppe Terragni* (Bologna: Zanichelli Editore, 1980), 156-161, Ada Francesca Marcianò, *Giuseppe Terragni. Opera completa 1925-1943* (Rome: Officina edizioni, 1987), 216-219; Cesare De Seta, *La cultura architettonica in Italia tra le due guerre* (Bari: Editori Laterza, 1972), 201.

⁴⁶⁹ 'Therefore, it is not a museum, not a palace, not a theatre, but a Temple that we wish to construct'. See: Giuseppe Terragni, 'The Relazione sul Danteum', in Thomas L. Schumacher, *Terragni's Danteum* (New York, NJ: Princeton Architectural Press, 2004) (1985), 144. In the seminal book, Thomas L. Schumacher explains that Terragni and Danteum's co-author Lingeri pasted onto the site plan for the Danteum a picture of the Karnak temple complex in Egypt and the Palace of King Sargon in Persia, as if to underline the multiplicity of sources and references, and consequently the plurality of the aims. But ultimately, for Terragni, the Danteum is a temple, a building that can accommodate the programs of other architectural types while, at the same time, being capable of transcending the expressive characteristics to become truly a place.

In the Danteum, the closed, solid appearance negotiating with the city fabric enables the autonomous development of Dante's poem on the inside, while the transparent solution of the Padiglione and the post and beam structure reacts to the absence of any conditions.

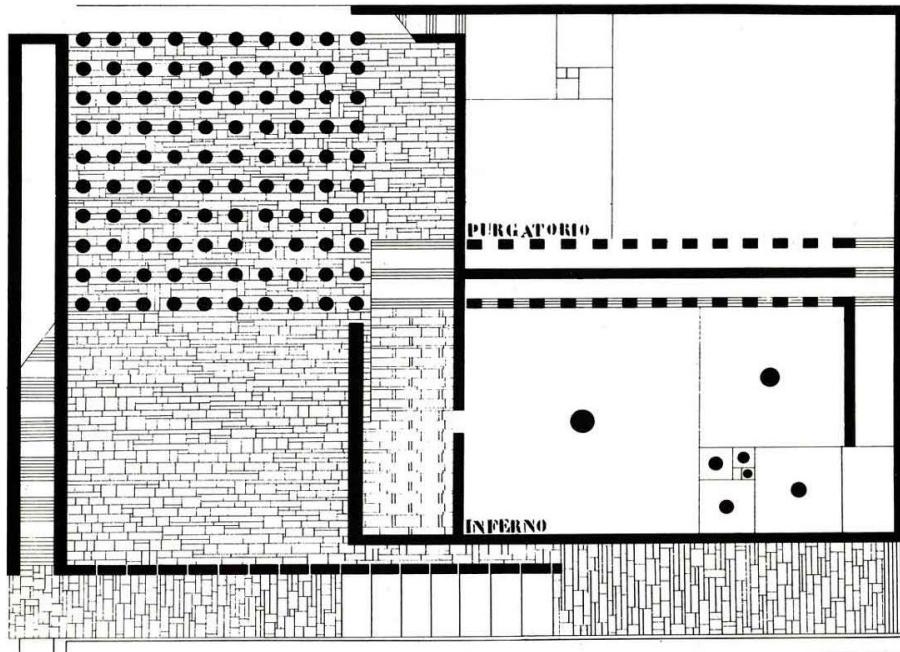


FIG. 2.79 Giuseppe Terragni, Pietro Lingeri, Danteum (1938). Plan



FIG. 2.80 Sebastiano Serlio, Plan for the Greek Council Hall, 100 columns. From: *Libro III, I sette Libri dell'architettura*, 1540; and Il Bertoia, *Sala del bacio*, Ducal Palace, Parma (1566-1577)

For Purini, the Danteum acquires a programmatic role in revealing the meaning of the architect's work and design elaboration. To clarify these aspects of Terragni's proposal, it is necessary to consider the statement presented at the conference "L'eredità di Terragni e lo sviluppo dell'architettura italiana 1943-1968" in 1968, which was published in the journal *Grammatica*, no. 3. In this statement, the then young Purini, along with the *Gruppo Atrio Testaccio*, criticises the instrumental way in which Terragni was re-proposed to the architectural debate and offers an alternative interpretation of his work:

'We are not available to occupy the space that is traditionally set aside for the "young generations". Consequently, we are not interested in any "rediscovery" [of Terragni's work] for rediscovery's sake because, in no way can it vivify us. The profession of architecture does not necessarily coincide with its direct practice. This is an equivocation into which the young generations have fallen: by interpreting compromise as always necessary and by viewing the "construction" of architecture always as a verification of the architect's very existence. Terragni reaches twice the edge of an architecture that is self-verified without being built: the first project for the Palazzo del Littorio and the Danteum. Here, he overturns the rationalist methodology by pushing the [architectural] figuration to levels of impenetrability that are no longer rational, since the [architectural] language no longer mediates with an objective programme: the programme is invented as is the language that substantiates it.'⁴⁷⁰

In conclusion, it is possible to affirm that Purini recognises in the Danteum the expression of the values of an unbuilt project without a programme that he tries to translate in the design for the 'Padiglione': to free the architectural language from its own rigid constraints and from the illusions it may provoke on the architect, as the epitomic research experience of the 'Classificazione' revealed.

⁴⁷⁰ Franco Purini (with Gruppo Atrio Testaccio), 'Elogio dell'incultura', statement presented at the conference 'L'eredità di Terragni e lo sviluppo dell'architettura italiana 1943-1968'. Published in Gastone Novelli and Achille Perilli eds., *Grammatica*, no. 3, (Rome: Edizioni Libreria Feltrinelli, 1969), 73. The emphasis on 'young generation' by the authors is explained to address the reference to the cultural debate animated by *Nuova Generazione* [New Generation] the influential weekly communists youth journal of the FGCI Federazione Giovanile Comunista Italiana [Italian Communists Youth Federation]. The hypothesised reference to the Danteum and this article published in 1969 offers another proof of legitimising the connection between the 'Padiglione in cemento e vetro' (1976) to the early research of 'Una ipotesi di architettura' (1966-1968).

2.6.6 Conclusion

In this section, I have investigated the link between the principles of Purini's research and a series of experimental designs. The analysis revealed how Purini's ideas are applied in the experimental design and, most importantly, how they can be expanded. The 'Progetto di un edificio lamellare' and the 'Progetto di ponte a San Giovanni dei Fiorentini a Roma', developed by Purini, explore the notion of plan and elevation as the generic framework of a project. I have highlighted how these speculative designs challenge architectural representation, and this questioning constitutes a creative act that defines the very content of the project. The façade, conceived as the figurative record of the organisation of the building's interior in the 'Progetto di un edificio lamellare' and the paradoxical "siteless" site plan for the 'Progetto di ponte a San Giovanni dei Fiorentini a Roma', exemplifies this approach. The conceptual tension generated by the literal and metaphorical correspondence between design limits and drawing has also been discussed in 'La città compatta' and in the 'Classificazione' and is further intensified here.

The 'Casa nella campagna romana' introduces a new aspect within the extensive research framework of Purini's work. The author develops the theme of architectural materiality as a compositional problem. For the specific purpose of this study, the investigation of the 'Casa nella campagna romana' revealed the idea of the literal incorporation of drawing into architecture – that is, an architecture that encompasses its simulacrum – in this case, the representation of its context. This suggestion broadens the general concept of drawing-as-architecture that has consistently permeated my reading of 'Una ipotesi di architectura'.

All these themes are also present in the 'Padiglione in cemento e vetro', which was investigated more thoroughly through analytical drawings guided by the findings of the previous investigation in the 'Classificazione' in Chapter 2, Section 5, and which confirmed the hypothesis of the current research on the case study. At the same time, it emphasised the value of drawing for architectural research. The analytical reconstruction of the composition of the 'Padiglione' led to the disclosure of the genesis of the architectural idea and the revelation of concealed aspects of his investigation, such as the specific relationships with other works of architecture.

In summary, it is essential in this section to emphasise that the speculative aspects of the projects discussed pertain to the complex realm of drawing.

Conclusion

The Architecture of Drawing

The conclusion explains what an ‘architecture of drawing’ entails by systematically organising and presenting the findings. I will first summarise the main research steps and subsequently derive general ideas on architectural drawing characterised by the absence of stable links binding them. The structure of the architecture of drawing is paratactical: all research ideas maintain relative autonomy and can be developed independently. The only solid relational aspect is between the individual ideas and the limits of architecture. Architectural drawing is, therefore, always a part (a fragment, a detail) of the whole whose boundaries must be questioned. Drawing is this questioning and the image of this questioning.

From Architecture to Drawing (and Vice Versa)

In Purini’s plan of ‘La città compatta’, discussed in Chapter 2, Section 3, the concepts of city and architecture merge in the proposition of a large square/plinth corresponding to the flatness of the drawing’s surface. This unifying field becomes the starting point for an investigation into architectural representation. The hypothetical content of the city and its architecture is explored by examining a series of drawings. Thus, starting from Purini’s initial premises, drawings become documents to be questioned and deciphered, and at the same time, constructions that can reveal new aspects of architecture. This hypothetical overlap between architecture and drawing was ultimately proposed once more in the investigation of the ‘Classificazione, per sezioni, di situazioni spaziali’ in Chapter 2, Section 5.

At the beginning of my investigation, I illustrated how Purini, influenced by a general dissatisfaction with the state of architectural education and the profession, began formulating a radical critique of architecture and the ways in which architecture, as an integral component of the ‘productive system’, is commonly ‘known’ and rapidly ‘consumed’ through its mediatisation and the pervasive diffusion of information technologies – already then, a topic animating the architectural debate. Having established this broad perspective and highlighted the cultural reassessment and analytical role attributed to drawing in the 1960s – as a privileged space for critically

rethinking architecture – I clarified how Purini's critical motivations, through design experimentation and programmatic themes, led to the proposition of an alternative approach to architectural conception beyond traditional design conventions. More specifically, Purini expressed the need for a new design system capable of representing and thoroughly controlling the complexity of the architectural object beyond the established figurative apparatus. Louis Kahn's drawings, whose inventive power could determine the fundamental relationship between the elements and the entirety of the composition, along with the use of elementary schemes to analytically explore the geometrical possibilities of form and the laws of aggregation and montage, were particularly influential in inspiring the premises of this research. In fact, Purini's approach is analogous and consists of applying non-naturalistic representational codes to architectural structures composed of three-dimensional modules. My research emphasised that a central aspect of the original plan was to shift the focus to architectural representation as the primary field of study. This approach aimed to develop a new architectural system centred on the relationships between elements, rather than just the concept of the architectural object, and to explore new dimensions of the architectural experience.

Beyond the more general motivations, the actual ideas that establish drawing as a fundamental research field, further developed in Purini's 'Una ipotesi di architettura', were established through the experimental design proposal 'La città compatta. Studi di strutture urbane', created in collaboration with Laura Thermes between 1965 and 1966. The key operation introduced by this work, significant not only for Purini's research but also for the current investigation, was the idea of conveying the entire conceptual apparatus of architecture through its drawing. In other words, to explore new architectural principles, the project 'La città compatta' establishes a hypothetical equivalence between drawing and architecture (and city). This equivalence is both a radical proposition and a hypothesis to be systematically tested and examined. Furthermore, I emphasise that the framework established by the speculative project of 'La città compatta. Studi di strutture urbane' not only converges architecture conceived as an object or a system of objects but also the contexts in which architecture is created; that is, the city and, by extension, the territory. It also encompasses all the facets inherent to architecture, such as the notion of architectural type, parts, elements, the concreteness of building, and its experience – the entire architectural system.

Purini and Thermes envisaged a city conceived as a continuum from which tower-like elements emerge, along with other parts and fragments that are instead carved within the boundless plinth. Furthermore, 'La città compatta' is not represented as if it should be built all at once; the drawings clearly illustrate that the city's fabric follows numerous distinct development areas. Therefore, I have also observed that

the very concept of a “city part” should be understood literally as a construction site. Simultaneously, the plinth can also be interpreted as the ground, the material on which the city is built, which consequently becomes an architectural construct. In summary, the conventions through which we normally interpret the city become ambiguous.

In ‘*La città compatta. Studi di strutture urbane*’, the city and the urban structures are organised around a single generative cubic element that endlessly iterates the canonical perspective cell. The cubic structure serves as the basic architectural element through which the very idea of urban structure is reformulated – and thus, by extension, the city itself. I have illustrated that the hypothetical principle comprised the iteration of a constantly differentiated cubic element and emphasised that this specific aspect was key to instigating a particular enquiry aimed at verifying its representation.

I have also indicated that the surface generated by the continuum of cubic elements should be understood both literally and conceptually as the space where one can simultaneously conduct architectural experimentation and assess its performance and resilience in the evolution of the city. Through this operation, Purini aims to transfer the concreteness and complexity of the “real city” to the realm of design experimentation, transforming it into pure architectural material. Thus, the cubic element, which the urban fabric extends from, not only represents the genetic code for the city’s entire composition but also embodies the series of hypothetical experiments and reflections that constitute this proposal.

I have also noted that the urban fabric proposed in ‘*La città compatta*’ can be read figuratively as a large square that corresponds to the expanse of the city. By simultaneously maintaining the theme of totalising construction along with the emptiness of a square, the figurative dimension of the representation becomes destabilised. It is this correspondence that creates a radical yet subtle unifying analogy between the city and the realm of representation, as the urban plan of ‘*La città compatta*’ could be compared with a sheet of paper and, therefore, to a drawing, whose description would establish the content of the city: a drawing, thus, to be revealed, deciphered, and described. By extension, drawing makes it possible to reconfigure any aspect of the architectural system that may warrant focused investigation.

It is not by chance, in fact, that the project develops through various types of drawings at all scales, ranging from a general scale of urban plans, views, and cross sections to the precision of axonometric drawings, including architectural details, which demonstrate how the city should be concretely materialised through a number

of exemplary connections between architectural elements and building materials for the original 'genetic' element – the cubic structure. Subsequently, I've identified two main themes emerging from the graphic documentation of this early design by Purini: on the one hand, the drawings seem to encapsulate the content of 'La città compatta' through the power of compelling images; on the other hand, these images are questioned by the drawings of parts and details resulting from the repetition of the cubic elements. The whole and the parts present the same degree of complexity, thus leading to the impossibility of identifying an order governing the architecture of 'La città compatta' and its representation.

In the first stage of Purini's research, it was also essential to emphasise the conceptual value attributed to the drawing of the city (in all its details) by staging and incorporating several theoretical problems and ambiguities (such as conceiving and communicating the architectural form) that are intrinsic to the field of architectural representation.

Drawing in Transition: Between Critique of the Architectural Conventions and New Notational System for Architecture

The systematic use of drawing to test and reveal the inherent contradictions of architectural conventions emerges from the analysis of Purini's work 'Ricerche di transizione' [Transitional research] (1967), an annex to the project 'La città compatta'. As discussed in Chapter 2, Section 3, this work establishes a link between the design and experimental components of 'Una ipotesi di architettura'. In fact, this investigation results in the impossibility of identifying with a conventional system of representation (plan or section) the typological and figurative character of the element isolated from 'La città compatta', thus leading to the necessity of devising a new architectural language and notational system capable of this identification. My research here illustrates the content of these drawings and outlines a connection with the subsequent phase.

In the 'Ricerche di transizione', Purini investigates the generative cubic element of 'La città compatta' and tests the limits of the formal variations introduced in earlier hypotheses of urban structures. The urban fabric, generated by the proliferation of cubic structures, and the tower-like buildings that emerge from the plinth cease their confrontational opposition by blending into a continuous and somewhat indistinct material. Purini removes these two distinct urban situations of 'La città compatta' from their context as a generic part of urban design and crystallises them into a single element. Therefore, the speculative problem of the relationship between generative elements and architectures, and by extension, the totality of 'La città

compatta' is exported from its framework and becomes the subject of a specific enquiry with a series of drawings. The cubic elements no longer need to denote an urban or architectural component and can be investigated autonomously as figures, which implies testing their stability as highly formalised ordering principles. Subsequently, Purini tests possible variations and implications with the original logic of elements-figures that he defines as 'transitional elements.' The notion of transitional elements resolves any possible ambiguity of the more classical idea of figures set in opposition to a background or an architectural element set in relationship with the urban structure. For Purini, the relationship between figure, background, element, and urban structure is dissolved and hypothetically reduced to one entity, which becomes the subject of his investigation.

The operation of isolating an element from its context, discussed in the research in relation to Viktor Shklovsky's notion of defamiliarisation (see Chapter 2, Section 2), introduces a critical problem for '*La città compatta*' because it reveals the intrinsic contradiction in the very hypothesis of conceiving an urban fabric from three-dimensional elements. If the complexity of a spatial system is achieved by juxtaposing a series of cubic units, then presenting the drawn construction of the total system adds nothing further to what is already expressed in the basic cube. For Purini, the reduction to a hypothetical archetypal form of the cubic elements aims to test and contest this assumption by devising a series of highly dense compositions of elements that configure an index of spatial individualities. These singular elements establish their finitude in opposition to the endless growth of the fabric.

In the '*Ricerche di transizione*', Purini develops these elements by experimenting with configurations characterised by the highest degree of three-dimensional and figurative autonomy so that the representation – i.e., through the plan, the section, and the façade – can no longer control the definition of the object. If the representational system cannot describe the object of the representation, it becomes necessary to conceive a new one. My research identified in this theoretical impasse the motivation for the need for a new notational system, i.e. the link that allowed the connection with the subsequent research step, which was not systematised in Purini's research documentation. More generally, I argued that all the subsequent architectural investigations of '*Una ipotesi di architettura*' are strongly influenced by the outcome of '*Ricerche di transizione*'.

Drawing as a Notational System and the Grammatical Foundation of the Architectural Language

In my reordering of Purini's 'Una ipotesi di architettura', the research phase 'Programma di fondazione grammaticale del linguaggio architettonico' [Programme for the foundation of a grammar of the architectural language] (1968) overcomes the theoretical ambiguities that emerged in the 'Ricerche di transizione' and addresses the consequent need to devise new architectural principles. In Chapter 2, Section 4, I provided a step-by-step analysis of this dense experimentation and clarified its sources; in particular, I discussed the connections to Noam Chomsky's ideas of Transformational Grammar and Arnold Schönberg's Twelve Tones theory. I also elucidated Purini's statement about the irrelevance of architectural history for the experimentation on the architectural language by highlighting the fundamental divergence in how the architect and the historian evaluate the significance of precedents. Above all, my investigation examined the role of drawing in relation to Purini's attempt to define a new architectural language and, most importantly, the rule that governs it, namely its grammar. Furthermore, I identified another aspect of drawing, which allows for the enquiry and systematisation of Purini's research. If, in the previous steps, I underscored the role of drawing as a means of critiquing architectural conventions and identifying the need to hypothesise a new architectural language and notational system, the investigation of the 'Programma di fondazione grammaticale del linguaggio architettonico' [Programme for the foundation of a grammar of the architectural language] (1968) enables us to see the emergence of a new instrumental role for drawing – a new conventional and merely denotative finality, in which drawing becomes a form of writing, a tool for "scripting" architecture.

Purini's idea for the 'Programma di fondazione grammaticale del linguaggio architettonico' (1968) consisted of creating a new architectural language and defining a notational system capable of organising and classifying the spatial complexity of architectural structures once their figurative and constructive expression has been reduced to an unambiguous, elementary level. For this experiment, Purini selected the cube as the generator of the basic architectural elements. This form was chosen because of its geometric and constructive characteristics and recognisable perspectival character, enabling the study and definition of the grammatical rules of architectural language. In fact, given a basic cube structure, the elements that can reconstruct the space of the cube can be reduced to a series of volumes, planes, and lines. Subsequently, Purini explored the constructive possibilities of an architectural space through a series of transformations of these basic elements.

Below, I identified ten main steps of the ‘Programma di fondazione grammaticale del linguaggio architettonico’ with particular attention to the theme of drawing:

- 1 The primitive act of construction directs research towards the principles that govern the creation of architectural space; in other words, the phases preceding the definition of an (architectural) object are an investigation conducted at the level of architectural language. Here, the historical corpus of architecture and ideas of style are not considered a starting point for research, ensuring that no predetermined architectural language can reveal the rules of a new type of language. From this, it can be inferred that the notational system is what leads to a new language.
- 2 Given these premises, the construction of a figure⁴⁷¹ in space leads to the definition of a notational system capable of describing the elementary constructive phases of architecture. Purini’s research goal consequently became the definition of a notational system that can unambiguously define and organise these rules. Hence, in this phase, drawing acquires a very technical and descriptive role. To undertake research in which the architectural language is founded on its grammar, Purini makes the rules of the language (the grammar) correspond to the organisation and classification of the degree of complexity of a three-dimensional basic structure, in this case, the constitutive elements of a cube.
- 3 Purini organised these basic elements into three series: volumes, planes, and lines, which determine the degree of three-dimensionality of each component. Thus, the notational system of the grammar can provide a direct description of architectural language and, by extension, of architecture. This notational description is not only analytical and representative of architecture but also inherently generative. It serves as a means of conceiving architecture. Consequently, the drawing can describe the sequence of architectural elements but can also generate architecture.
- 4 Consequently, architecture consists of the relationship between degrees of three-dimensionality that are inherent to classes of volumes, planes, and lines. This relationship is established by defining intervals between elements, similar to musical notation.
- 5 The elements from the transformational series are, in fact, positioned on a support resembling a musical stave, a framework used to identify the degree of three-dimensionality of an element based on its placement. By understanding the element’s position on the support, one can articulate its spatial complexity.

⁴⁷¹ The figure is intended as stable configuration of architectural elements. In this case, in principle, it is not necessary the specification of the notion of figure as transitional elements as introduced in the ‘Ricerche di transizione’.

- 6 Once the characteristics of the grammar and the notational system are outlined, and the notions of the three-dimensionality of the element and the interval are clarified, Purini derives the associated concepts for the structural definition of the programme: the notion of architectural sign, the notion of the base and lamellar structure, and finally, the notion of architectural composition.
- 7 The architectural sign is the notation that provides a comprehensive description of the three-dimensional elements of the classes (volumes, planes, and lines) located on a support.
- 8 The architectural sign allows for the definition of architectural composition, which is the stage where the conceptual structure aligns with all the other architectural aspects that were omitted in the formulation. Purini views composition as a sequence of well-formed architectural signs capable of establishing a relationship with the building's function, materiality, context, and its connection to historical precedents.
- 9 At the level of composition, the support is specified architecturally as both a base and a vertical structure. The base also connects the elements to the ground, while the vertical structure serves as a surface for evaluating the figurative dimension of the elements. The analogy between the two types of support implies the possibility of a tectonic interpretation of the element projected onto a vertical surface and, conversely, the potential for a figurative interpretation of the elements in the horizontal dimension. As I have noted in the analysis, both base and vertical structures are also explicit metaphors for the sheet of paper on which they are drawn. Thus, the correspondence between notation and architecture is not only conceptually describable but also immediately visually recognisable.
- 10 Consequently, the notation that describes the architectural project identifies the relationship between the compositional elements and all other architectural aspects. In other words, the project takes the form of a drawing that visually and conceptually describes in a unified graphic structure the elements of the composition and the system of relationships they establish. This drawing simultaneously incorporates the representation of the architectural object and the principles regulating the relationship of its parts.

My investigation of the 'Programma di fondazione grammaticale del linguaggio architettonico' (1968) revealed the role of drawings as the analytical field for redefining architecture's constitutive components and principles. In this research phase, drawing becomes a notational system, with the drawing itself reduced to a simple denotation and, ideally, free from any ambiguity with its referent. This discovery allowed for further consideration: the 'zero degree' of the architectural

language as a premise for establishing a grammar for a new language also corresponds to the “zero degree” of architectural drawing. This association implies that even the basic denotative properties of drawing can and should be questioned, given that the reference is not an architectural object, but an operation conducted at the level of architectural language: the new notational system describes the structural relationships intrinsic to the definition of architecture, and from this foundation, it also identifies the architectural object.

This new definition not only proposes an alternative to the conventional understanding of drawing in relation to architecture (or architectural objects) but also underscores the importance of the relationship between drawing and architectural design. The analysis of the ‘Classificazione’ enables a precise clarification of the characteristics of drawing (and of the drawing) as the identifying moment of the architectural project.

The Drawing Before and After Language: The Crystallisation of the Architectural Idea and the Memory of its Process

The profuse investigation of the drawing ‘Classificazione per sezioni di situazioni spaziali’ [Classification, by sections, of spatial situations] (1968) in Chapter 2, Section 5, supported by the production of multiple analytical drawings collected in Appendix 1, can be regarded as the core and synthesis of the present dissertation. Purini’s ‘Classificazione’ represents a crucial development of the ‘Programma di fondazione grammaticale del linguaggio architettonico’ (1968) and aims to demonstrate how drawing identifies the overall notion of an architectural project – an aspect that, as noted in the previous paragraph, emerged from the reading of the grammatical exercise – and to further the understanding of the relationship between drawing and architectural language.

The ‘Classificazione’ develops the formulation of a grammatical base for architectural language and a corresponding notational system within the unifying structure of a cube. In this exercise, the generic organising support of the compositions of cube elements also becomes a cube. This choice implies a definition of ‘support of the composition’ with the same formal language adopted for the three-dimensional elements. This reduction enables (and ideally enhances) research within a unified system, namely the relationship between the two main aspects of the composition (elements and support), which were already considered as a complex design problem consisting of the organisation of the degrees of three-dimensionality of the elements in formulating the relation between elements and ground, and, when the support is considered in its vertical position (as a lamellar structure), in investigating

the composition's figurative dimension. At the same time, the representation techniques that, in the previous examples, consisted of a freer mix of conventional representation techniques, as previously indicated for the 'La Città Compatta', are here unified in a single technique: the section. The reduction of all representation techniques to the section (whose vertical or horizontal orientation is left unspecified) corroborates the aim of the 'Programma di fondazione grammaticale del linguaggio architettonico', namely the proposition of a new notational system.

Furthermore, my earlier reflections on grammatical language led me to realise that the typical character attributed to the section is not primarily linked to precedents. Instead, it should be assessed in the context of 'Classificazione', which involves identifying, through a section, the potential relationship between the perimeter of a cube and architectural elements arranged within a 9x9 box grid. The seventy-two sections of the 'Classificazione' are numbered and organised in a grid of eight columns by nine rows. Moreover, there are no specific indications regarding the section's orientation; one can interpret them both horizontally and vertically without any predefined scale or analogy to other building types.

However, the 'Classificazione' is not merely an application or proof of the validity of Purini's architectural language, but rather its crystallisation. It marks the moment when the potentially infinite proliferation of formal architectural compositions generated by Purini's grammar is halted and defined as a finite series of seventy-two configurations. Most importantly, the 'Classificazione' reveals the limits of the architectural language, both as an ordering criterion and as a generative apparatus. If the 'Programma di fondazione grammaticale del linguaggio architettonico' (1968) corresponds to the constructive phase of Purini's research, involving the definition of a generative grammar and an unambiguous notational system, then the 'Classificazione' corresponds to the experience of its crisis. It records this experience, and ultimately, this record manifests itself as a project to be continued – a hypothesis of architecture.

My research on the 'Classificazione' involved retracing this work and re-describing the experimental experience. (In this attempt lies all the meaning of the present dissertation). The drawing was examined both as an individual piece (as a whole) and as a series of seventy-two entities. This approach prompted an exploration of the basic graphic structure and formative process of the drawing, including the analysis of the three-dimensionality of the sections, the compositional characteristics, the correlation between the progression of the sections and the increase in volumetric complexity, and how compositional variations occur within the classification.

The investigation revealed that the seventy-two sections of the 'Classificazione' exemplify remarkable combinatory creativity, although they do not arise from a rigorous process. In most instances, they are guided by internal logic, aleatory circumstances, or shaped by the compositions of other adjacent sections that do not adhere to the linear progression of the compositional theme. In other words, the exploration of the formative principles of the sections has illuminated both the power and the ultimate indeterminacy and open-ended nature of the exercise. The grammatical rules crystallised by the seventy-two sections fail to identify any ordering criteria of the architectural language. Consequently, the architectural language appears to be ungovernable.

Subsequently, I critically reviewed the meaning of the grammatical approach, which seems both necessary for establishing an architectural language and ultimately incapable of governing it. To achieve this, I expanded my inquiry by gathering direct and indirect sources regarding Purini's work, including writings, drawings, and projects. From this exploration, it became evident that the grammatical exercise, despite its inadequacies, is necessary precisely because it highlights the absence of principles for architectural formulation.

The "zero degree" of the architectural structure (previously discussed in Chapter 2, Section 4) and, more significantly, the "zero degree" of the author, which is stripped of even the basic references of a notational system, has led the architect to the 'void' of a pre-linguistic state. In my opinion, it is at this point that the urgent need for the foundation of a new system of rules for architectural creation and the meaning of architectural expression emerges, along with the necessity to devise a notational system that corresponds to the grammatical exercise. It is precisely in this moment that the architect discovers the fundamental role of drawing.

The 'Classificazione' stages and crystallises this experience, and by doing so, it establishes the original landscape of Purini's future architecture and the meaning of a project. In other words, the 'Classificazione' redescribes the content addressed by 'Una ipotesi di architettura' and originates research to be continued while, at the same time, enabling endless interrogations and clarifications of its very bases. By doing so, the 'Classificazione' acquires the status of a transitional system orienting the architectural approach and connecting future investigations to his original reflection. The architectural content of this work remains programmatically in a 'state of waiting' to enable the possibility of intermediating future developments of the architectural elaboration. It is precisely in this hiatus that the difficulty of fully defining its content resides. The seventy-two "architectural entities" can be considered simultaneously as discrete line constructions resulting from the

compositional process and as signs incorporating the memory of this experience through its representation. In the ambivalence, the semantic status of the seventy-two sections shifts and becomes impenetrable and purely emblematic.

The last graphic analysis of my research questioned the completeness/incompleteness of the 'Classificazione' and Purini's decision to end the exercise with 'Section 72'. This drawing hypothesises that the layout structure of the seventy-two spatial situations can also be interpreted as a repetition of the basic 9-by-9 grid of the single sections. However, the missing ninth column, or as I claim, its deliberate removal, marks the act of arresting the formal proliferation and crystallises the author's decision to consider the work complete and detachment from it. The vertical *caesura* generates this ambivalence of being a totality and, simultaneously, a part or fragment in understanding the 'Classificazione'. It is ultimately this sudden cut that identifies the 'Classificazione' by subtracting it from an 'endless serialisation' and placing it 'in a state of waiting' while at the same time introducing it in its historical dimension.

It is precisely in the inextricable duality of the material and figurative aspects of the sections, as well as the completeness and incompleteness of the work of the seventy-two sections, that the concept of drawing is crucial to overcoming the "problem" of the ultimate inadequacy of language staged by the 'Classificazione'. Recognising the impossibility of governing the proliferation of form implies a continuous return to a proto-linguistic moment, that is, to a state where architectural thinking cannot rely on abstract categories, but only on their representation. Like archaeological ruins, the seventy-two entities incorporate their history – and, in this history, their embedded meaning – through their image and, therefore, by means of visual recollection.

Drawing as Research

The final part of the research explored a series of experimental design works: 'Progetto di un edificio lamellare' [Project for a lamellar building] (1968), which investigates the theme of frontality, and the 'Ponte a San Giovanni dei Fiorentini a Roma' [Bridge at San Giovanni dei Fiorentini in Rome] (1968), which examines the theme of the base, or the two types of supporting structures Purini devised for the composition. The 'Classificazione' was essential in interpreting the design for a 'Casa nella campagna romana' [House in the Roman countryside] (1971) and for an original interpretation of the 'Progetto per un padiglione in cemento e vetro' [Project for a concrete and glass pavilion] (1976). These investigations, particularly the last one, aimed to demonstrate the applicability and significance of my research method

based on a rigorous analysis of drawings in a work where the author attempts to expand his ideas by engaging in a dialogue with a broader array of references. In this context, the concepts about drawings are not innovated but are summarised and contextualised.

The 'Progetto per un padiglione in cemento e vetro' presented another opportunity to evaluate the reduction and elaboration of architectural themes through drawing. More specifically, in this project, Purini investigates the idea of 'history as a history of themes' rather than a linear progression of events by analysing a series of design procedures crystallised in a number of works. My research revealed an additional, arguably real precedent of the 'Padiglione in cemento e vetro', namely, Giuseppe Terragni's design for the Danteum (1938).

The architectural design for the 'Padiglione in cemento e vetro' was established by the relationship between the whole and its parts, as well as by questioning a series of architectural themes that Purini considers to have historical significance within architectural design tradition. For instance, the design explores the connection between logic and arbitrariness, the themes of symmetry and rhythm, the relationship between architecture and landscape, and the theme of the temple. In the context of this project, drawing once again serves as the arena for an accumulation of themes. The notion of a project whose program is relatively basic (a generic pavilion in the landscape) represents a moment where language manifests itself and reveals its limitations in generating and denoting architecture.

My analytical approach involved reading the project as a series of spatial situations characterised by strong figurative and constructive values, which facilitated the connection between compositional themes and the system of references. In my analysis, the notion of spatial situation permitted the deconstruction of the design, the reconstruction of its process, and the clarification of the link with the references. This enquiry also revealed a new kind of architectural experience embodied within the drawings. It broadened the aims of representation beyond the basic description of the architectural object.

Ultimately, this investigation aimed to prove the validity of the hypothesis proposed in the present dissertation and the research approach: the focus on drawing as the underlying concept of 'Una ipotesi di architettura' and, more generally, as a field and mode of conducting theoretical architectural research.

Elements for an Architecture of Drawings

The paratactical character of the architecture of drawing is exemplified in the definition of the grammatical rules incorporated and encompasses the relational aspect discussed in the analysis of the 'Programma di fondazione grammaticale del linguaggio architettonico'. Ultimately, the drawing 'Classificazione, per sezioni, di situazioni spaziali' crystallises all research ideas. Retrospectively, we could also trace a direct analogy between Purini's 'Classificazione' and Piranesi's 'Ichnographia Campo Marzio', a fragment of a city plan consisting of a continuum of individual architectural plans - sometimes plans of existing buildings, sometimes their re-elaboration, and sometimes entirely invented - where any attempt to establish hierarchies and principles of the relationships among them can only be partial and ultimately vain. Both in Piranesi's 'Ichnographia', discussed in Chapter 1, and Purini's 'Classificazione', the content of the drawing is established by the relationship between the individuality of the ever-changing parts and the whole of the composition. However, this whole is also a fragment, a part, and the idea of totality and relative stability is only granted by the confines of the drawing. These works represent architecture, but more accurately, we should refer to "representations of representations", representation of a drawing representing an idea or a system of ideas.

The link with Piranesi's 'Campo Marzio' may be questionable because one could argue that it is not a foundational design like Purini's 'Classificazione'. Nonetheless, 'Campo Marzio' can also be interpreted as the inauguration of the awareness of architectural design regarding the impossibility of regulating the city through urban form, the loss of the classical reference, of the notion of unity, and ultimately, the absolute freedom of architectural language.

In addition to the connection to Piranesi's work, it is possible to generalise several other research ideas regarding drawings from which different considerations may emerge. The first relates to the speculative values of autonomous drawing investigation. In principle, one could extend the specific analytical role of drawing as it appears in the 'Ricerche di transizione' experimental situation to Purini's more ephemeral drawing series. However, even beyond Purini's research, autonomous drawing investigation remains a fundamental method of analysis and creativity in architecture. Drawing can investigate any aspect of architecture, and this statement allows us to identify the non-obvious importance of speculative and ephemeral designs that do not have a specific urgency or functional problem to solve.

From the research, we can extract the idea that systematically questioning the design conventions within an architectural culture can lead to innovative and experimental research in architecture. John Hejduk's enquiry into the diagonal in relation

to Modernist architectural compositions, which culminated in the Diamond House project (1968), serves as a parallel example of this approach beyond the specific context of Purini's research. More generally, critiquing architectural conventions can influence all facets of architecture once it is articulated and examined within the field of representation. This approach can yield various outcomes, including a complete reformulation of the architectural apparatus, and can also create conditions that contribute to a far-reaching redefinition of the design notational system. This process entails resetting the instrumental role of drawing within the design process and renewing the creative techniques employed by the architect. The experience of 'Una ipotesi di architettura', for instance, prompted Purini to outline seven creative techniques (illustrated here in Chapter 2, Section 2): the conceptual association among different elements, reduction to the archetype, simplification and schematisation of how a building is connected to the ground, the use of pure volumes and simple structures together with the transformation of their geometry, the choice of common, conventional architectural elements, the estrangement, and the disassembly of the building parts. The elaboration of inventive techniques can facilitate the translation of the distinct character of the research into a more comprehensive context.

Following the indications derived from Purini's research, I also suggest that drawings do not primarily aim to denote content – they are not directed towards translating a concept from one linguistic system to another or from one notational system to another (i.e., from words to lines). Instead, drawings are always something more or something other than a direct translation of an idea. Above all, drawings are strongly connected to the *hic et nunc* of a broader field of references irreducible to unique content. The drawings, therefore, consistently provide the opportunity to investigate the intrinsically ambiguous, if not contradictory, nature of the image and its relationship with specific graphic cultures and representational systems.

Another idea that can be isolated and derived from the previous one concerns the notion of architectural complexity, commonly considered a qualitative design aspect often associated with form, space, program, structure, or ornament. In the context of Purini's research, complexity is a constant value (an invariant) that is redistributed on the various aspects of the composition. This constant value can be investigated by establishing multiple relationships between the totality and parts, between parts and architectural elements, the sequence of elements, and the drawing of the whole and the detail. The graphic analyses of the 'Classificazione' provided evidence of the absence of architectural biases when evaluating the content of the drawing. Similarly, the redescription of the 'Padiglione in cemento e vetro' as a relationship of the four different spatial situations and simultaneously as the composition and a totality provides another instance of this formulation. Therefore, this idea of complexity associated with a constant value can

also explain the meaning of the particular relationship between part and whole. Moreover, we can also extend these considerations to the notion of architectural scale. In this sense, the hierarchical interpretation of a building or building plan directed by the notion of scale would become relative and, therefore, open to specific investigations and creative determination during the development of the design.

An additional generalisation is suggested by Purini's notions of base and elevation. The horizontal and vertical surfaces establish a mutual exchange, but they also define the limits of the architectural intervention and create a metaphorical link with drawing: they establish the support of the architectural composition, the page upon which architecture can be written, read, drawn, and described. However, the relationship between the horizontal and vertical surfaces also forges a new link between drawing and architecture. The manner in which the architect achieves form becomes a form of writing (an idea that Purini summarises as *architettura autodescritta* [self-described architecture]), similar yet alternative to that of classical architecture. In this context, drawing acquires a new theoretical and instrumental status in relation to architecture and rediscovered its necessity.

Lastly, from the crucial relationship between drawing and language, we can expound that drawing manifests both the necessity and limits of language in architecture, the need for order and the inevitability of chaos, and the alternation of constructive and destructive processes. Drawing is ultimately a projective act connected to memory – perhaps its memory. In this sense, drawing not only represents architecture but also incorporates the recollection of an event or experience that generated that architecture. This is what establishes the indissoluble relationship between architecture and its simulacrum. Through drawing, the architect can reveal the most profound meaning and essence of architecture, humanity, vitality, and the pursuit of freedom.

‘Una Ipotesi di Architettura’: Documentation and Analysis

Appendix 1 consists of the documentation of Franco Purini’s ‘Una ipotesi di architettura’ and includes the analytical work produced in parallel to the development of Chapter 2 of the present research. The documentation comprises the English translations of four seminal essays by Franco Purini that clarify the motivation, scope, objectives and theoretical foundation of the research; a comprehensive graphic documentation of the main research steps, including the architectural project and experimental exercises and their graphic illustrations; and the analytical drawings and writings produced in the context of the present research that integrate Franco Purini’s documentation.

The graphic documentation of the architectural projects is limited to published material. The publication of the full documentation from the Purini-Thermes archive would create unnecessary complications, since the general motivations, hypothesis, and research field of the present research are not compatible with the specificities of archival research, also given the extent of Purini’s body of work. The decision to collect solely published material was carefully pondered after surveying the complete set of publications and during regular visits to the Purini-Thermes archive, preserved at their office in Rome and accessible for research purposes.

The first essay, ‘I motivi di fondo – Sulla tecnologia – I problemi della città’ [The fundamental principles – On technology – The problems of the city] was written in 1966 in collaboration with the student collective *Gruppo Atrio Testaccio* and published in the journal *Grammatica* in 1969. The text represents a fundamental source for contextualising the general motivations of Purini’s research – in particular the identification of architectural representation as a specific research field – and should be read in parallel with the project ‘La città compatta. Studi di strutture

urbane' [The compact city. Studies of urban structures]. The second essay, 'Note sulla composizione architettonica [Notes on architectural composition], was written in 1967 and first published in the 1969 issue of *Grammatica*. The text, highly influenced by Arnold Schöenberg's essay 'Composition with Twelve Tones'⁴⁷², aims to develop the theoretical work on architectural language and should be associated with Purini's most experimental research phase and with the third essay: the presentation of 'Una ipotesi di architettura' in *Luogo e progetto* [Place and project] the first comprehensive publication of Franco Purini's work in 1976. The set of ideas elaborated abstractly in 'Note sulla composizione architettonica' and more generally in 'Una ipotesi di architettura' also appear in the fourth essay 'Programma di Fondazione grammaticale del linguaggio architettonico', [Programme for a grammatical foundation of architectural language]. This essay describes Purini's research into architectural language in relation to the project for a lamellar building. Both the essay and the project were published in 1968 in the journal *Palatino*, with an introduction by Manfredo Tafuri.⁴⁷³ This was not only the first publication of a project by Franco Purini but also the first publication of the content of 'Una ipotesi di architettura', even though the research title itself only appeared years later, in 1976, in *Luogo e Progetto*. It is also important to mention that the first three essays presented here were written while Purini was still a student at the Faculty of Architecture, University of Rome 'La Sapienza'. The list of his projects includes the abovementioned 'La città compatta. Studi di strutture urbane' (1965-66); 'Ricerche di transizione' [Transitional research] (1967); 'Progetto di strada "costruita" tra Roma e Latina' [Project for a mechanised road from Rome to Latina] (1967) and 'Progetto di una biblioteca a Roma' [Project for a library in Rome] (1968).

The experimental research begins after this last project. The first documentation comprises a series of drawings and charts produced in the context of my research and illustrates the transformational series elaborated in the essays 'Note sulla composizione architettonica' and 'Una ipotesi di architettura'. After this intermediary analytical phase, the annex to the text continues with Purini's more hermetic graphic illustrations. This intermediary analytical phase is followed by a presentation of the documentation for 'Progetto di edificio lamellare' [Project for a lamellar building], and 'Ponte a San Giovanni dei Fiorentini' [Bridge at San Giovanni dei Fiorentini in Rome], both from 1968.

⁴⁷² Arnold Schöenberg, 'Composition with Twelve Tones', in *Style and Idea* (New York: Philosophical Library, Inc., 1950), 102-143.

⁴⁷³ Manfredo Tafuri, 'Il progetto che presentiamo...', in *Palatino*, no. 2 (Rome: Edizione Palatino, 1968), 225.

The documentation of 'Una ipotesi di architettura' ends with the analysis of the drawing 'Classificazione, per sezioni, di situazioni spaziali' [Classification, by sections, of spatial situations] (1968). This drawing should be regarded as the summa of all the themes Purini developed earlier, and it is thoroughly analysed in my research through a series of speculative descriptions, given that the classification chart epitomises the idea of architectural drawing that my research attempts to expound from that of Purini. The classification has been redrawn on the basis of a detailed survey of the original plate, since the published versions of the drawing present some inaccuracies.

Beginning from the indications given in the title, the spatial situations of the seventy-two sections that comprise the classification were analysed through their three-dimensional development. This first operation enabled me to identify classes of analogous spatial situations according to the three-dimensional complexity conveyed in the section drawings. Furthermore, I analysed the spatial situations at a compositional level, enabling the definition of another series of classes comprising homogeneous compositional structures, elements and classes in which the compositions derogate to the rule set by the 9 x 9 box grid. Lastly, I describe each of the seventy-two sections in the form of an alternative graphic illustration with a caption. The particular aim of the captions is to reconstruct the compositional theme and the spatial situation, including the way in which the spatial situation is constructed within the section. Therefore, by following Purini's ideas, the description attempts to reconstruct the way in which the spatial situation is revealed by destroying, through drawing, the grammatical rules established by the author himself: namely, the rules of architectural language developed by means of the three transformational series of cube elements.

Appendix 1 ends with the documentation of two projects: the first is for a 'Casa nella campagna Romana' [House in the Roman countryside] (1971), part of the series 'Case nella campagna romana', one of the still ongoing spin-off pieces of research carried out alongside 'Una ipotesi di architettura'; and secondly, the documentation and analysis of the project for a 'Padiglione in cemento e vetro' [Concrete and glass pavilion] (1976). The project for the pavilion is considered the epilogue of 'Una ipotesi di architettura' in the form of an architectural design proposition, and it is the epilogue of my research. The project has been redrawn and subsequently analysed according to ideas that emerged from the description of the classification chart, which has led in turn to a partial reassessment of Purini's own project description. In fact, this approach led to reading the project as a sequence of spatial situations, which enabled a clarification and evaluation of the novelty (all internal to the design) of the specific role of the historical sources that, according to Purini, were at the basis of the project.

The fundamental principles - On technology - The problems of the city

Franco Purini (with Gruppo Atrio Testaccio), 1966

Originally published as 'I motivi di fondo - Sulla tecnologia - I problemi della città (1966)' in *Grammatica*, no. 3, eds. Gastone Novelli and Achille Perilli (Rome: Edizioni Libreria Feltrinelli, 1969): 64-68.

The fundamental principles

One of the most characteristic aspects of the current [architectural] condition is the way in which the architectural intervention is 'known' or 'consumed'. Therefore, it seems important to us to embrace the new information techniques as a distinct factor that inevitably reverberates in the processes of [architectural] production. These technologies should be adopted in their broadest sense, thus including all levels of photographic and cinematographic representations that entail a visual preselection of the represented object and a subsequent 'habituation' of the audience. With particular reference to architecture, we believe that confronted with this situation, the architect progressively loses interest in a critical reading of an [architectural] object based on parameters belonging to the category of the 'organic', as this term is understood by the majority engaged in the current critical discourse. To validate the urgent need for a new type of reading and use of the architectural work, we may recall the use Kahn's work has also been put to in this school; his formal solutions have been absorbed and immediately 'mythicised', while virtual indifference has been shown to the equally remarkable and far more transmissible indications that Kahn provides in relation to the process of defining the architectural organism in all its complexity.

It seems to us necessary to replace this type of acquisition with another approach that, by taking into account the situation described above, leads *towards a design practice that programmes the rates of consumption*, differentiating them in relation to the various levels of the design intervention (from a technological determination to the scale of product design) thus rationalizing a process which is nowadays uncontrollable. Let us consider for instance what is already happening in the field of advertising, where the structure of the image is differentiated so that the rates of consumption of the object advertised are different from the figurative operations on the urban fabric.

Hence, within our field of interest, programming the consumption rate of an [architectural] intervention – a problem we present as a working hypothesis to be further developed – depends on a series of methodological choices that lead to the exclusion of a number of currently operating compositional directions, even if these

methodological choices cannot be defined with precision at this moment. For a start, it seems relevant to us, for example, to see how new [architectural] themes emerge at the level of *representation techniques*.

The need to control the [architectural] object in all its complexity leads us to hypothesise the possibility of 'representing it' even before defining certain particular limitations, such as the plan, the section, etc.

What is of interest to us with regard to an architectural object is not so much the possibility of an immediate perception of certain geometrical forms, but the legibility of a certain constructive process of the complex, global image of the space, precisely because the allusive reduction of the complexity of the architectural space into elementary forms means that the perceivable values of an [architectural] object are situated outside the architectural logic that establishes its matrix. As a consequence, we believe it is essential to imagine the possibility of representing and thus immediately verifying a 'figurative programme', even at an intermediate level, which can then be further clarified through a subsequent focus on specific design phases through the use of 'signs'. These signs could be as conventional as those traditionally used, with the difference that they would no longer be based on a naturalistic code (i.e., perspective, Euclidian geometry). Instead, they would refer to specific constructive processes within the architectural space and could be analysed and disassembled in typical situations.

To return to the discussion of the visual consumption of an image, we will try to understand more precisely what distinguishes mass communication, which is the typical vehicle of consumption. Mass communication is characterised by the direct relationship, and sometimes by the coincidence, between the structure of the semantic medium and the characteristics of the intended object of communication. From this, it is possible to understand on the one hand the inability of some 'descriptive' criticism to read and accurately interpret the characteristics and the meaning of the [architectural] object; while, on the other hand, the necessity of reaching a direct relationship in the design field between the proposal and its verification, by reducing as much as possible the intermediate moments.

This implies the prospect – and the necessity – of tackling the design process not by the prior deconstruction and abstraction of the [intended] object into a number of hypothetical stages, but instead, by carrying out an form that defines it. However, as we understand it, the concept of consumption is not limited to the current acceleration of changes in taste but also includes the problem of the 'duration' or functional performance of an architectural intervention. In other words, it appears to us relevant to acknowledge how some design interventions are structurally

incapable of dealing with the increasing changes in the demands placed upon them: for instance, design interventions that apply what is now elephantine technology, such as reinforced concrete. Moreover, if this argument is already true at the level of large-scale interventions (automated industrial sites, storage units, vertical or horizontal residential units), the problem of intrinsic adaptability to changing requirements becomes substantial when one considers the possibility of intervening with design initial verification on the image; that is, accepting the object in all the complexity of its relationships with the real. As a comparison, we should recall the use that rationalist architects made of the two-dimensional drawing and its use by Kahn. For the rationalists, the drawing was not so much an instrument for verifying the preliminary figurative hypothesis, given that their research was directed towards geometries with a very low degree of abstraction, but rather an important instrument for the invention of the actual architectural organism (and thus capable of determining the fundamental relationships between the elements and the whole). Kahn, on the other hand, when referring to geometries that are elementary but not simple, used the two-dimensional drawing as an analytical instrument to investigate the geometrical possibilities of the form, in other words to continuously extract the laws of aggregation and of montage that are determined by the logical organisation of the unitary elements. This leads to the possibility of an analogous operation by us: namely, to apply non-naturalistic representational codes to architectural organisms composed of three-dimensional modules.

We shall now try to propose a tendentious definition of architectural specificity as it emerges from the hypotheses presented above. For us, a way to define it could be the following: 'a relationship of time, a typical series of architectural "aspects"', where 'aspects' indicate both the 'elements', namely the parts of the organism that are materially recognisable, and the 'factors', namely the components of the organism that are identifiable through processes of logical abstraction – notions deriving from different interpretations of the complexity and multiplicity of an architectural organism.

The specificity of an architectural intervention appears to us to consist in the organisational process of its physical and visual determination. To give an example: all classical architecture is characterised, and it is thus readable, through morphological laws determined by the notion of 'architectural order'. At most, in fact, research in classical architecture is directed to the integration of the trilithon-vault system as represented by the order, combined with various spatial and representative intentions.

Within the concept of order, it is possible to identify what we have called 'a typical sequence of elements'. In fact, the morphological and quantitative determination of

the elements of the order are found within it and are a consequence of the process of defining the relationships between the part and the whole, namely the static connective system of the trilithon.

Analogously, it is plausible to consider that current research in architectural composition could be qualified through the definition of a number of 'constants' in relation to other 'variables'. In this way we reach a new definition of the traditional concept of 'organicity', which is no longer linked to the capacity of an [architectural] intervention to be univocally qualified in relation to the multiplicity of critical and functional requirements (which are historically determined), but instead, to its internal order. Consequently, for us is indispensable to understand and, as designers, to highlight, its programmatic-matrix.

A first specific critique that could be directed to the traditional construction methodology – which, after all, is still present and operating in most of today's [architectural] interventions – is the fact that it is founded on a deeply ambiguous methodological hypothesis that consists in the attempt to experiment the possibilities of further developing constructive concepts that are already completely established, namely the concept of the module-measure [modulo-misura] or the Greek-module [modulo-greco] (brick, the three-dimensional cell). Precisely with reference to this hypothesis, we believe that at the level of the design, the traditional methods of representation we have previously exemplified (naturalistic representation: i.e., axonometry and perspectives; schematic representation: i.e., section and plan), cannot resolve the complexity of the constructive, dimensional and morphological characteristics we believe are central to current research in the design field. We feel instead the need for a completely 'conventional' design instrument through which it is possible to verify, already at the design stage, the complexity of the spatial relations that qualify the design of a three-dimensional module understood as a law of construction for architectural space, such as the rates of [architectural] production and consumption, and the problems of the assembly and transportation of building materials.

On technology

The convergence of the problems already discussed – the new scales of [architectural] intervention, the desire to identify complex spaces generated by a number of programmatic constants (from the uniform three-dimensional bay to the disruption of the vertical succession understood as a simple functional stratification) so as to obtain complex configurations from a single degree of three-dimensionality – enables the exclusion of building technologies such as reinforced concrete. At the basis of this exclusion is the adoption of a precise definition of the word

'economic', not limited solely to costs, but comprising the entire series of concrete problems that intervene in the realisation (in its literal sense) of an architectural intervention: from the transportation of the building materials to the duration of the construction process. Moreover, despite the numerous attempts at integration, reinforced concrete remains the typical vehicle for spatial organisations and vertical expansions based on the trilithon-vault system, both facts which are, for us, no longer valid in terms of the spatial contents (form and place) of the new scales of architectural intervention.

We believe instead in technologies and building materials whose performances are capable of welding the traditional fracture between technology and architecture and, consequently, of unifying within a single process both the static-tectonic vision and the architectural vision.

In place of the current use of reinforced concrete, whose execution times are so significant they drain the figurative potential of the architectural object before its completion, the process we propose would involve the new architectural time spans set by new materials such as steel, plastic laminates, etc.

From this emerges the acceptance of a new type of prefabrication that excludes the present rationalization of a constructive system that is, in fact, still traditional and has interruptions in the construction phases that can be only be filled by the work of craftsmen, yet do not contribute to architectural values.

Therefore, beyond the current lexical attributions affecting its meaning, the prefabrication should take into account:

- 1 Specific architectural categories;
- 2 A unitary and complex three-dimensional module;
- 3 The possibilities of a new architectural representation of space.

Warranted by our hypothesis of a different representability of space, these possibilities lead to the proposal of a design process that is global, unitary and completely controllable in the totality of its complex relations, therefore:

- 1 enabling the use of organic aggregative typologies, by excluding the use of perspectival grids since it would be incompatible with a space constructed in three-dimensional bays (hence the rejection of compositional techniques based on the aggregation of linear elements – strips, etc. – whose usefulness depends on a specific perspective view);

- 2 determining the reduction of architectural interpretations by excluding proportional research (e.g. on the reading of the façade) precisely as outlined in the discussion we introduced on the complexity of the module.

All these elements which we imagine charted according to a conventional order, like a musical score, find their adaptations, their degrees of freedom, etc. through sampling the various approaches compatible with the range of architectural models that one works with (from Wachsmann's component to the three-dimensional bay).

In order to further exemplify what we have been saying, we are convinced of the substantial imprecision of 'Archigram's' proposals, in their large-scale preservation of certain images (such as the tower), which are subject to rapid consumption, while on the small scale (such as diagonal structures) they are unable to formulate any real design definition (let us consider, for instance, the tubular structures, which are nothing more than a mechanic scaling-up of tubular scaffolding structures), since they fail to offer any valid sampling for the problems of structural relation inherent in the joints of tubular structures.

The problems of the city

In recent years, the problem of the city, the architecture of the city, has been enriched by a series of contributions, both theoretical (from Lynch to Gregotti and Rossi in Italy) and in the field of design (the English experiences, Tange, the Metabolism group, Archigram, Friedman, etc.), all aiming to overcome an *a priori* definition of the urban and architectural fields. In Europe in particular, the city-territory [*città-tettitorio*] has been broadly discussed by hypothesising that the city in the modern world is destined to lose its traditional dimensional and geographical limits. Nevertheless, the formulation of a series of hypotheses on the structures and morphologies of the territory, together with a number of discussions on the practical possibilities of a new figuration, have not been accompanied by any developments which, through analysis of the problems posed by the expansion of metropolitan environments, would identify with precision the characteristic of the urban fabric in relation to a number of phenomena and situations that are necessarily different from those of the territory. As a consequence, our interest in the city is not so much concerned with understanding it as a super-dimensional 'locus' compared to the traditional scale of a building (see, for example, the British new towns), nor as a large field that can be subdivided into smaller functional sectors characterised by different aggregative typologies according to the rationalistic principle of zoning, but rather as *a place that accumulates complex functions, characterised by a 'type' of spatial organisation that constantly exhibits a character that is different from the territorial one*. In fact, the territorial structure has been conceived until now as a complex

system which, in its various forms, superimposes itself on pre-existent conditions (riverbeds, valleys, hills, etc.), whereas what interests us more is a construction process that involves urban space in all its complexity; that is, not only those pre-existent by nature, but in all the real components of the city, without distinguishing between spaces that are served and spaces that serve.

This type of *complex unity* has emerged in recent years only to the level of a figurative proposal detached from the concrete problems of the metropolis, which require the introduction of different and 'typical' spatial organisations. Therefore, we are aiming towards a complex morphology characterising the urban space in all its three-dimensional structure. In the traditional city, such morphology could be found only by carrying out a section coinciding with the reference level (height 0,0) since other cross-sections would reveal only discontinuous and particular 'drawings'. Moreover, since we believe that this proposition can occur at the level of the architectural process, in line with what we have said so far, our hypothesis sees *the structure of the city as characterised by the aggregation of different 'modular bays', which are typical of the various form of settlement* and no longer by an organised infrastructural network.

Instead, the infrastructural network will be completely integrated and absorbed by more complex elements that will link it to dimensionally homogeneous objects. In this way, by rejecting the concept of zoning, we imagine a city whose fabric, in its structural and infrastructural nodes, is capable of self-determination in relation to its various requirements in terms of time and space. Hence, *a city that would exist only in relation to the situation it creates*, instead of the city of today, which is, for the most part, structurally indifferent to its liveability. Hence the metropolitan fabric will no longer be structured by the more or less random juxtaposition (according to the laws of perspective) of an undifferentiated fabric of formal emergencies, but by a unitary complex comprising a typology of *various dimensional capabilities*, recognisable both at the representational and programmatic level by means of 'three-dimensional surveys' (an instrument that would substitute the traditional cross-section, since the latter relates to a spatial type no longer acceptable for such complex three-dimensional operations).

As a first hypothesis – as a methodological indication for the functional and typological choices – we will identify the possibility of distinguishing three different 'dimensional thresholds' (which, naturally, do not correspond to a functional stratification) in which the urban fabric is structured:

- 1 dimensional type of industrial and mobility equipment;
- 2 dimensional type of service and leisure sector;
- 3 dimensional type of residence.

It should be noted, however, that the coexistence of different metropolitan characteristics within a single urban fabric does not necessarily imply contiguous relations, given that three-dimensional surveys can be used to represent the different dimensional and aggregative aspects in characteristic layers.

For example, nowadays, information and communication networks tend to cover the majority of traditional urban relations instead of establishing nodal concentration points. Consequently, given the technicalisation of business functions (memory storage, computation, decision processing, programming, etc.), the hypothesis of a physical distinction between business centres and the urban fabric (residences, etc.), tends to fulfil these functions according to a network so dense as to make it indifferent (inasmuch as it is always copresent) to the various compositions of the urban tissue.

The compact city. Studies of urban structures

Franco Purini (with L. Thermes), 1966

Originally published as 'Studi di strutture urbane'.

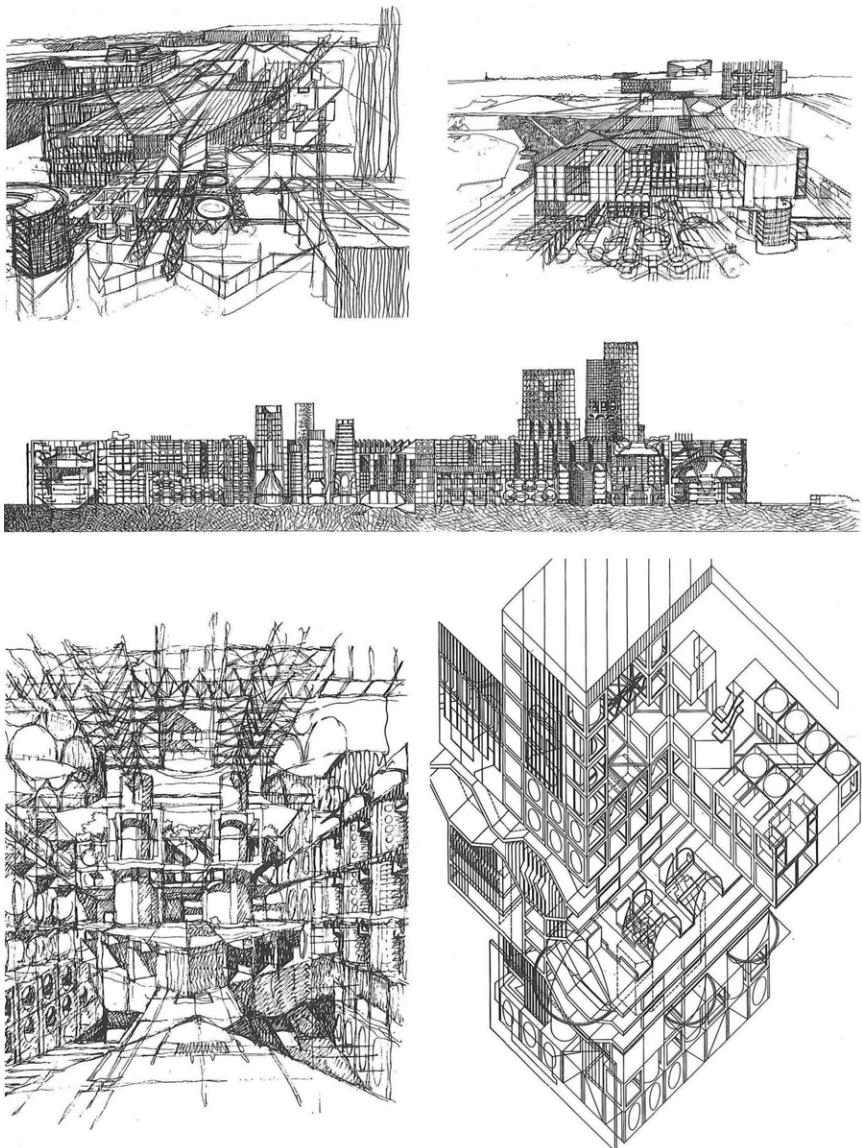


FIG. APP.1.1 From top to bottom, left to right: Relationship between the basement structure and cubical spans; The beams and the towers; Cross section of the urban fabric; Study of an urban interior; Isometric view of the fabric (detail).

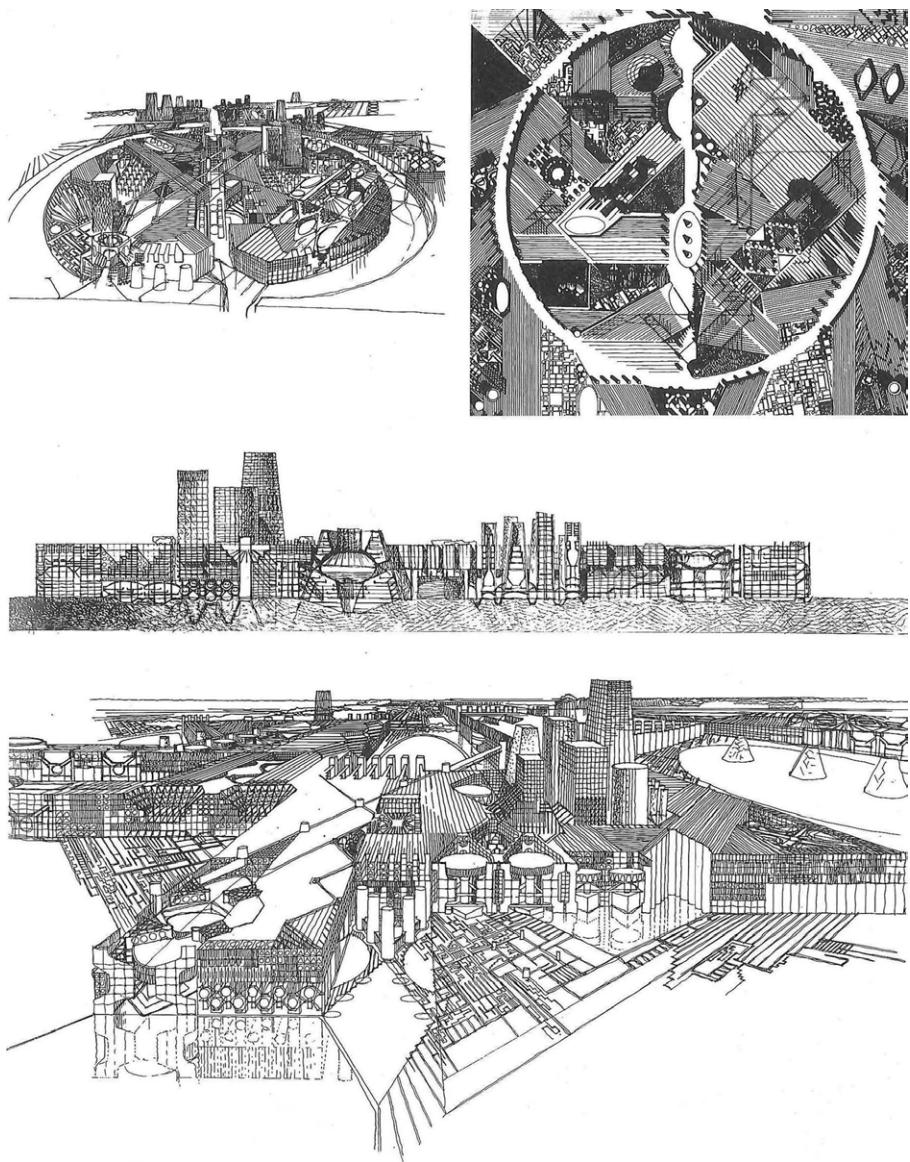


FIG. APP.1.2 From top to bottom, left to right: The plinth carved by the lanes of the media landscape and subdivided in various construction sites; Cross section of the urban fabric; The roof of the plinth as a square extended throughout the entire city.

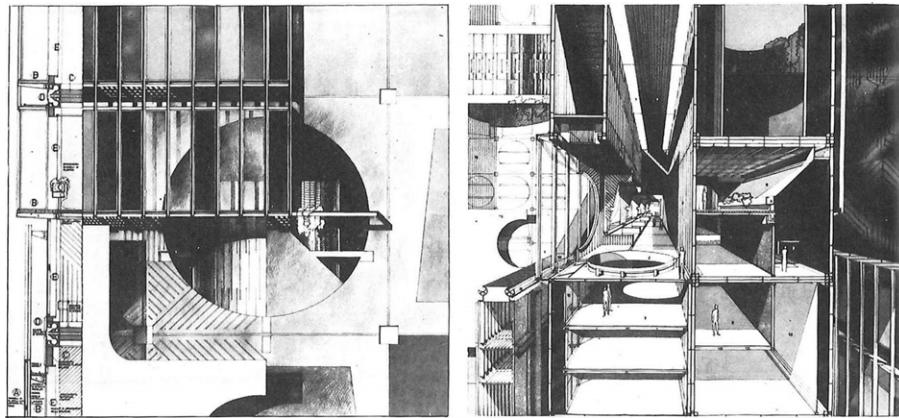


FIG. APP.1.3 Details of the front of the urban fabric.

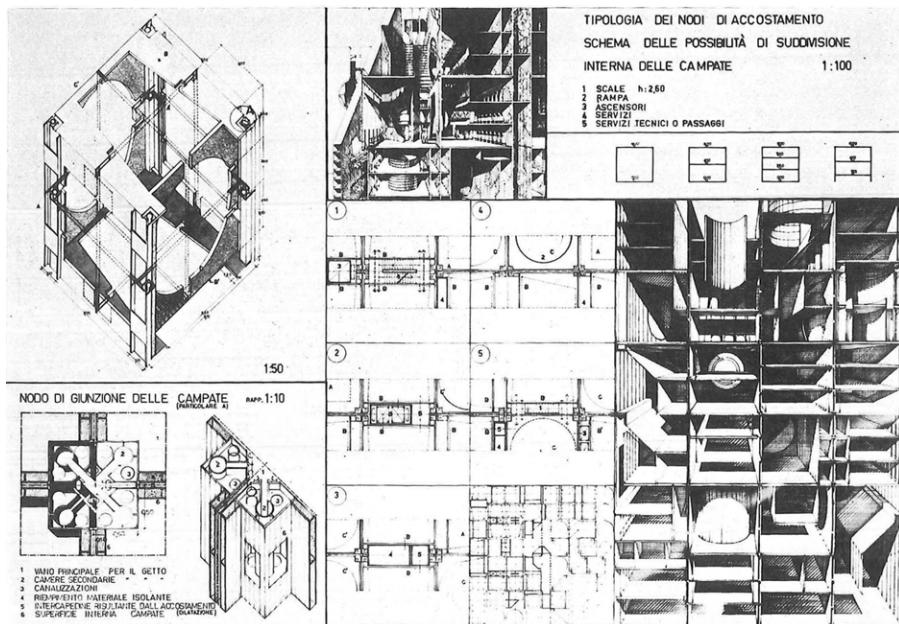


FIG. APP.1.4 The cubic structures: technological definition, the junction, typology and combinatory relationship between the nodes, arrangement of the interior space and the relationship with light.

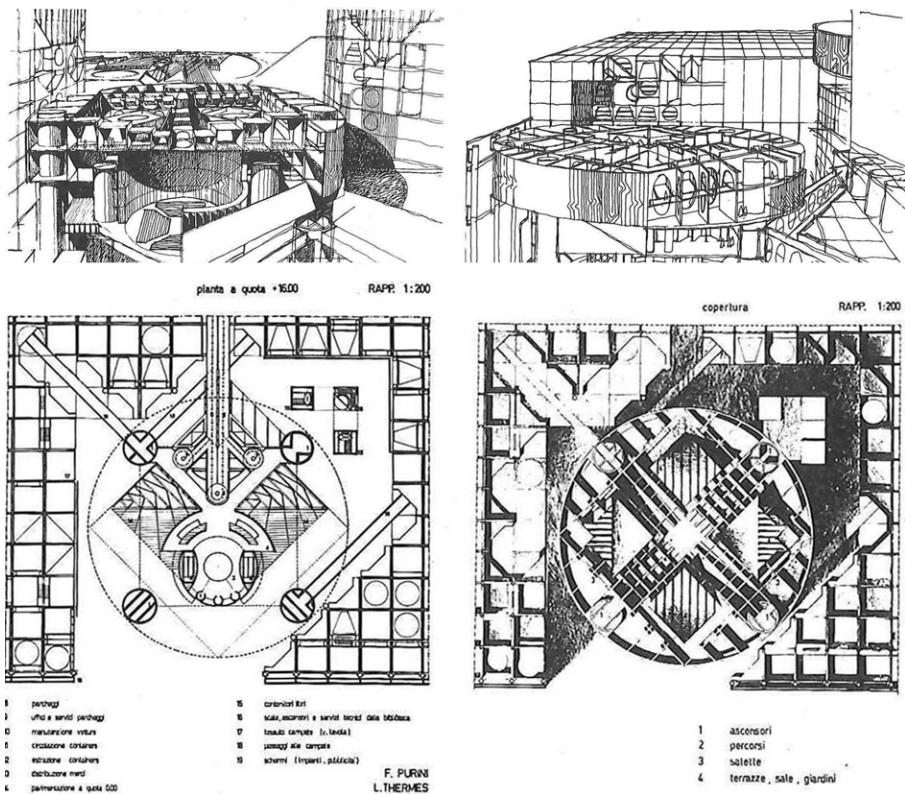


FIG. APP.1.5 From top to bottom, left to right: Relationship between the fabric and the buildings; Plans of the building for cultural activities.

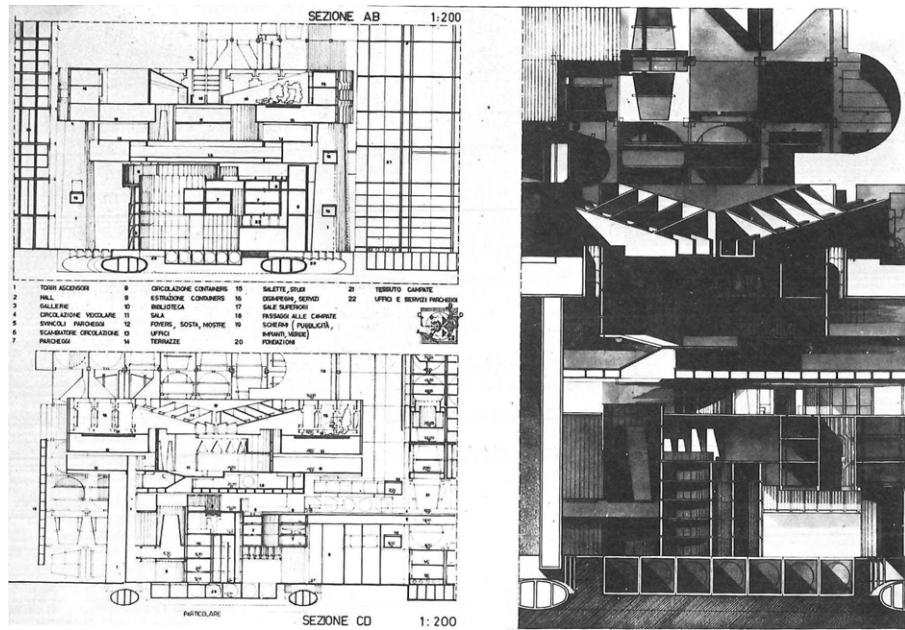


FIG. APP.1.6 Sections of the building for cultural activities.

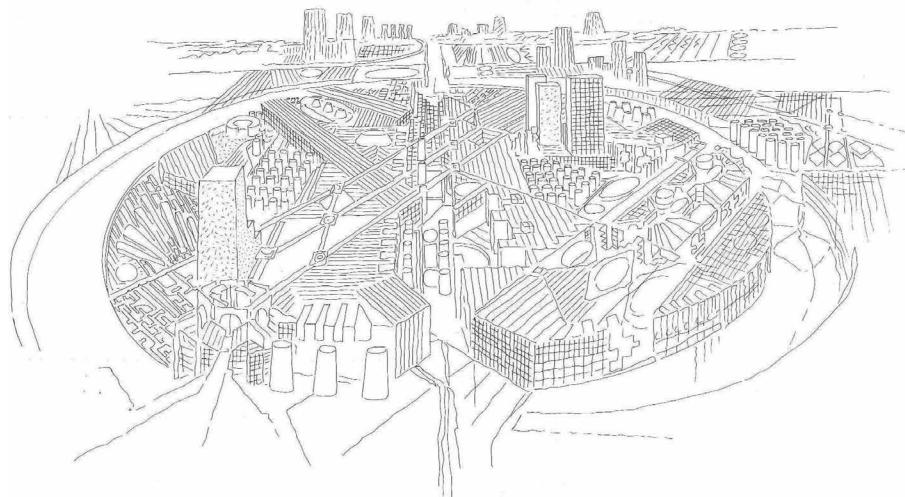


FIG. APP.1.7 Bird's-eye view of the Compact city.

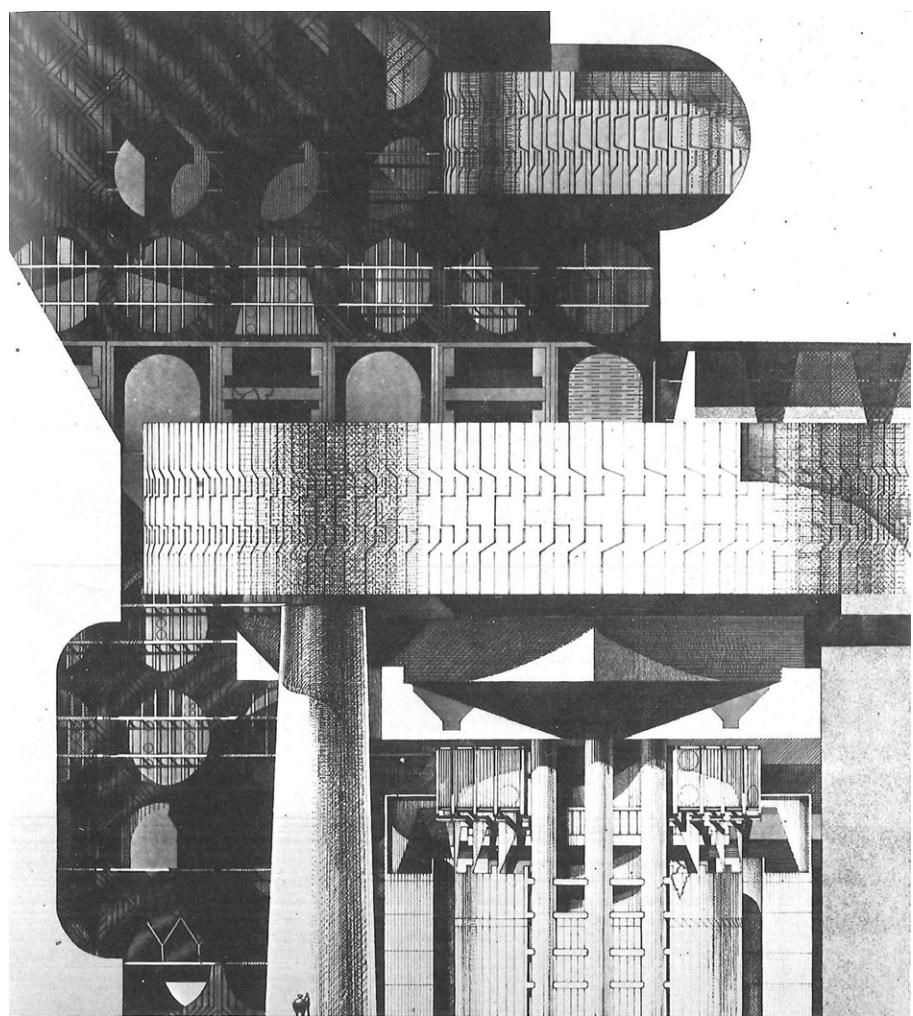


FIG. APP.1.8 The front of a public building (detail).

Transitional research

Franco Purini, 1967

Originally published as 'Ricerche di transizione'.

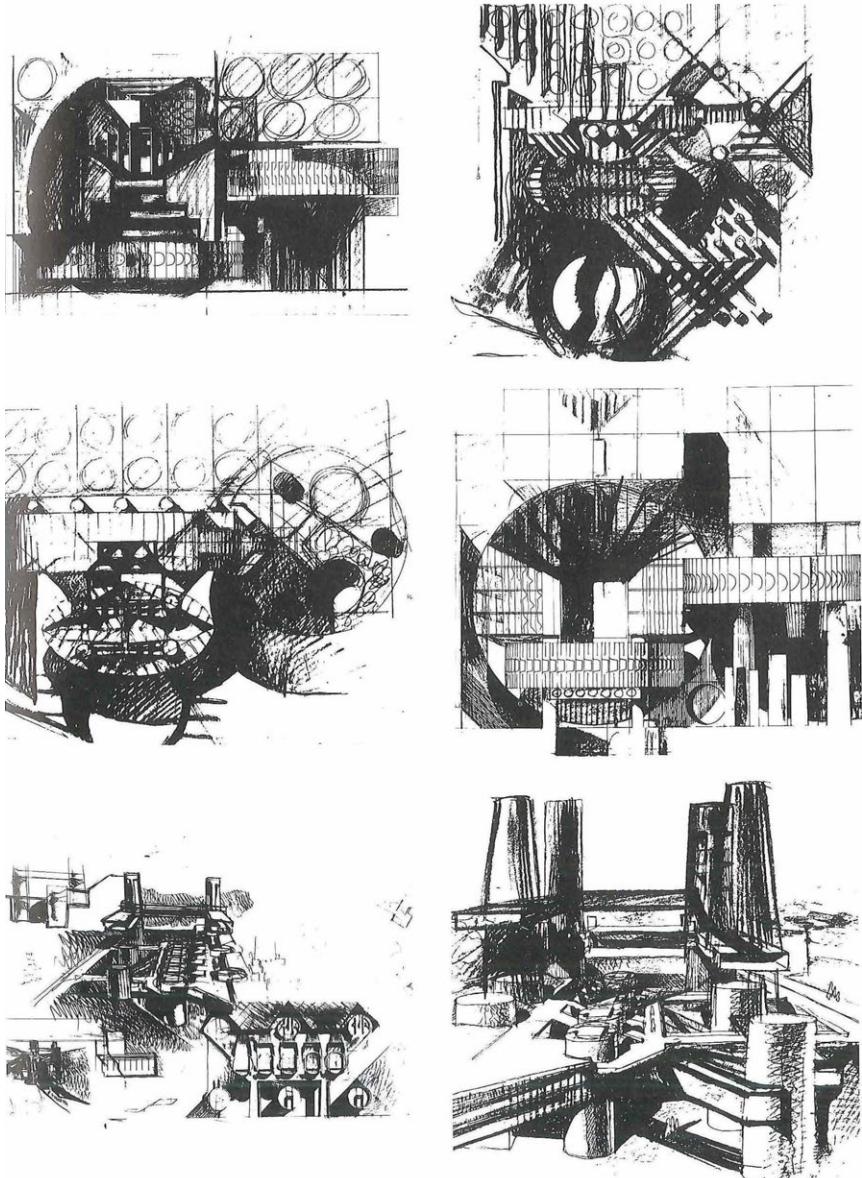


FIG. APP.1.9 Studies of architectural organisms characterised by central symmetric plans and consisting of cylindrical volumes and systems of columns.

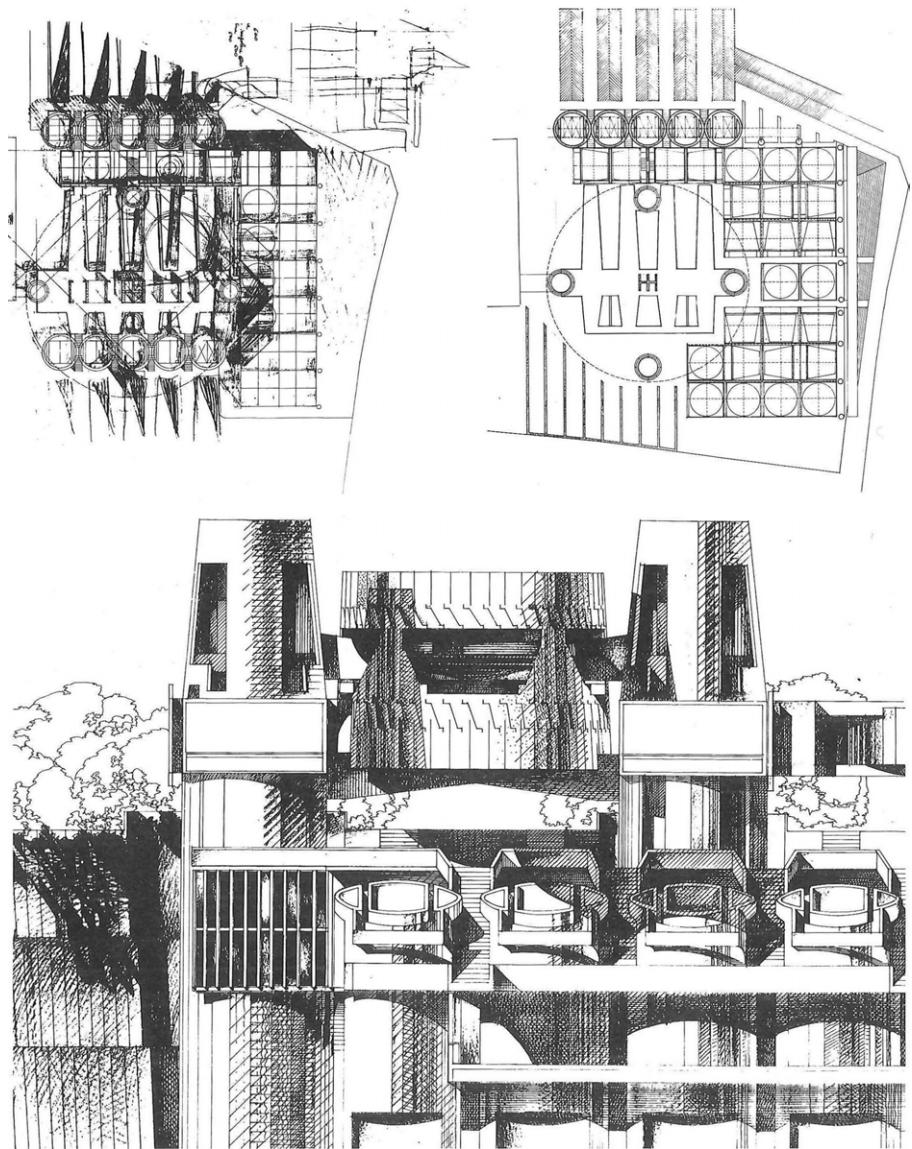


FIG. APP.1.10 Studies of architectural organisms characterised by central symmetric plans and consisting of cylindrical volumes and systems of columns.

Project for a mechanised road from Rome to Latina

Franco Purini, 1967

Originally published as 'Progetto per strada "costruita" tra Roma e Latina'.

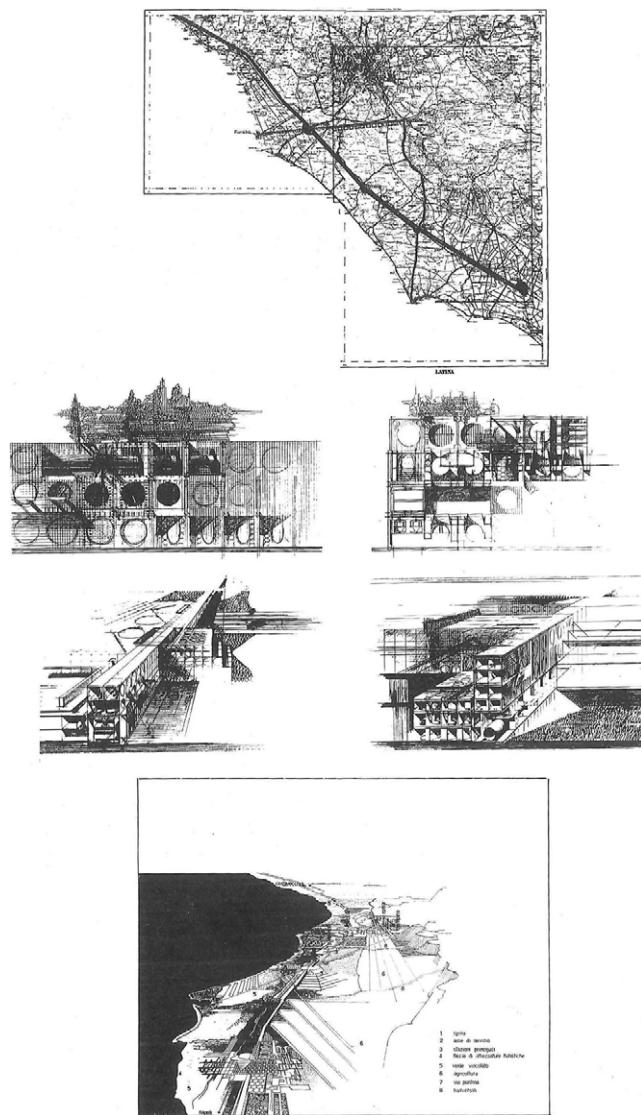


FIG. APP.1.11 From top to bottom, left to right: The Rome-Lastra territorial system with the stretch of the built road; Preliminary study of the façade; Preliminary studies of the road section and its relationship with the crossing industrial structures.

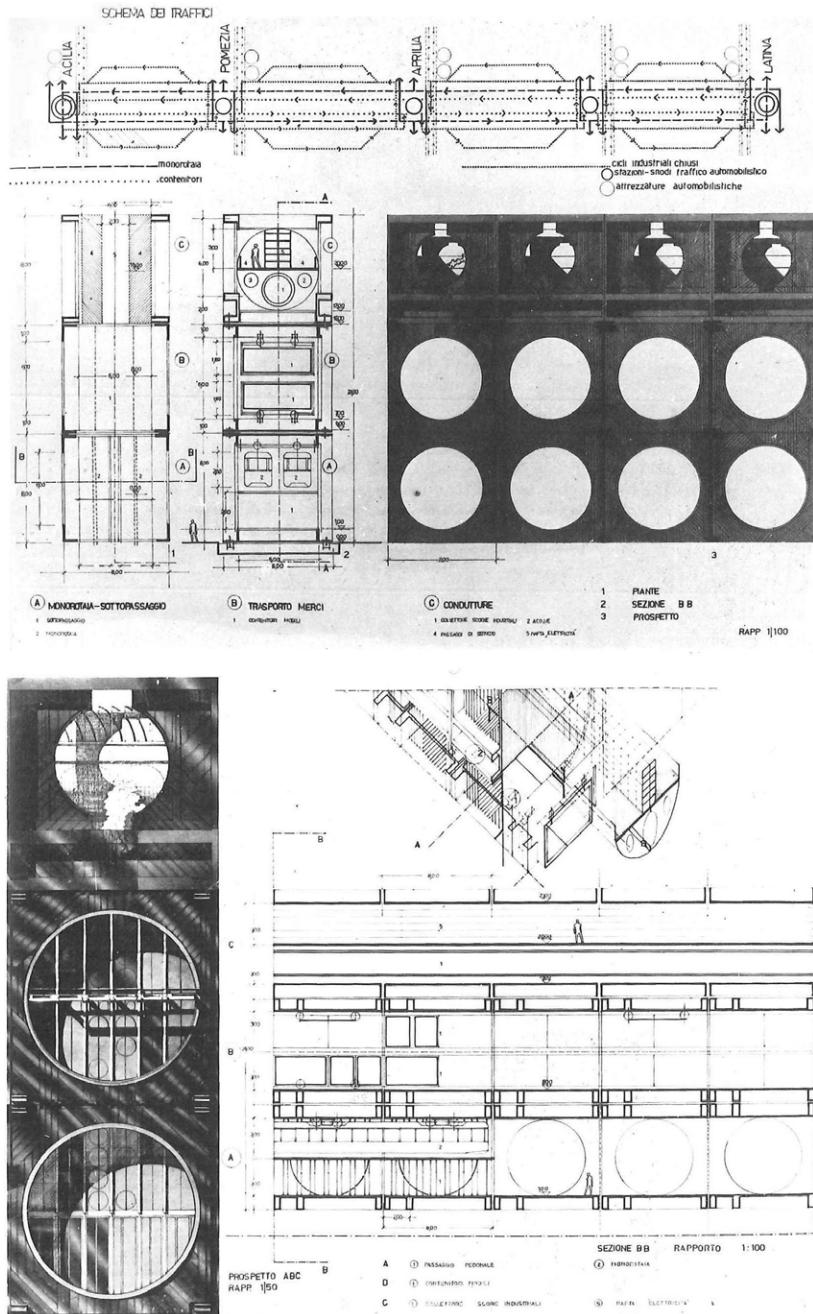


FIG. APP.1.12 From top to bottom, left to right: Scheme of the Agro Pontino traffic system; Cross sections and façade of the 'wall structure'; Details of the façade; Isometric and longitudinal sections.

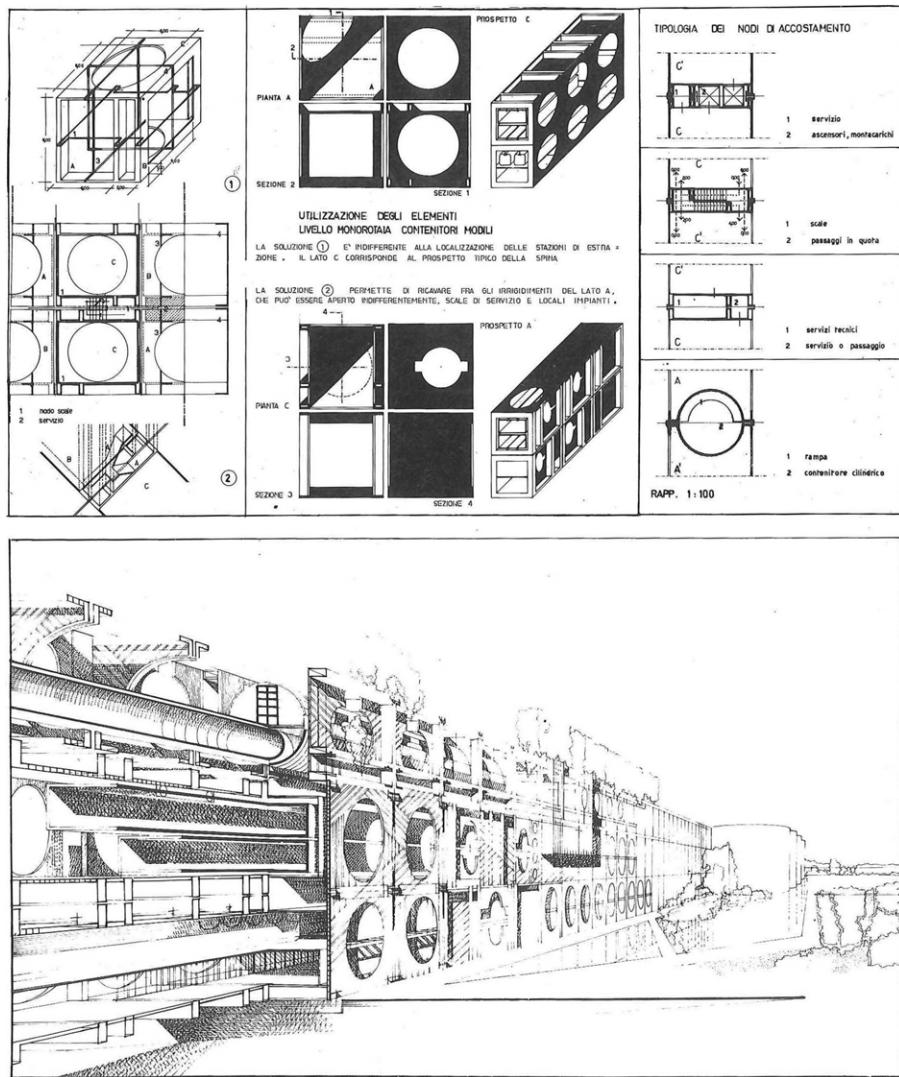


FIG. APP.1.13 Above: The cubic structures. Combinatorial typologies of the nodes. Below: The wall as a territorial 'sign'.

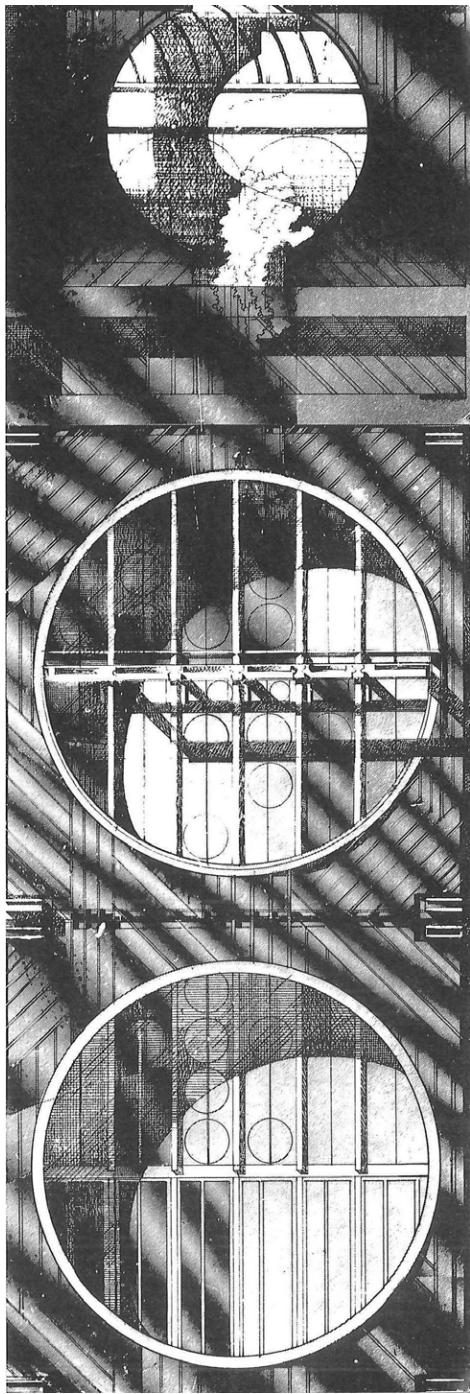


FIG. APP.1.14 Details of the façade.

Project for a library in Rome

Franco Purini (with A. Pedone), 1968

Originally published as 'Progetto di biblioteca a Roma'.

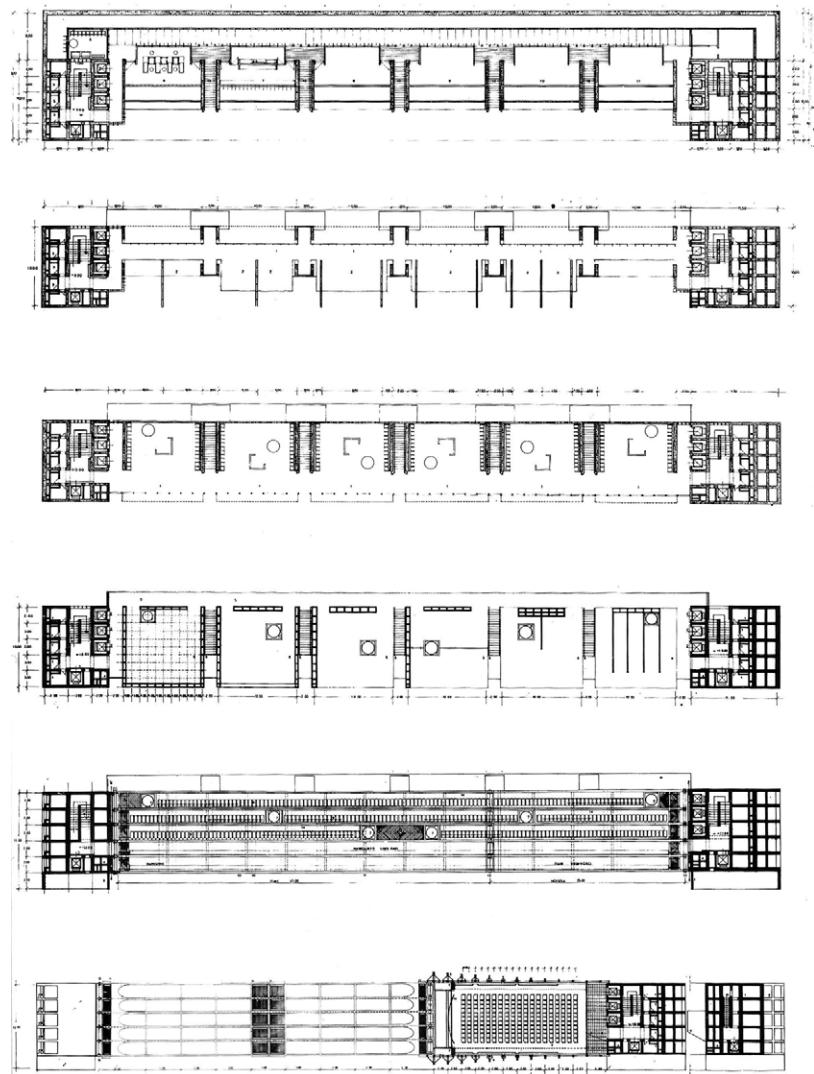


FIG. APP.1.15 Floor plans: 1st level, technical services; 2nd level, design space; 3rd level, catalogues and book distribution; 4th level, reading rooms; 5th level (Gerber structure), book storage; 6th level, conference room.

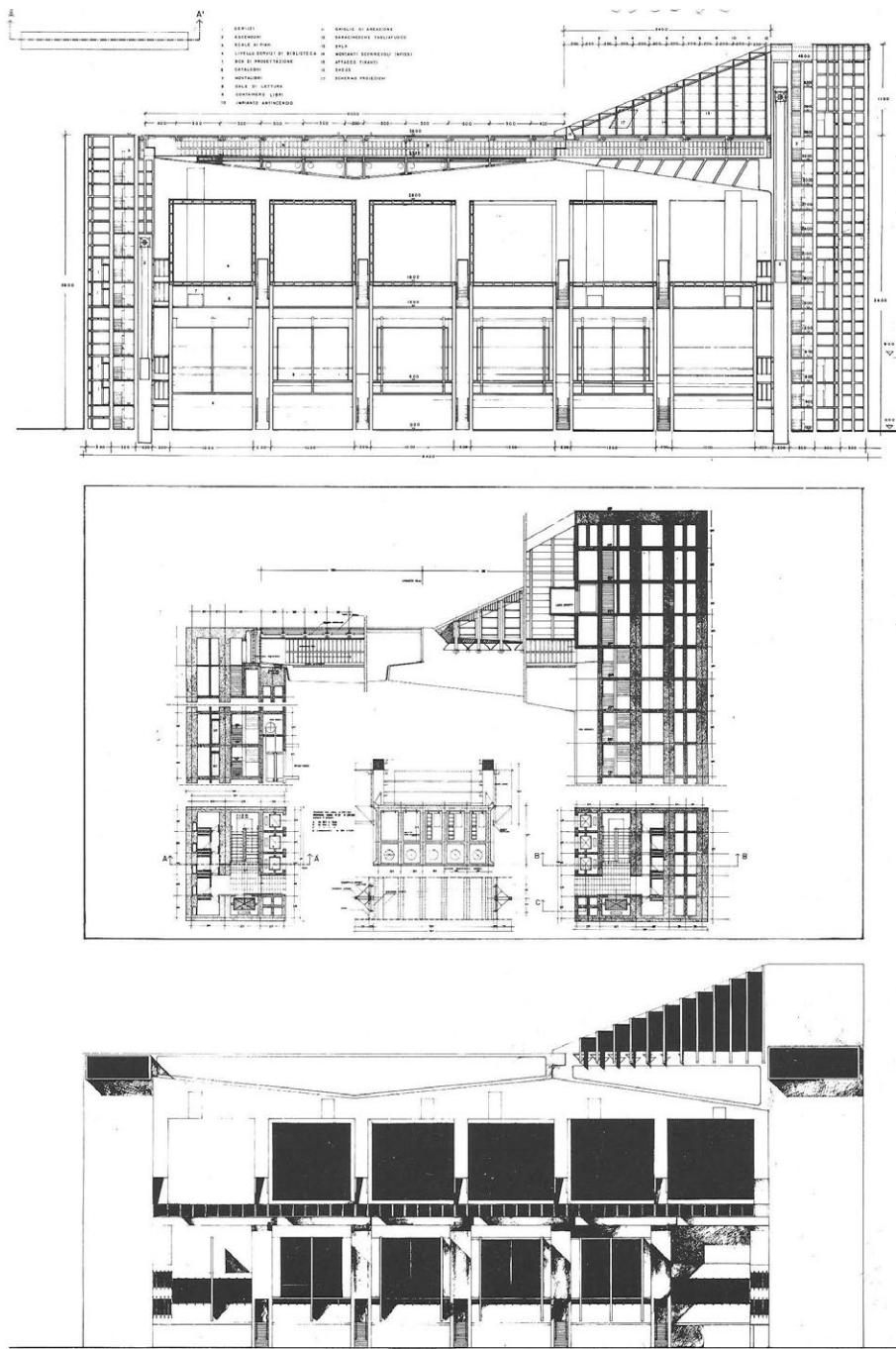


FIG. APP.1.16 From top to bottom: Cross section; Details of the joints of the bridge structure; Façade.

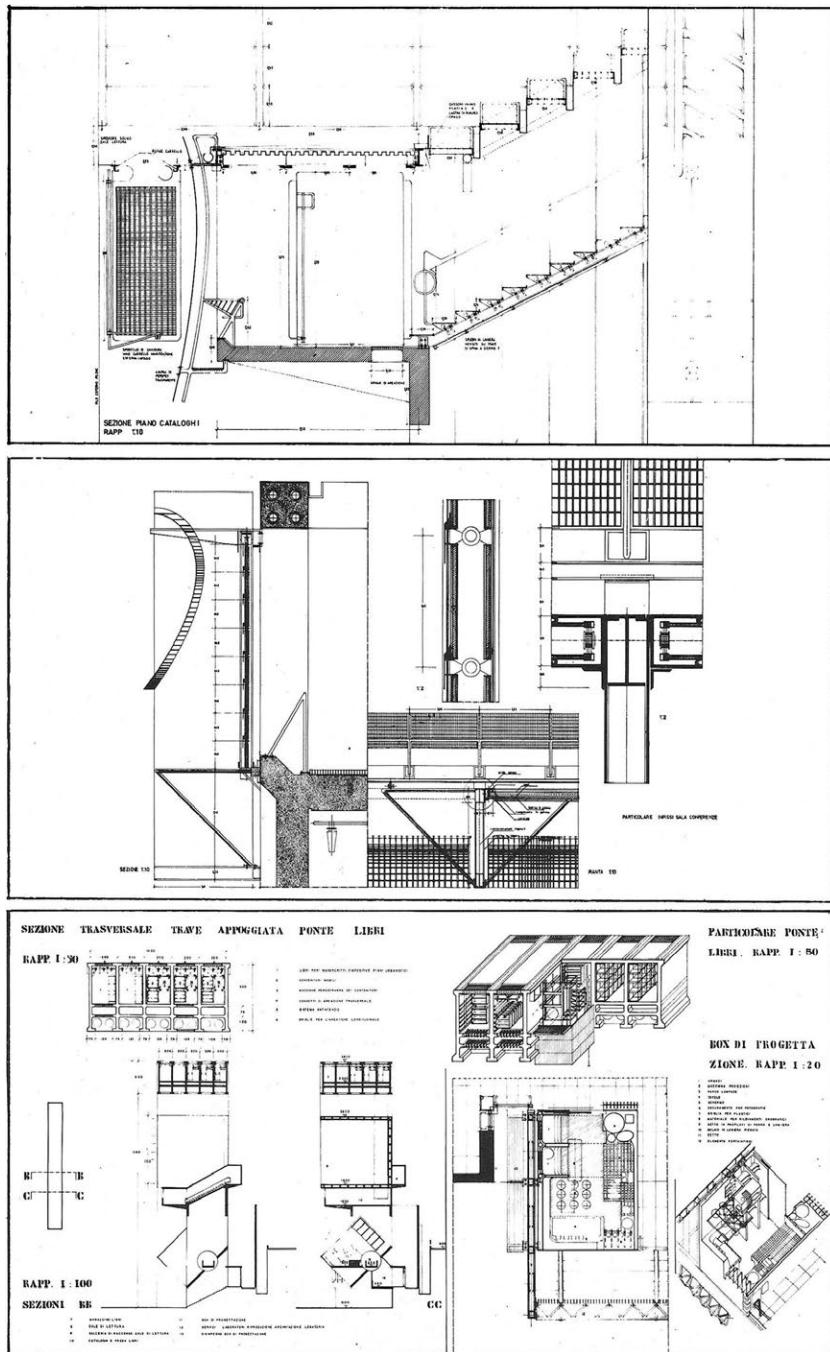


FIG. APP.1.17 From top, to bottom: Detail of the ramp connecting the reading rooms to the catalogue area; The framings of the bridge overhang bracket; Cross section and detail of the book storage.

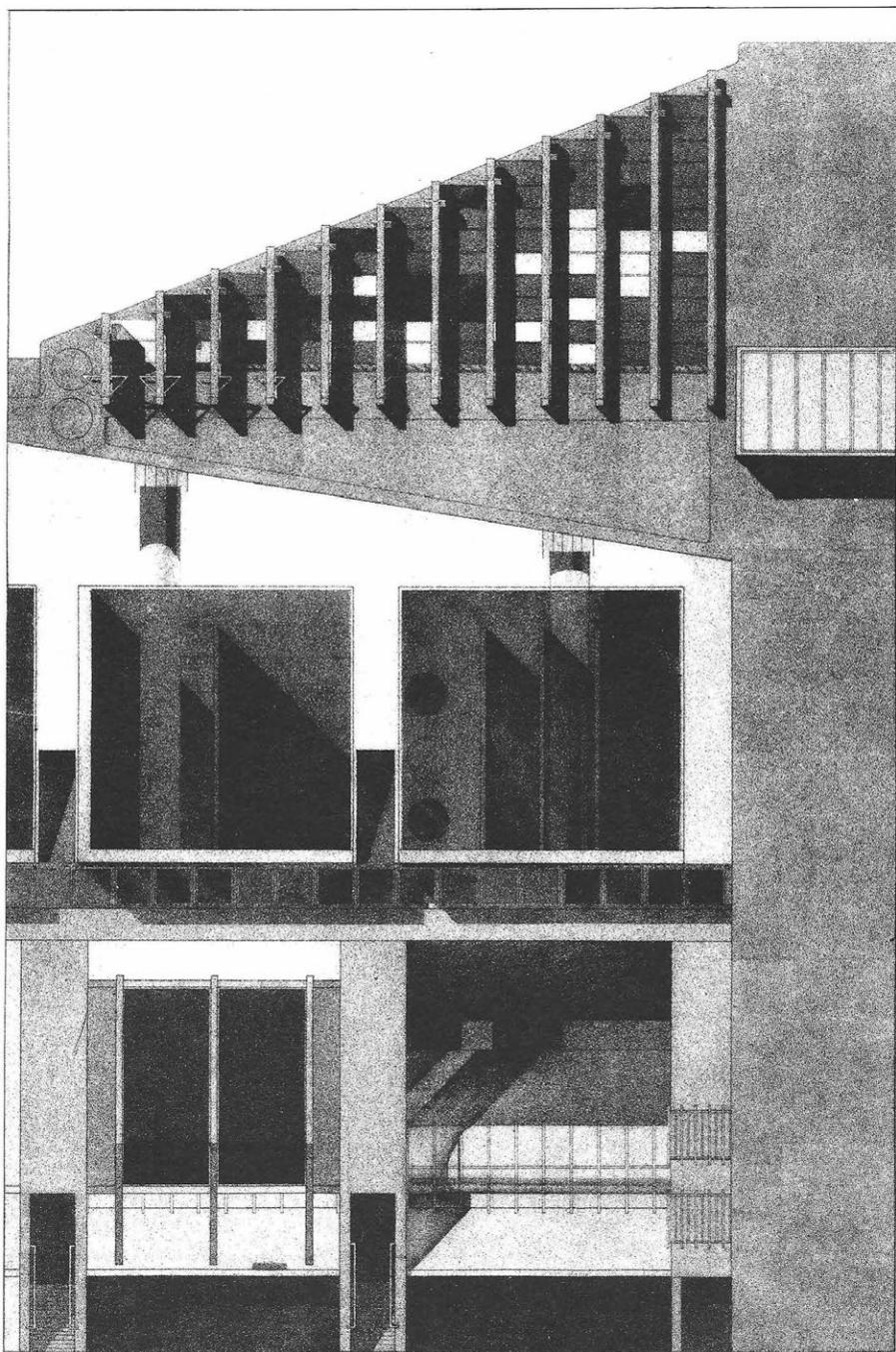


FIG. APP.1.18 Detail of the façade.

Notes on architectural composition

Franco Purini, 1967

Originally published as 'Note sulla composizione architettonica', in *Grammatica* no. 3, eds. G. Novelli and A. Perilli (Rome: Edizioni Libreria Feltrinelli, 1969): 69.

Architecture consists in the relationship of degrees of three-dimensionality inherent to classes of volumes, planes and lines. This relationship exists as soon as the original level of three-dimensionality and the scalar interval – an interval that defines the degree [of three-dimensionality] – is defined. This interval, chosen for one of the elements of the three classes volumes, planes and lines), consists in establishing the number of operations (spatial, geometric, distributive) that are subtracted, or are considered implicit, in the passage between an object 'A' and an object 'B' of the class in question. In doing so, the series obtained – more or less dense in intervals, and crossed or not by the other two parallel series – establishes the 'supporting' core of the architectural notation.

In this way, it is possible to precisely define the notion of the architectural sign: *[the] architectural sign is the double succession of classes (volumes, planes, and lines) and the degree of three-dimensionality adopted.*

The architectural composition should therefore be understood as a succession of structured series alternated and arranged, or disarranged, according to an axial direction, in such a way that, for instance, an interval between two elements, whether a void or occupied by an element belonging to another class of elements, has the function of making it possible to virtually reinterpret the series in its entirety.

Clearly, the most basic element should be defined in relation to the minimal subdivision possible of the primary functional element in its geometrical development, and beyond any analytical-cellular interpretation of the architectural setting.

Ultimately, the composition is a definition of 'dense blocks' of real or virtual three-dimensionality, in other words, the maximum or minimum concentration of three-dimensionality compatible with the constitutive objects of the (architectural) element.

The drawing obtained, endowed with structural properties of reciprocal compensation among the constitutive elements, affects all degrees of the design process, including the modulation of the structure, which should follow the rhythmic succession of the classes of 'dense blocks'. Hence the modulation of the

compositional structure should not be chosen according to conventional rules based on a constant axial modulation (even though the output of a compositional process might also result on a regular grid). The 'physical' support on which this composition of dense blocks lies is a designed, temporal fabric, which in turn has thickness and a complex and multidirectional rhythm.

This fabric orders and innervates the composition of the series of dense blocks and determines their nodal situation.

The reading of the overall structure is rendered synthetically possible through the perception of the structure of the [architectural] sign, defined as the double succession (rhythmic and the temporal fabric) of classes (volumes, planes and lines) and the degree of three-dimensionality selected for them.

The reading of the architectural setting can therefore be determined once the three-dimensional complexity of the blocks or 'modules' has been established, and once the scale of the interval is known: namely, the concentration and rarefaction of the series. Consequently, it is evident that it is precisely this quality of the composition that determines the development and the logic of interior and external spaces, thus ultimately substantiating the physical and sculptural consistency of the object. In fact, while it is not possible to reduce the architectural categories to spatial, sculptural or geometric categories, it is possible reduce them to compositional categories of series that, as was said, not only include all the architectural values, but that these same values, at the same level, result in a structure capable of compensation.

For instance, if particular conditions necessitate the compression of the fabric into a flat element, whether a plane or linear configuration, the multidirectional fabric will either superimpose itself in a single plane or 'crowd' the section of the linear element.

A hypothesis of architecture

Franco Purini, 1976

Originally published as 'Una ipotesi di architettura', in Franco Purini, *Luogo e Progetto* (Rome: Edizioni Magma, 1976), 61.

The aim of this 'notational' system is to organise a number of architectural elements into a certain number of series, in which the 'ordering' criterion adopted is the 'degree' of three-dimensional complexity. This is made to correspond with the elementary phases of constructing a figure in space. The initial volume, or generative element, is a cube, chosen for its geometric characteristics, which consist of its extreme 'reconstructability', starting from fragments, together with its recognised perspectival character.

There are three series: the first moves from a plane and, through subsequent thickenings, generates a volume that is ideally not homogeneous but composed of strata. The second series starts from a linear element to progressively construct the geometrical structure of a cube. This, in the form of a volume, is the starting point of the third series. Step by step, the faces of the cube are removed until a dihedral angle and a plane remain, which is the initial element of the second series.

The spatial hypothesis of this 'writing' consists in the complete citation of one entire series before introducing successive ones.

Particular configurations are obtained by combining elements of two series. Based on complex rhythmic intervals in which the metric distance is a function of the degree of the constructional complexity, the compositions of these elements confer their spatial effect to the rigour of the elementary forms and the programmatic schematism of the reciprocal positions of the objects.

Volumes, planes and lines allow almost all the spatial situations of a building to be anticipated, but without determining the scale of the elements. Thus, they act as abstract models for measuring the relationship between even the smallest parts of a construction.

In addition to these grammatical notations, a number of higher connections in scale are proposed between bases, volumes and linear elements. The base understood both as a podium on which the series of the architectural objects are placed, and as one of the two significant connections with the ground (the other is support by columns or pillars), establishes a visual tension; in other words, a sense of expectation that enhances the sculptural value of the forms.

Analogous to the base [podium] but developed in a vertical direction, the plane is understood as a page on which the positioned elements 'write' by means of shadows: the vertical plane renders the spatial relationships two dimensional.

The possibility of spatially subdividing a cubic section is a further aspect of this research. Seventy-two sections, starting from those most common ones, identify a series of relations between the perimeter of the volume and the elements.

The 'construction' of a building enumerates in succession the elements and the phases that define the built artefact, identifying points where a creative intervention could be applied. The principle of the autonomy of the parts in fact governs⁴⁷⁴ the design of a building analogous to a temple. Base, lamellar element, trellis, stairs, monumental structure and pyramid are presented as specific architectural forms. The reference to the classical temple is intended as a recognition that this formal 'type' lies the potential generative core of any building: it is the archetype par excellence, the only structure whose parts enable the most significant series of variations.

In the context of this study, the drawings of the lamellae are a reflection on the theme of the skyscraper.

Although abstract projects, they do not escape the realism of formal structures or the solidity of an image.

They arise from the problem of the recognisability of a formal type starting from its translation into another grammatical system. The translation enables the typical elements of a consolidated organism to be compared with those of the system proposed.

These studies began within, and directly refer to, a particular situation in the visual arts. The precedents of this work can be found in: minimal art, as research into primary forms; *arte povera*, in its attempt to eliminate the relevance of the creative technologies in favour of expressions derived from the logic of the materials themselves, and freed from everything capable of diminishing the 'ingenuity' of intuition; conceptual art for the attention that, on the contrary, it presupposes behind the least gesture, and for the value it gives to the physical 'result', to the sculptural presence, and to visual values.

⁴⁷⁴ Translator's note: the verb 'to govern' is used here in a grammatical sense, namely where a word is 'governed' by its semantic relation to other words in a sentence.

Aside from the result, the significance of these studies lies in the questions it poses in relation to the [creative] techniques used, whose degrees of stability and possibilities for significant variations are a subject for investigation.

Graphic representation of the first and last elements of the three transformational series

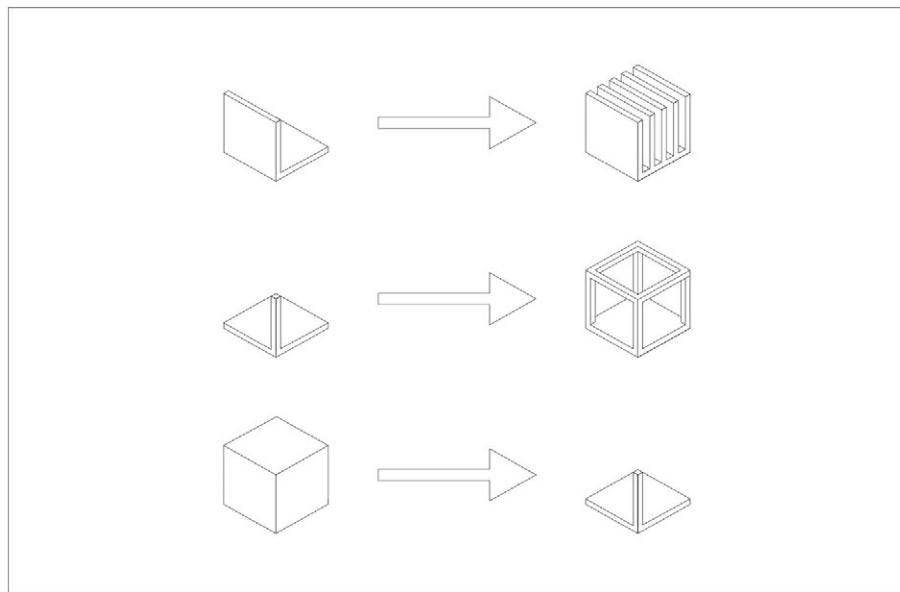


FIG. APP.1.19 Graphic representation of the three basic classes of elements. (Author's image.)

Series of volumes, surfaces and lines

Series 1

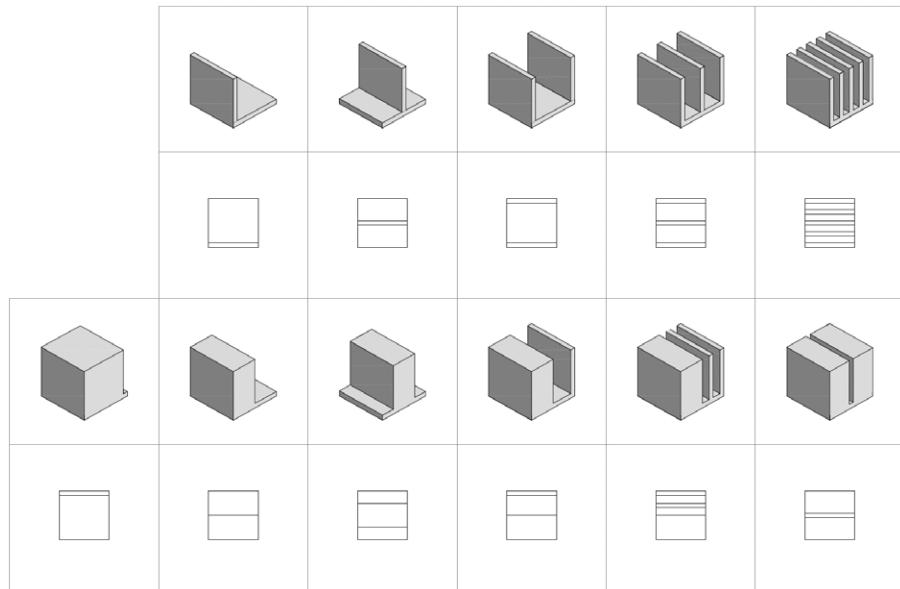


FIG. APP.1.20 Graphic representation of Series 1. (Author's image.)

Series 2

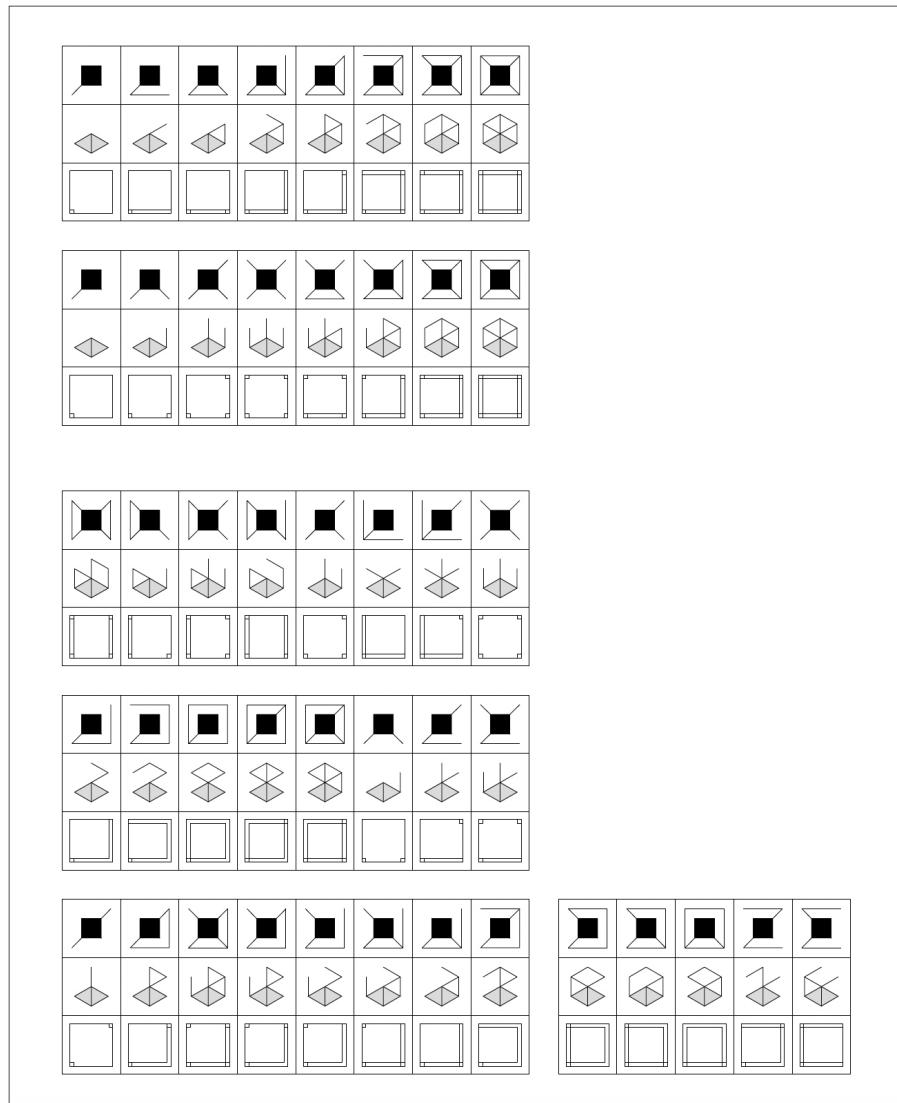


FIG. APP.1.21 Graphic representation of Series 2. Wireframe structure and all the intermediate combinatorial stages from the basis element to the cube. (Author's Image.)

Series 3

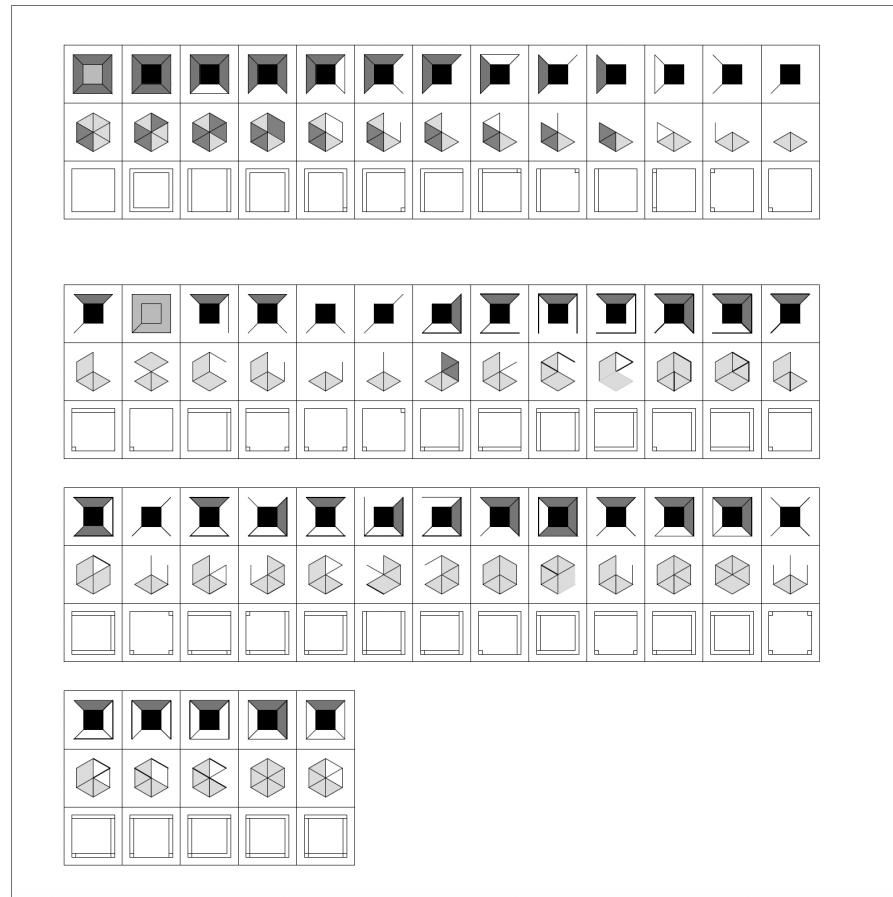


FIG. APP.1.22 Series 3. The cube conceived as surfaces and intermediate combinatorial stages to achieve the basic element of a wireframe structure. (Author's Image.)

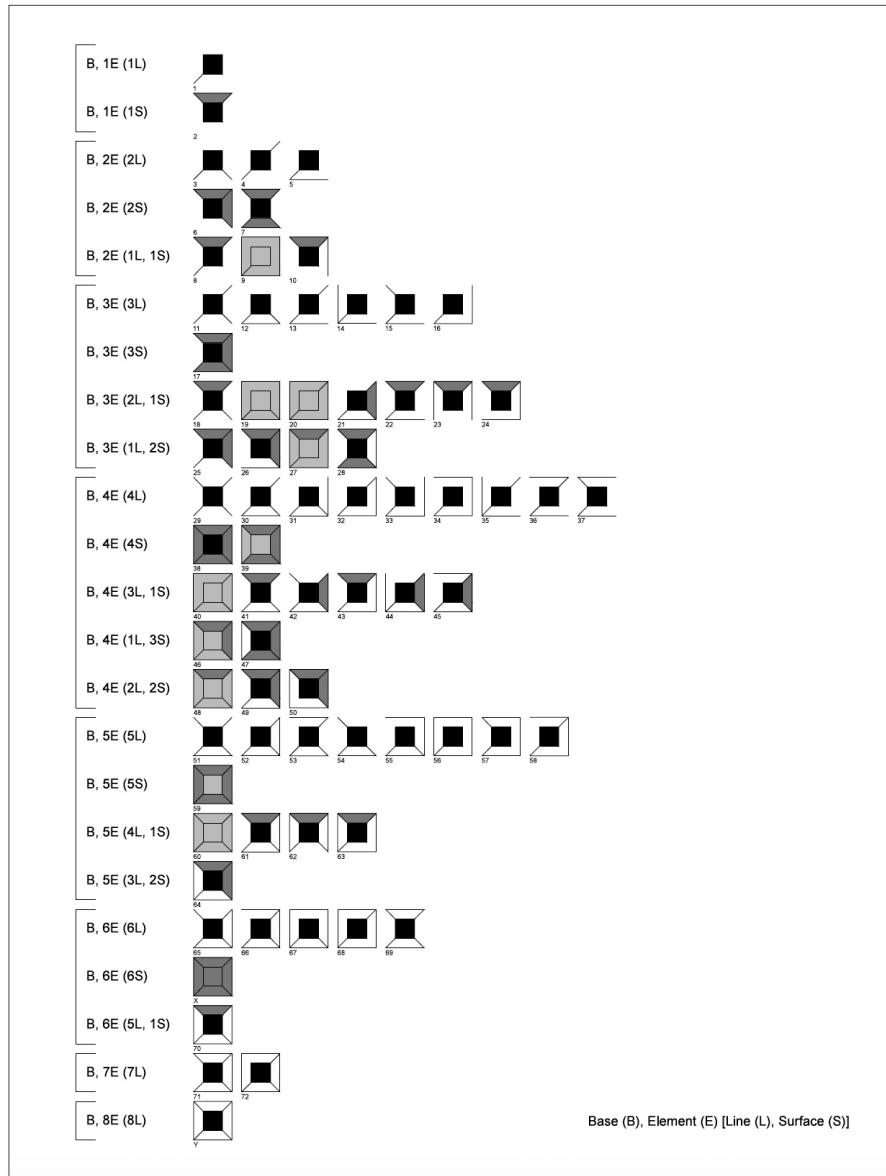


FIG. APP.1.23 Graph drawing (isomorphism classes of three-dimensional cubic graphs) of the 74 structures (72 intermediate combinations +2 cube versions as wireframe structures and as surface structures) from the second and third transformational series established by Purini in 'Una ipotesi di architettura'. Embedding (instances of the cube configuration contained in other instances) is not included and structures of cube configurations appear only once. Mirrored and rotated instances are excluded. (Author's image.)

The concept of interval

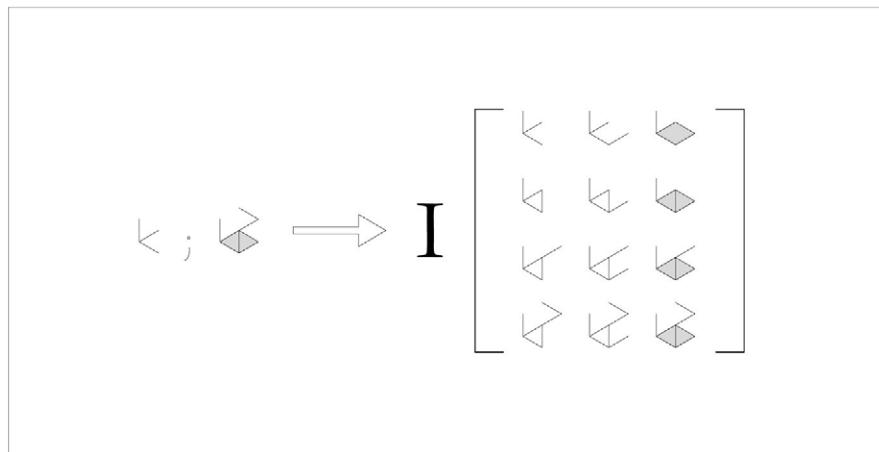


FIG. APP.1.24 Graphic description of the concept of interval. (Author's image.)

A hypothesis of architecture

Franco Purini, 1966-1968

Originally published as 'Una ipotesi di architettura'

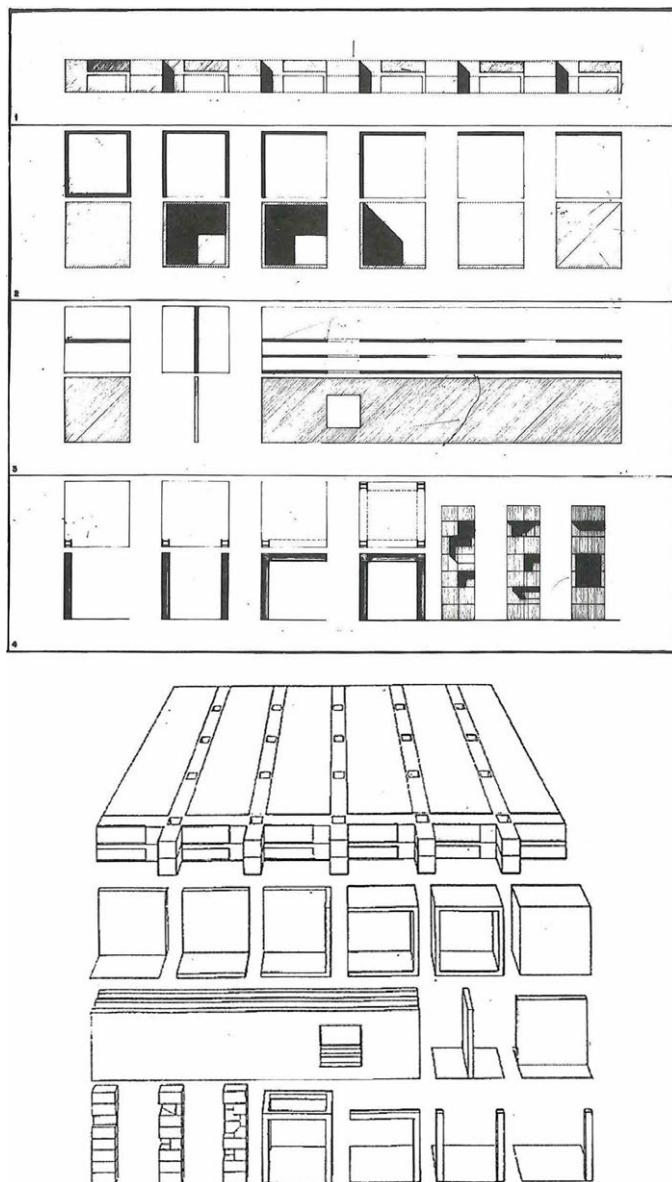


FIG. APP.1.25 Series of volumes, lines and planes.

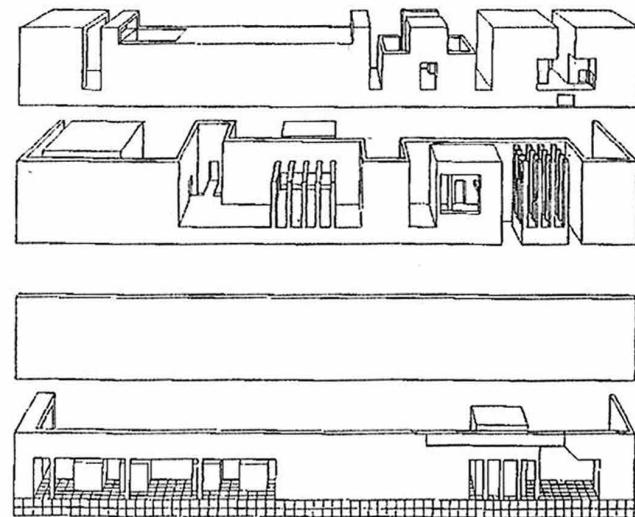
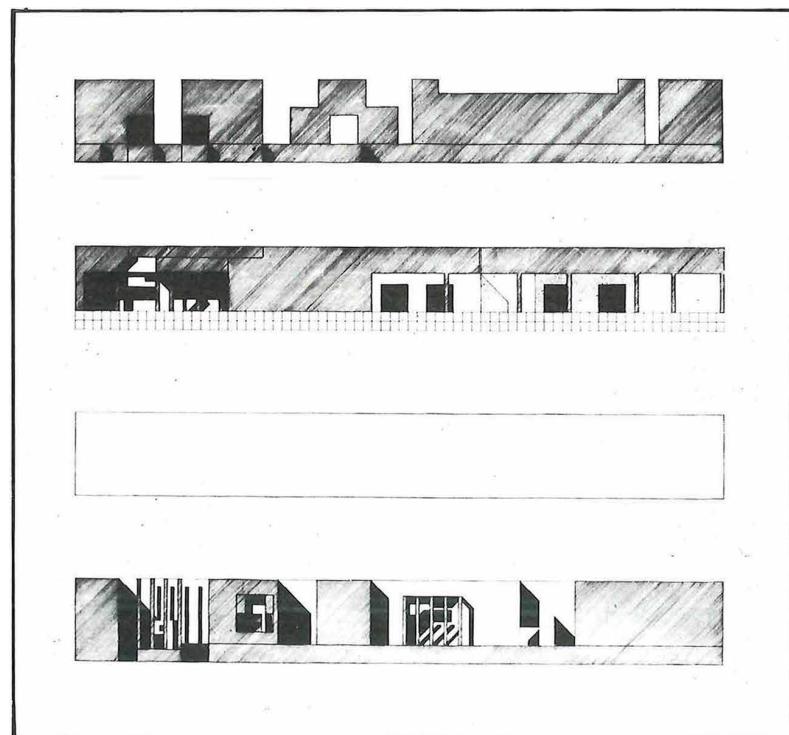


FIG. APP.1.26 Development of architectural signs and intervals on the base.

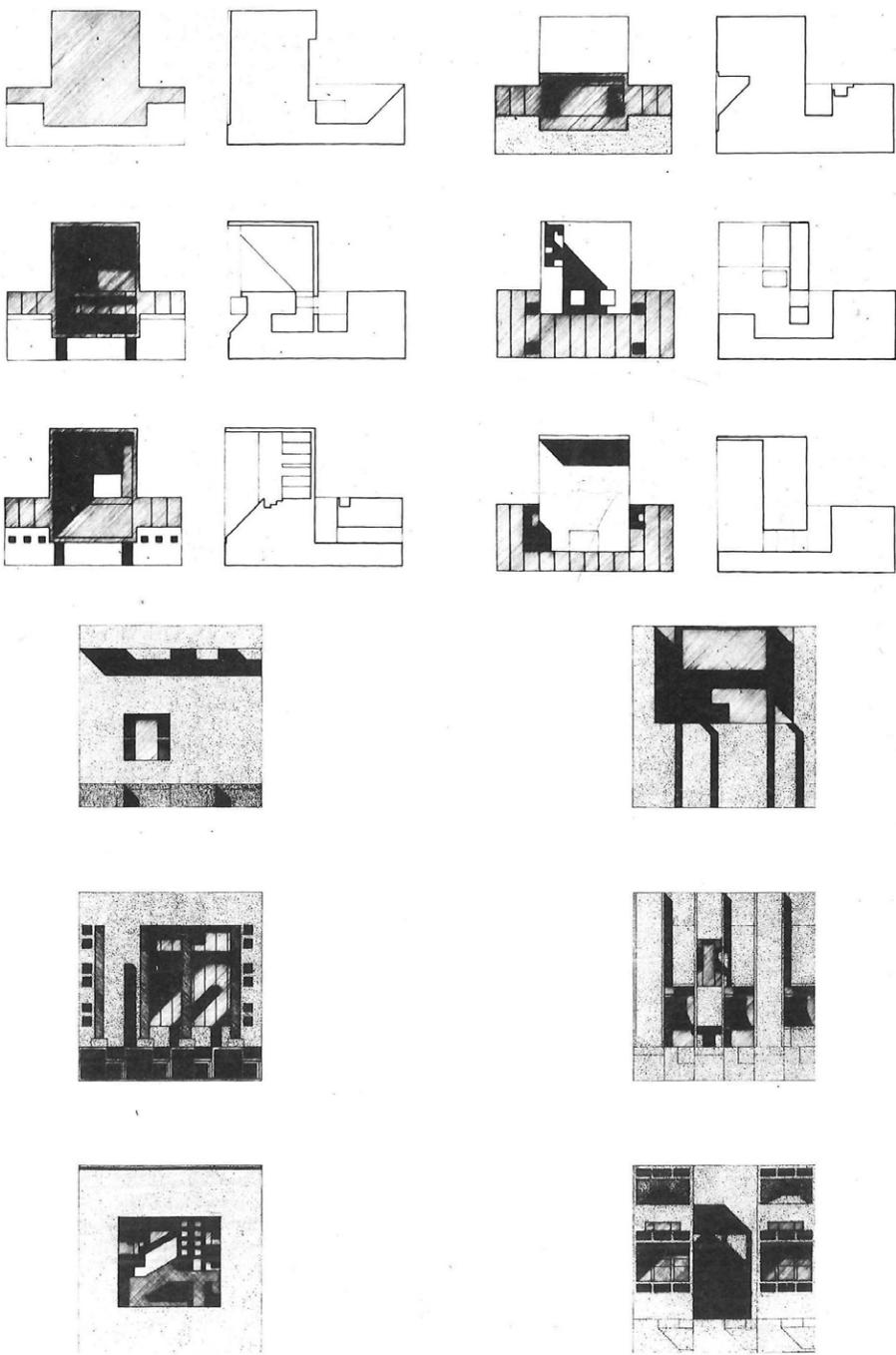


FIG. APP.1.27 Relations between base and volume and relationships in elevation between flat surfaces (walls and slabs) and linear elements (pillars, portals, towers).

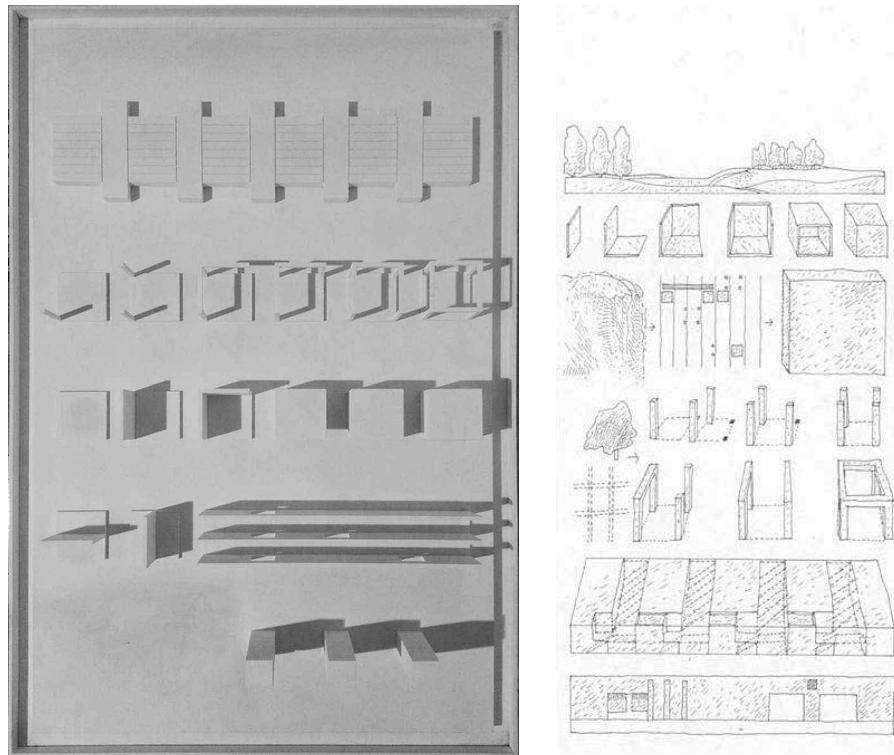


FIG. APP.1.28 Model of the series of volumes, lines and planes and sketch drawing.

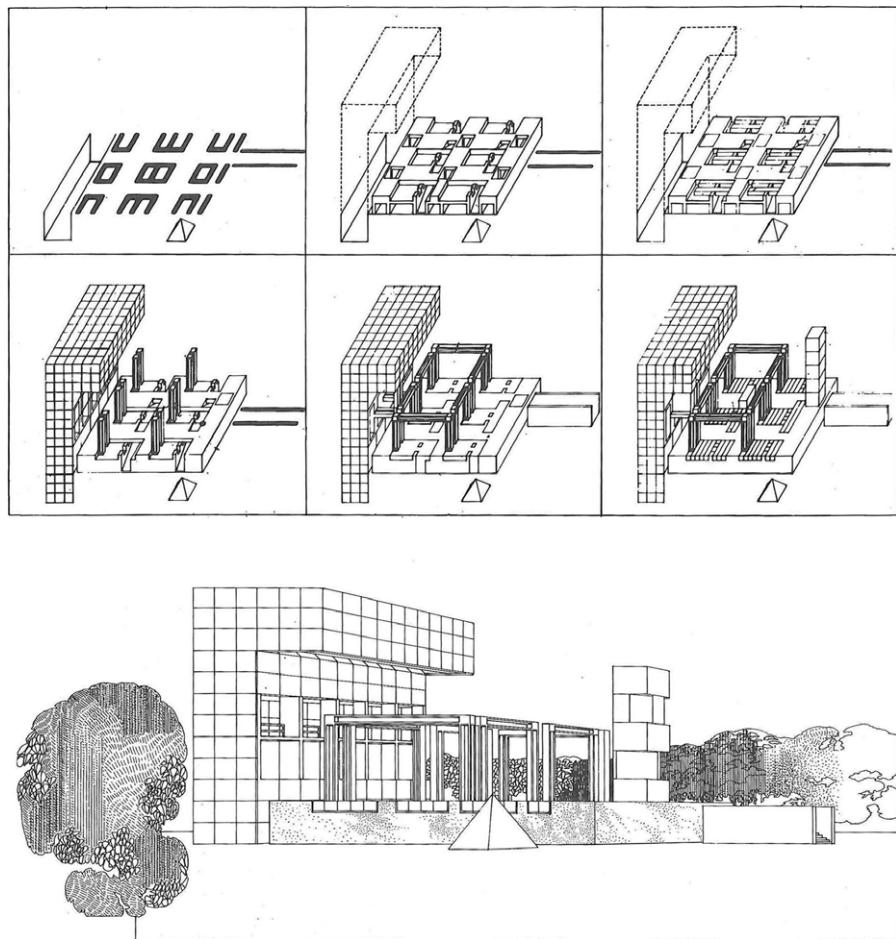


FIG. APP.1.29 Left: Analysis of a construction process of a temple. The definition of a building according to the model of the temple archetype. Right: View of the temple.

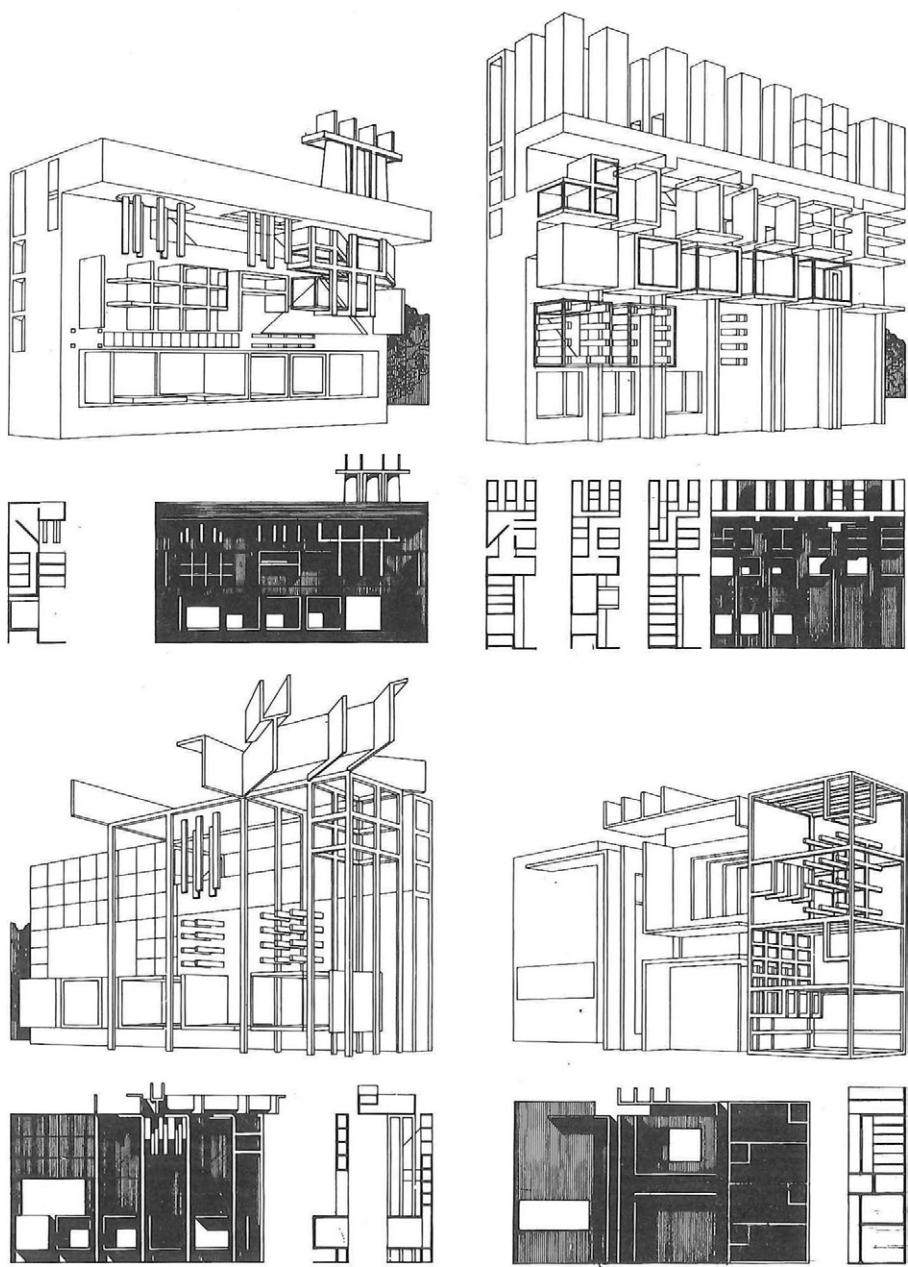


FIG. APP.1.30 From top to bottom, left to right: Lamellar buildings: views, sections and elevations.

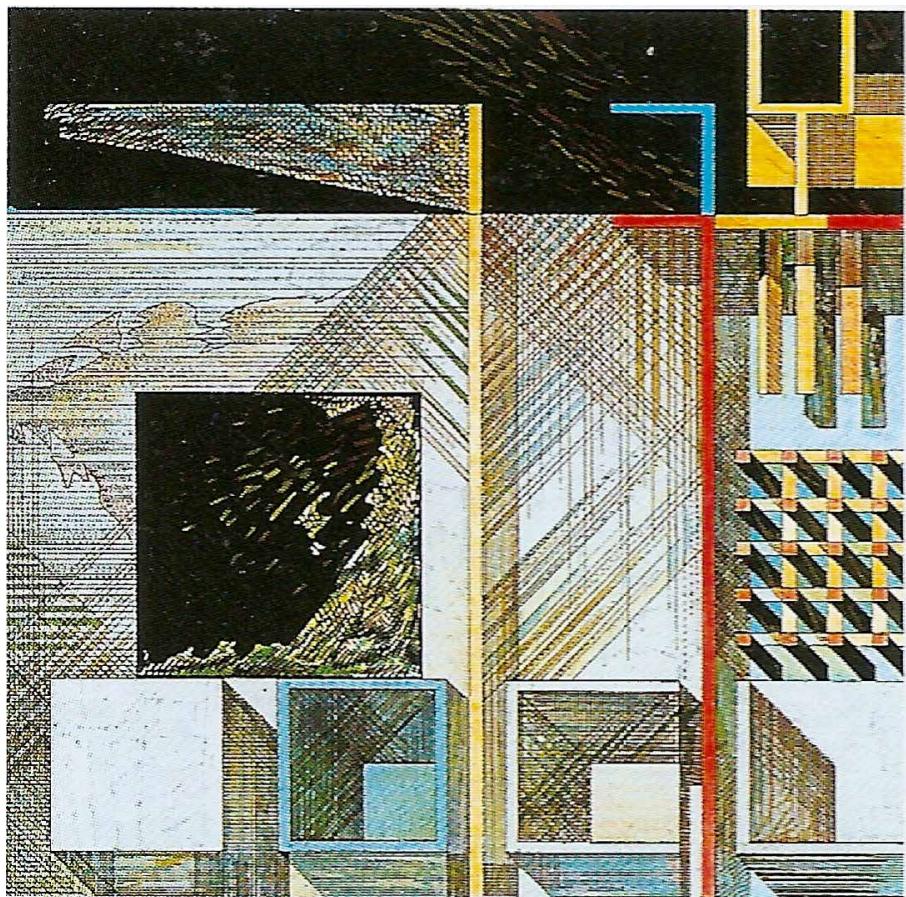


FIG. APP.1.31 Wall skyscraper. Elevation detail.

Programme for the grammatical foundation of architectural language

Franco Purini, 1968

With an introduction by Manfredo Tafuri. Originally published as 'Programma di fondazione grammaticale del linguaggio architettonico'.

In *Palatino. Rivista Romana di cultura*, no. 2, April-June (Rome: Edizione Palatino, 1968): 225-227⁴⁷⁵

The project we present in this issue, the work of a student at the Faculty of Architecture in Rome, goes beyond the normal design praxis. As a 'pure' experiment, we are confronting an attempt to reinvent anew the grammar and the syntax of architecture, restored here to its functional, formal and technological 'zero degree'. As historical references, the 'Future Planits (Houses)' by Malevich, the 'Proun' by El Lisitskij and the abstract compositions by Cor van Easteren and van Doesburg come to mind. Whatever the case, and however one wants to judge Purini's project, highly symptomatic here is the emergence of research that reutilises avant-garde formalistic techniques to approach architecture and question the construction of the architectural project and its role in the configuration of the city. Moreover, it should be said again that the dimension of the abstract [architectural] project, which many might suspect of neo-academicism, redeems its potential ingenuity when read as a formal accusation of the modern 'tradition', which is incapable of courageously recognising its own failures and taking action on this front.

M. T. (Manfredo Tafuri)

The reason for this research is the desire to achieve a direct and immediate relationship between architectural objects and the project. In other words, by rejecting first of all the often-illusory historicity that affects current architectural 'signs' and their compositional procedures, and thus restoring architecture to a primitive act of 'construction', understood as a simple montage that does not set itself in opposition to 'space', 'style' or 'taste', but can do without them, so that the compositional structure is simultaneously the 'architecture', and the visual and spatial appearance and the generative fabric tend to correspond without any additional compositional phases or procedures.

The project is the process through which a series of minimal and elementary constructive actions become 'set', or, more precisely, the process that defines the path these minimal actions need to take in order to be placed on a hypothetical

⁴⁷⁵ Translator's note: the text refers to the 'Project for a lamellar building' (1968).

supporting surface inside a building (see the series of cubes on the ground)⁴⁷⁶. To this end, we have created a form of 'writing', or sequence, or list or series of spatial movements with minimal intervals (for example, the interval of one side of a cube in the upper cubic series), and put forward the hypothesis that the architectural sign consists of a particular succession of classes (volumes, planes and lines) and of the degrees of three-dimensionality that these acquire.

Therefore the architectural composition should be understood as a succession of series of intervals that are structured, spaced out and intersected in such a way that, for example, an interval between one element and the next, whether left empty or filled with an element of the class below or above, has the function of being able to virtually reinterpret the whole series.

This programme was developed on a wall in which [three] parallel rows of circular holes were created to serve as the page or reference for inserting the sequence. The elements in this sequence are volumes, planes and lines (in other words, objects capable of constructing a space) whose first elements appear in the last holes of the first and second horizontal rows.⁴⁷⁷ These are aligned vertically so that the final element of each series corresponds with the initial element of the next series.

Each series tends to correspond to a completed architectural process.

Dimensionally, the 'wall' or lamella represents the flattening of both internal and external space, and presents a proportional adaptation of the habitability [of the space] reduced to its extreme. To verify the programme, the 'wall' as a figurative type was chosen, since it presents the process particularly clearly.

Thus, the design of an 'uninhabitable' architecture was conceived in order to break the convention of the link between habitability and architecture. In this way habitability becomes a secondary outcome of the construction of a physical environment in which other, more complex dimensions are established.

⁴⁷⁶ See figure no. 67.

⁴⁷⁷ See figures nos. 68 and 69.

Hence, this is an attempt to liberate architecture from the mechanical relationship of a continuous declination of one term from another, which today evades the real, complex relationships. For this reason, in addition to seeking to create an 'uninhabitable' architecture, internal and external space have also been clearly separated, thus making them incommunicable, so that now, the continuity between outside and inside has to be sought instead on the basis of the organisational logic of the building.

The displacement of cubic elements visible in the longitudinal section shows the 'flattening' of perspectival space.

The inverted relationship road/block, presented vertically, and the interior like the exterior, fenced and open to the sun, wind and rain, create a building whose recognisability as an urban organism relies on the identification of its elements. Although no functional purpose was intended, the building probably suggests some appropriate uses, all directly related to the way it can be walked through.

The technological means for constructing the building are those of a 'poor' technology of cement and steel in their most current versions. This is because removing the technological dimension from the logic of continuous development based on the need for ever-increasing profits, and instead returning it to a relationship of real need and gradual development that is controlled and determined by those who actually build, would act as a formidable means for monitoring over time the internal values of a building. In other words, even if the construction of the building presented no unusual difficulties the construction time would still be long enough to establish an internal dimension for the project itself, and the opportunity to check the contents of the work and the context in which it was being made.

In this sense, the difficulties would be of architectural nature, continually fine-tuned in relation to the logic of the building rather than being absorbed or negated by technological problems. As a consequence, the scope left for 'drawing' is minimal, if not non-existent.

Project for a lamellar building

Originally published as 'Progetto di un edificio lamellare', in Franco Purini, *Luogo e Progetto* (Rome: Edizioni Magma, 1976), 70.

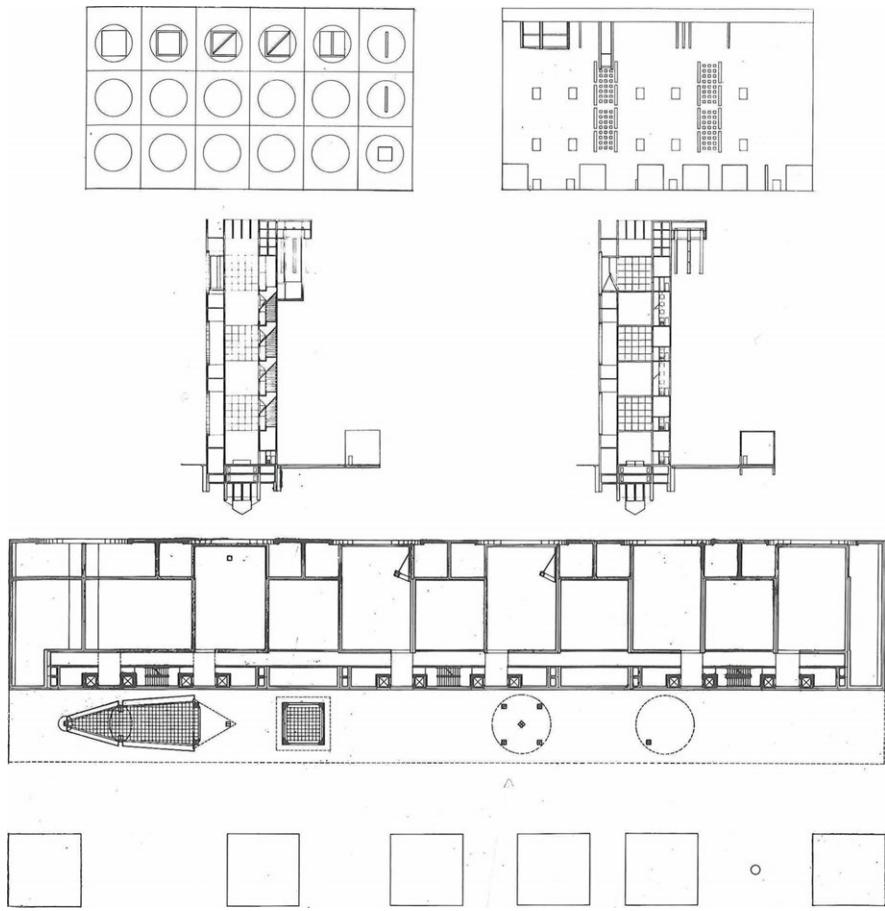


FIG. APP.1.32 From top to bottom, left to right: The perforated wall. Façade on the distribution and service side; Cross sections; Plan at the level of the hanging structures.

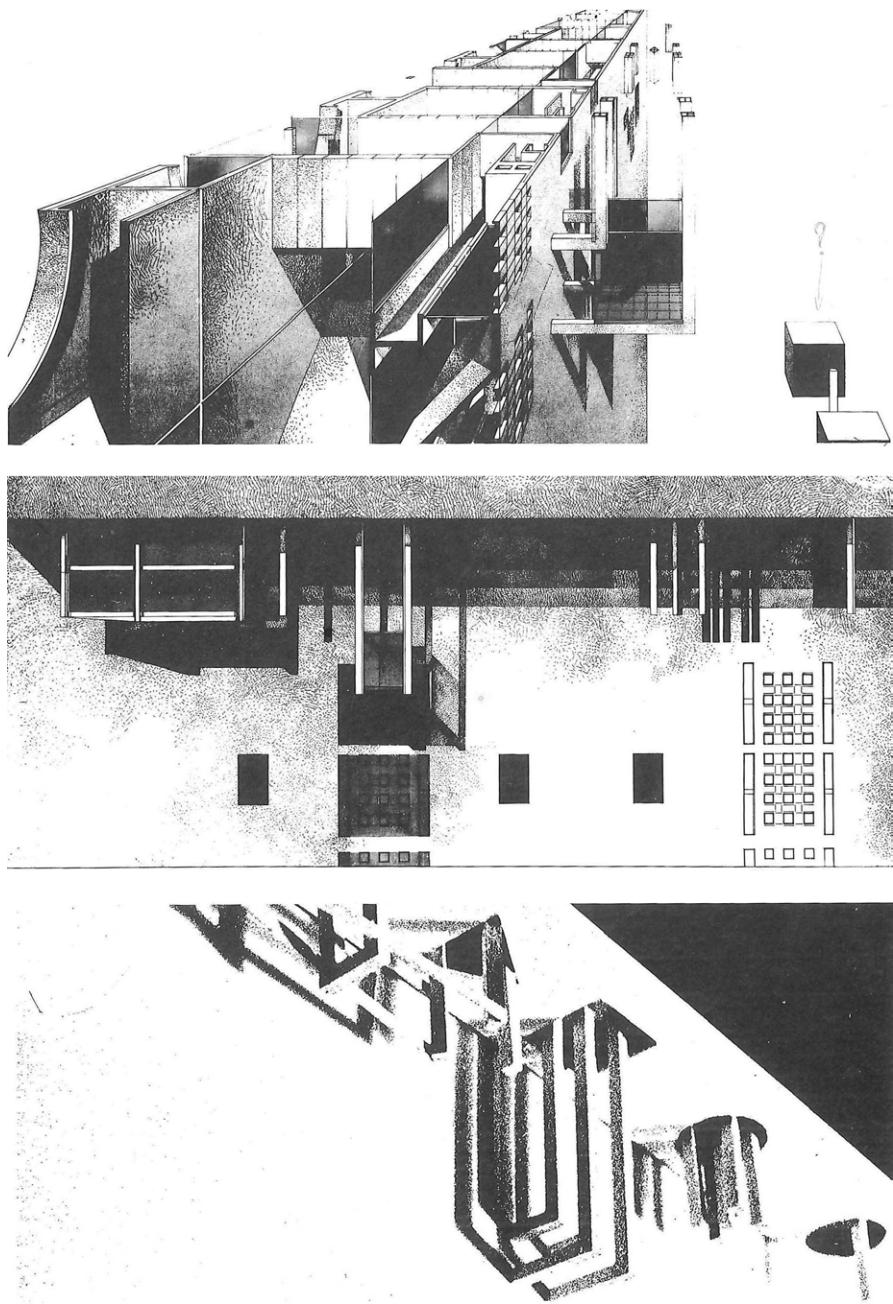


FIG. APP.1.33 From top to bottom: Perspectival section: the relationship between the two linear structures (the double and perforated wall) and the internal volumes; Detail of the hanging structures on the moulding; Photo of the model.

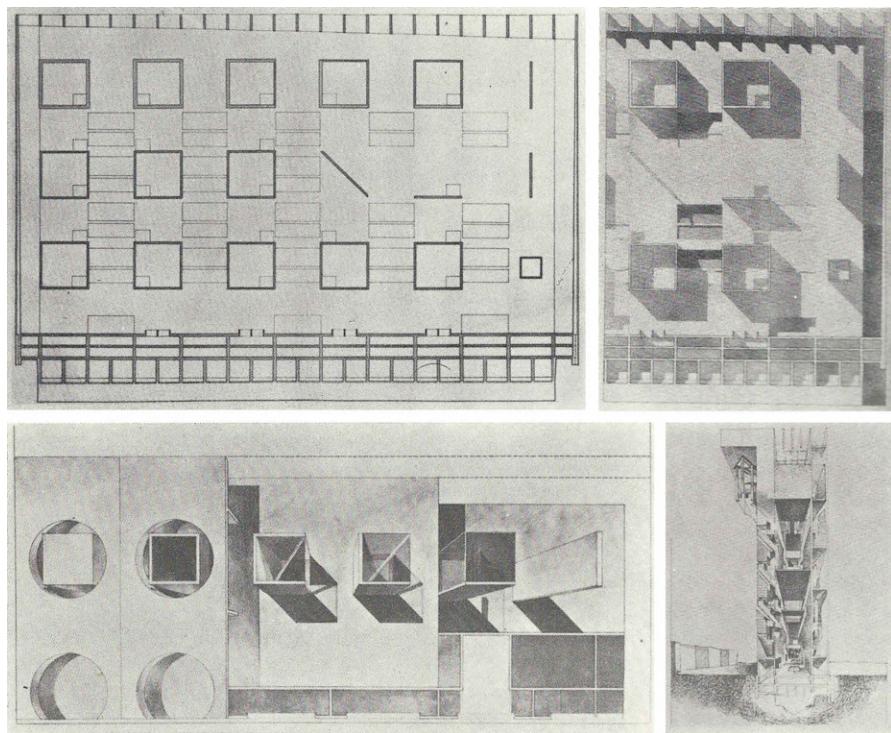


FIG. APP.1.34 From top to bottom, left to right: Longitudinal section; Longitudinal section (detail); Series of cubes (detail); Perspective cross section.

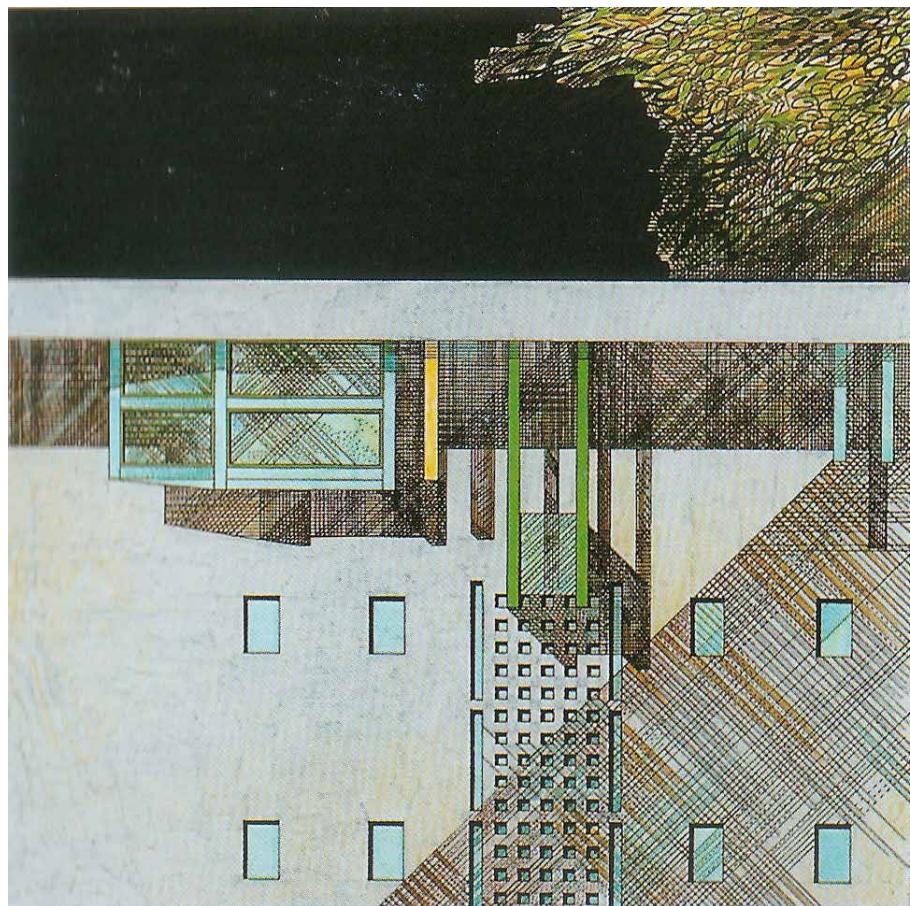


FIG. APP.1.35 Lamellar building: elevation detail.

Bridge at San Giovanni dei Fiorentini in Rome

Franco Purini, 1968

Originally published as 'Ponte a San Giovanni dei Fiorentini'

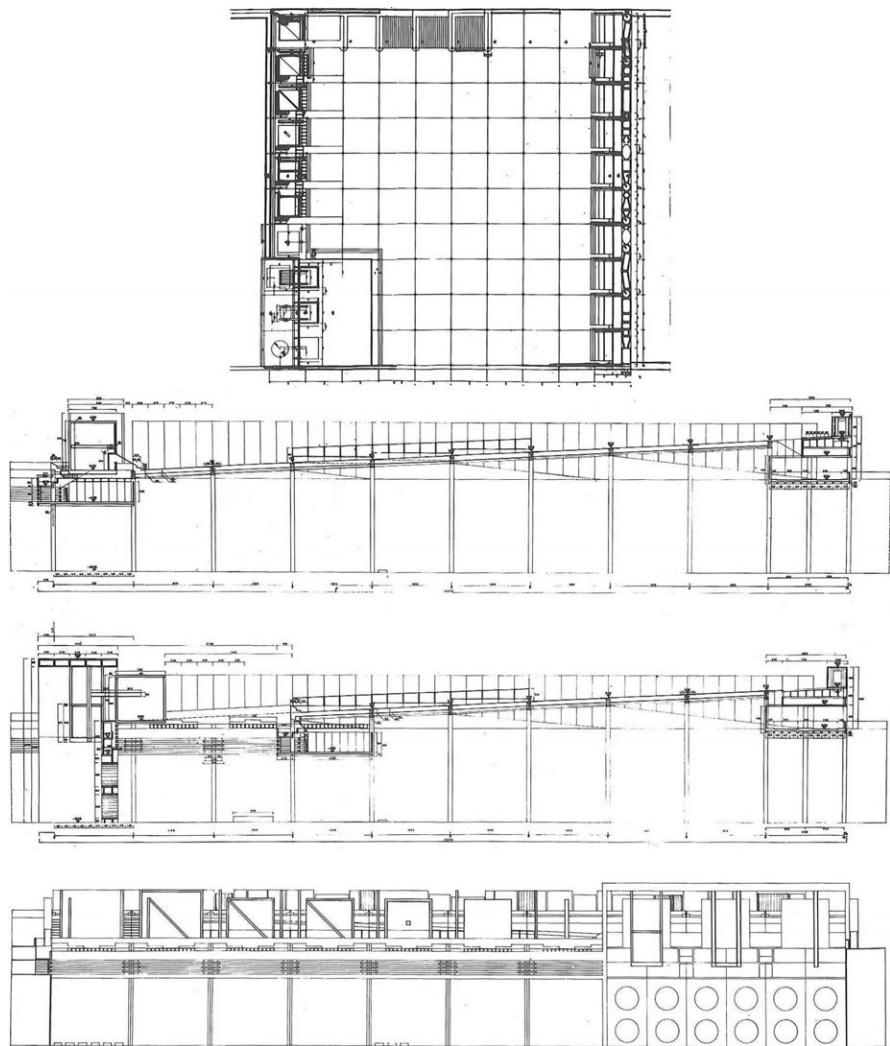


FIG. APP.1.36 From top to bottom: Plan of the square bridge on the River Tiber; Section of the inclined square; Downstream façade: the pedestrian tunnel composed of the combination between the spans and the great portal with the dam.

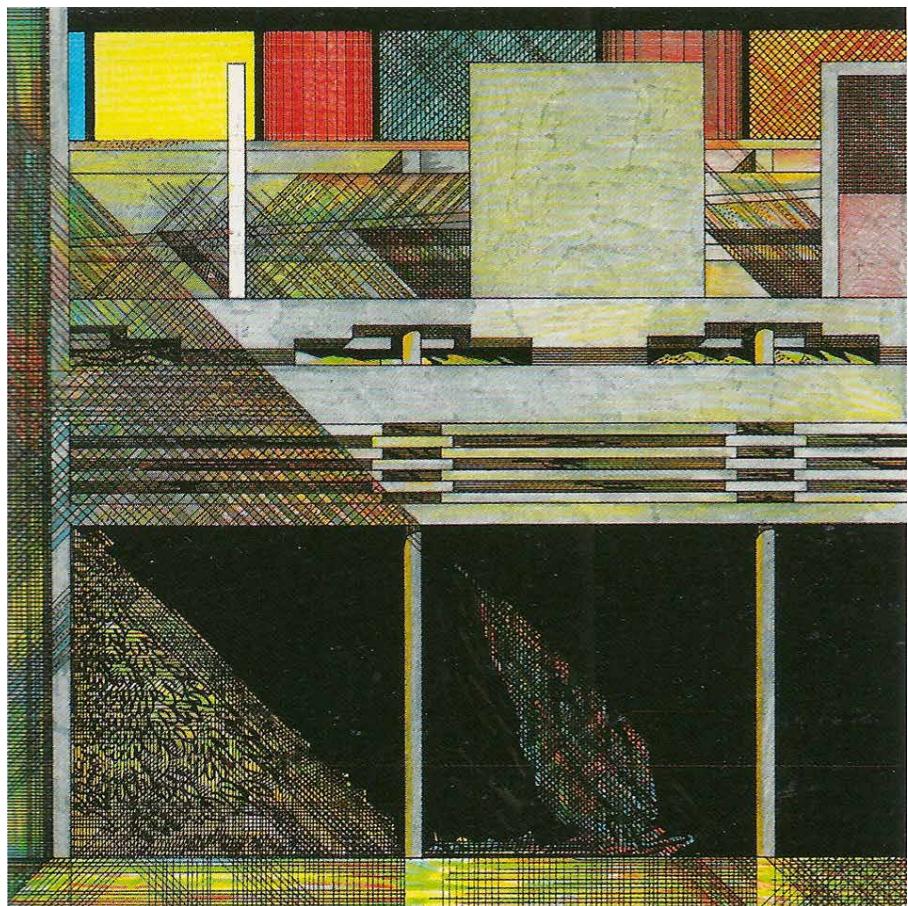


FIG. APP.1.37 Elevation detail of the bridge.

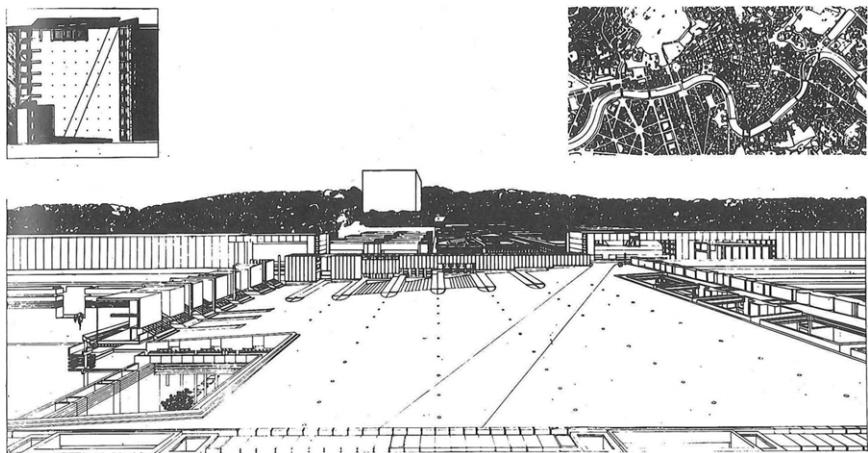


FIG. APP.1.38 Perspective of the left riverbank.

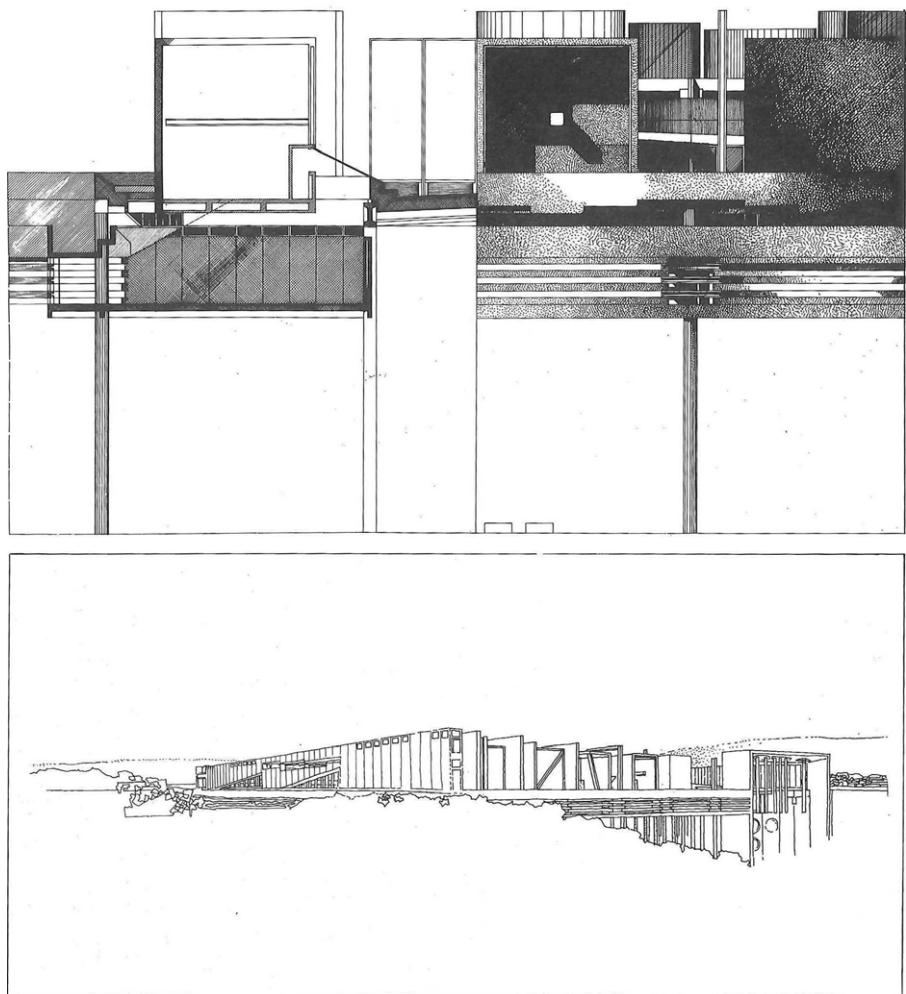


FIG. APP.1.39 From top to bottom: Details and view of the downstream façade.

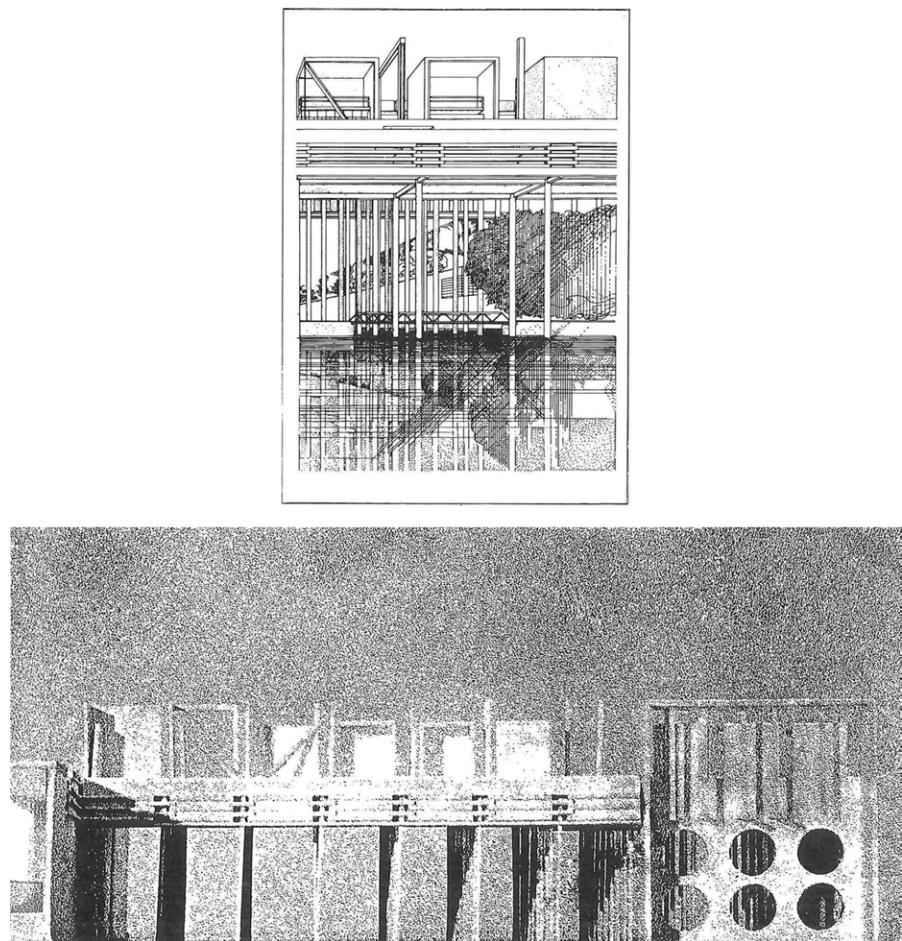


FIG. APP.1.40 The 'hypostyle hall' at water level; Model.

Classification, by sections, of spatial situations

Franco Purini, 1968

Original title of the drawing: *Classificazione, per sezioni, di situazioni spaziali*.



FIG. APP.1.41 Classification, by sections, of spatial situations, 52x58 cm (1968). Photograph of the original drawing. (Autor's picture).

Classification, by sections, of spatial situations

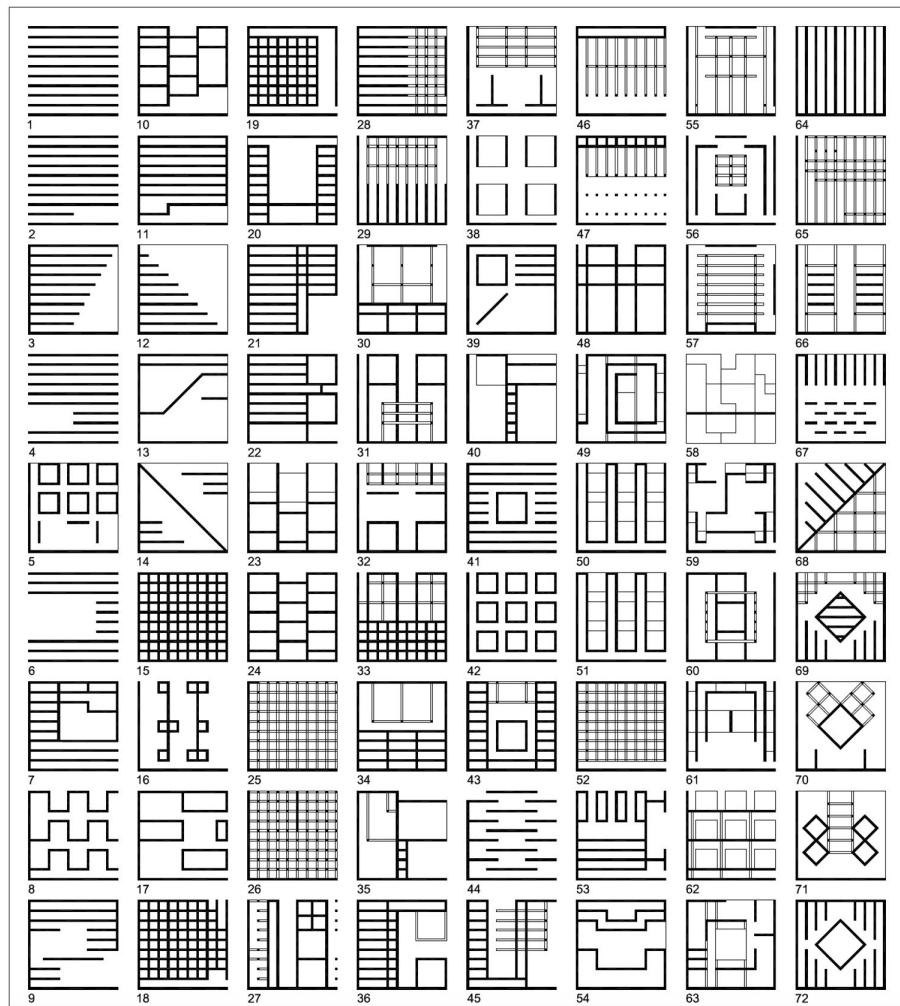


FIG. APP.1.42 CAD drawing of Franco Purini's original work. (Author's image)

Classification, by sections, of spatial situations

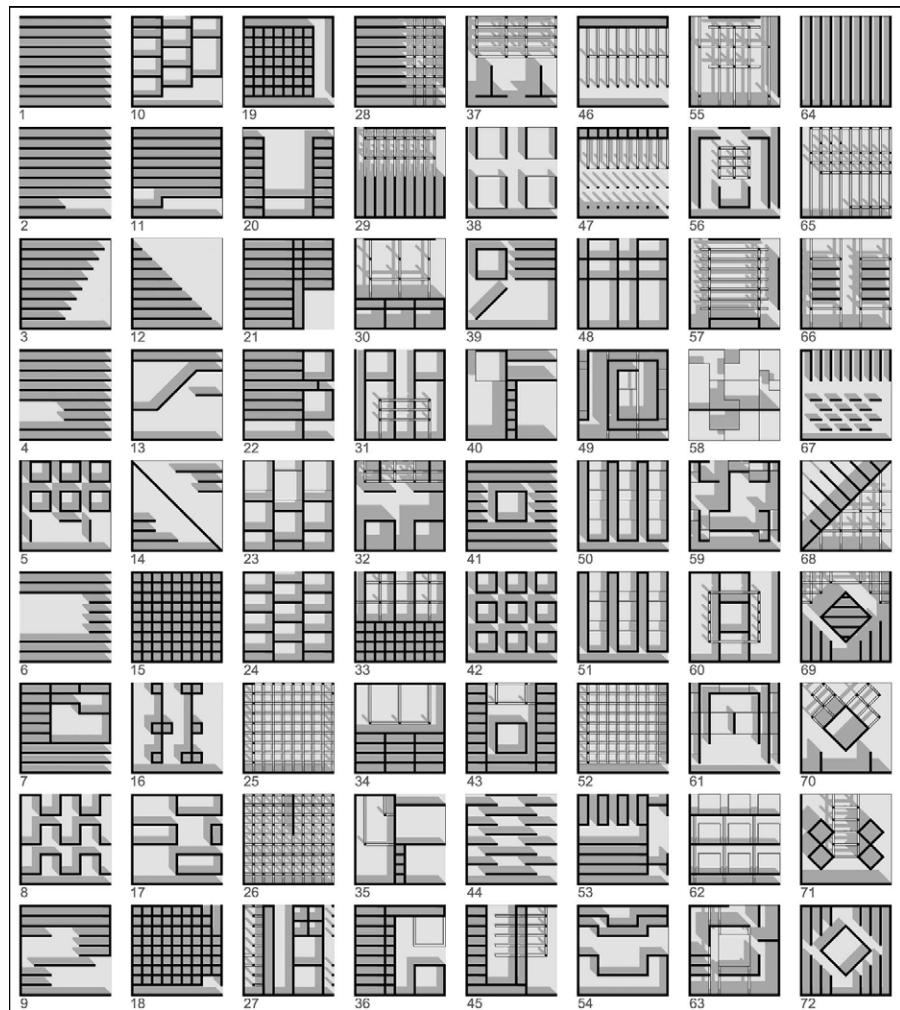


FIG. APP.1.43 Interpretative analysis of the three-dimensionality of the 72 sections of spatial situations.
(Author's image)

Classification, by sections, of spatial situations

Classes of spatial situations

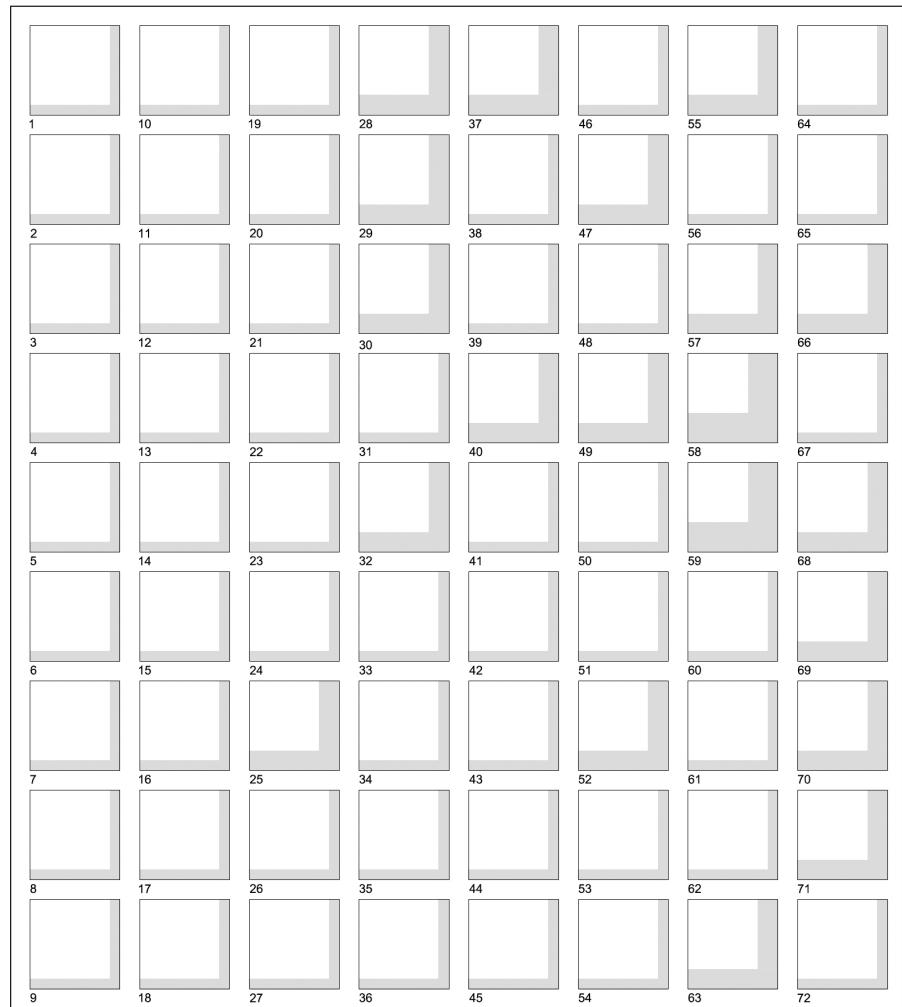


FIG. APP.1.44 Analysis of the three-dimensional complexity of the sections of spatial situation. The spatial situation is investigated through the volumetric complexity implied by the sections. The volumetric complexity is represented by indicating the minimum amount of extrusion required to describe the line composition of the section. (Author's image.)

Classification, by sections, of spatial situations

Classes of spatial situations

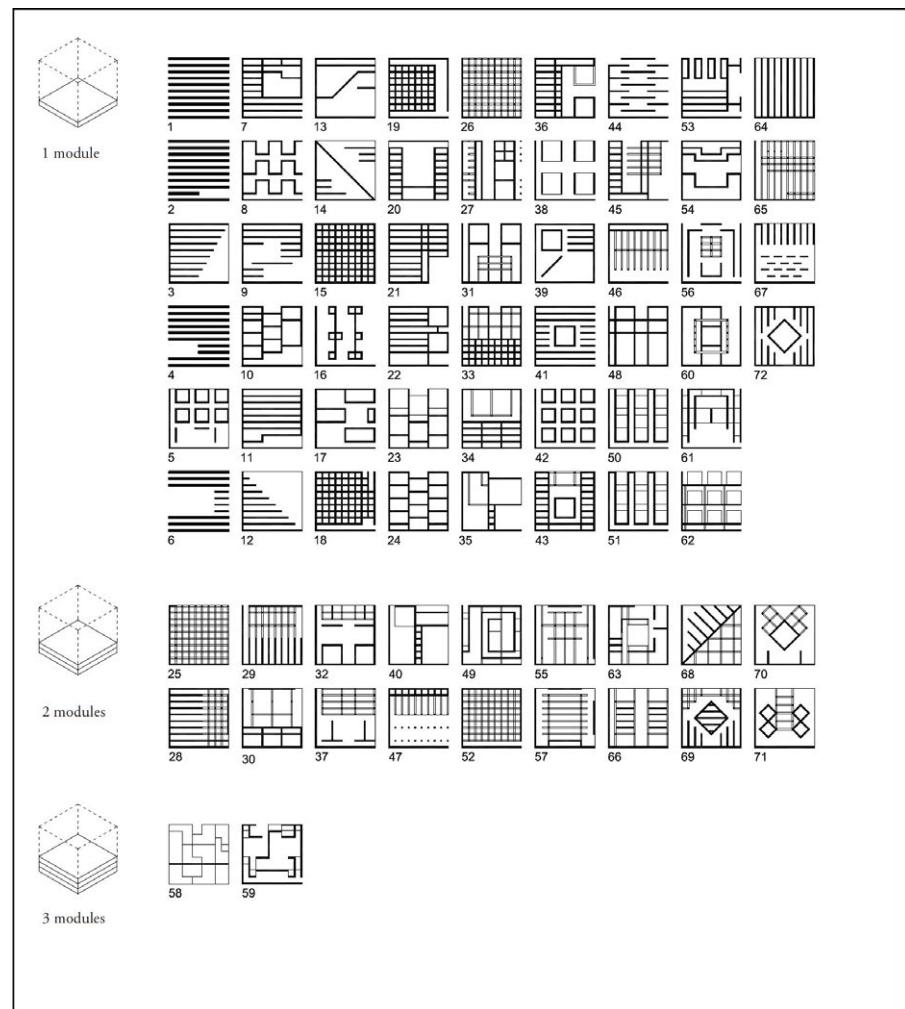


FIG. APP.1.45 Classes of homogeneous three-dimensional complexity. (Author's image.)

Classification, by sections, of spatial situations

Classes of spatial situations

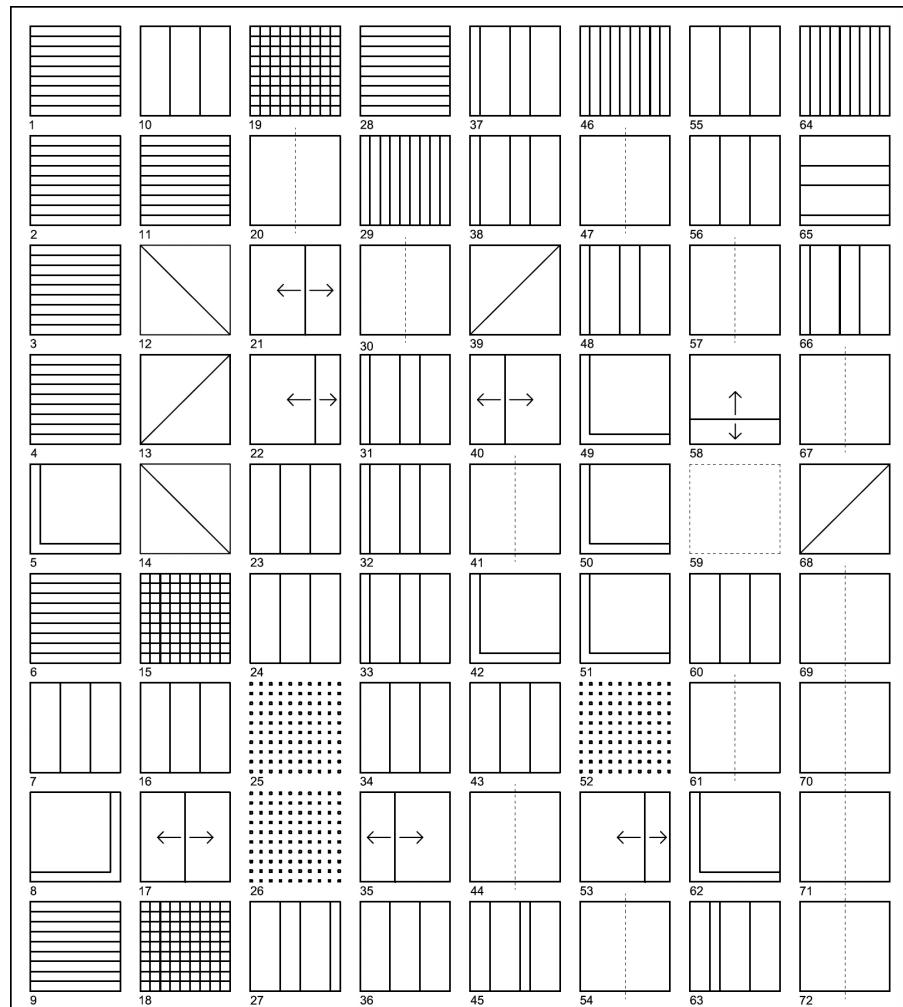


FIG. APP.1.46 Identification of homogeneous compositional structures. The first approach is to identify themes and analogies at a direct and perceptual level. From this analysis it is possible to identify "similarities" among neighbouring sections and throughout the panel. The grouping in homogeneous classes also serves to identify more precise compositional techniques. (Author's image.)

Classification, by sections, of spatial situations

Classes of spatial situations

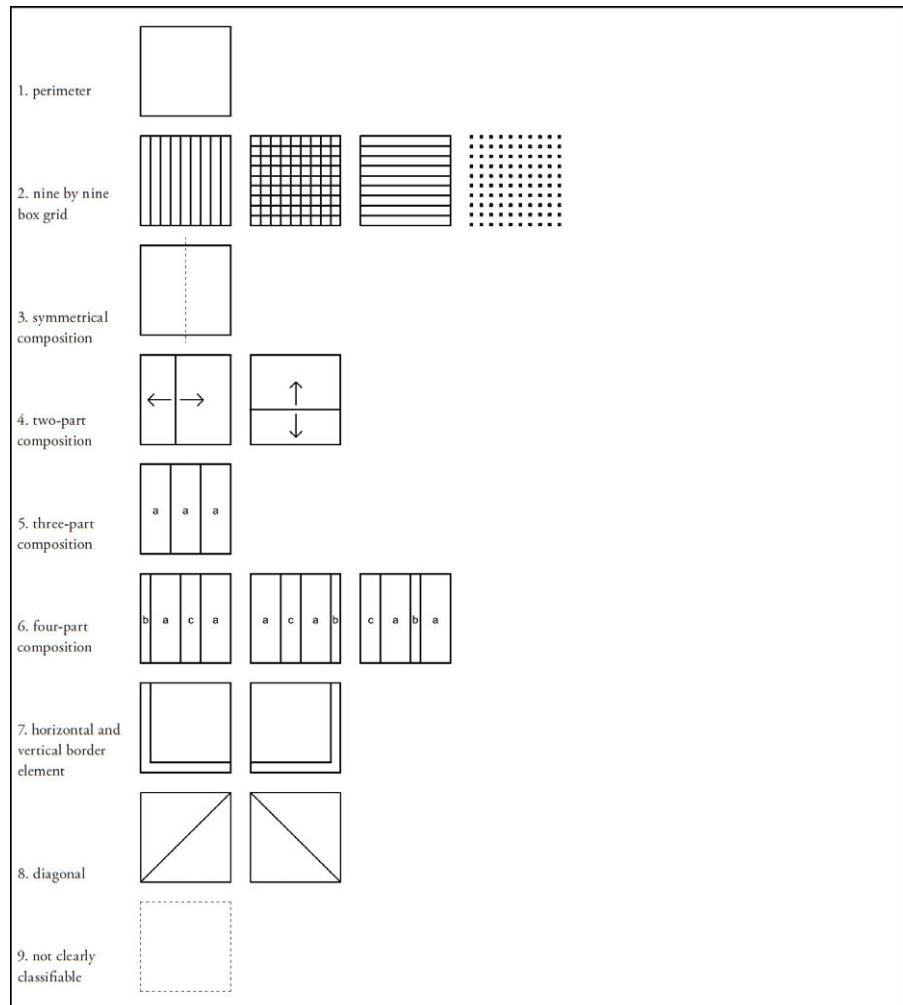


FIG. APP.1.47 Classes of homogeneous compositional structures. Main compositional themes: 1. The perimeter; 2. The 9x9 box grid, the sequence of vertical or horizontal lines, or the grid points; 3. Symmetrical composition; 4. Two-part composition; 5. Three-part composition (equal); 6. Four-part composition (parts are different); 7. Horizontal and vertical border element; 8. Diagonal; 9. Other configurations that cannot be classified. (Author's image.)

Classification, by sections, of spatial situations

Classes of spatial situations

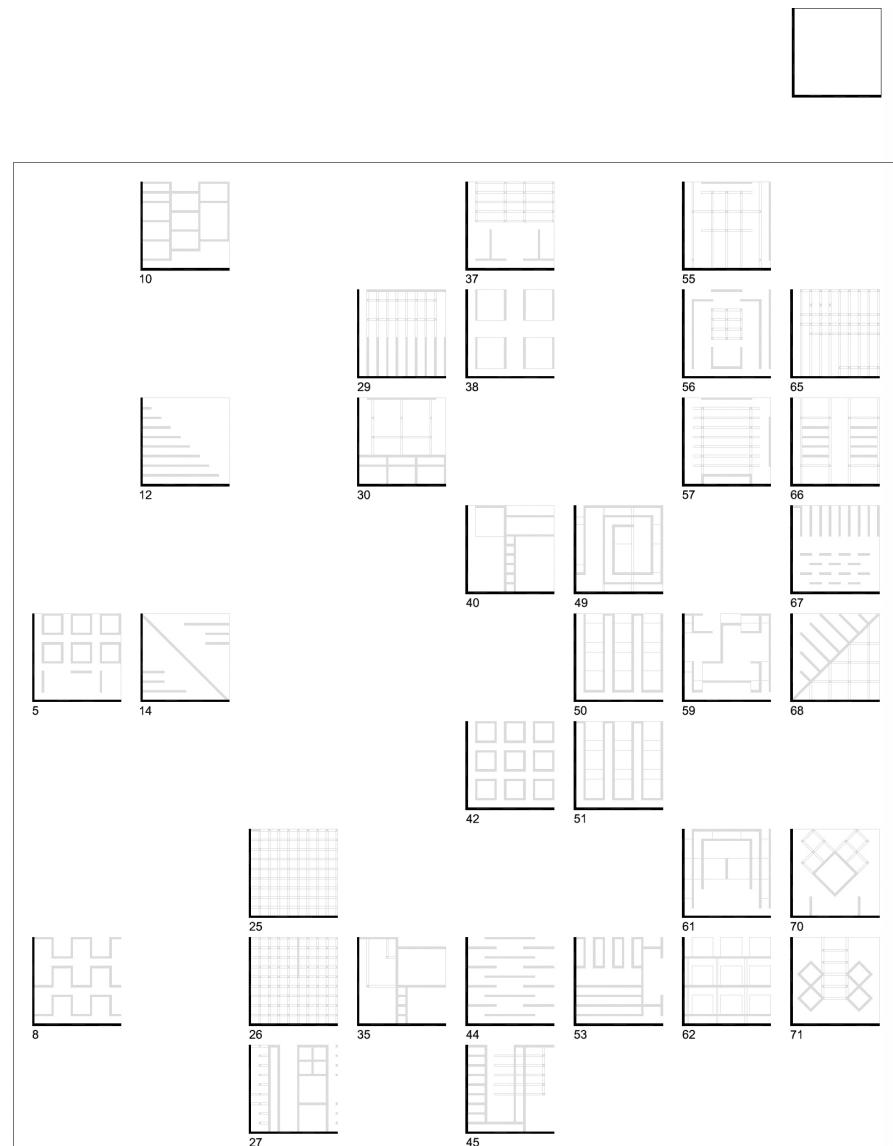


FIG. APP.1.48 Class of homogeneous compositional structures: the bottom and left border element as generator of the composition. (Author's image.)

Classification, by sections, of spatial situations

Classes of spatial situations

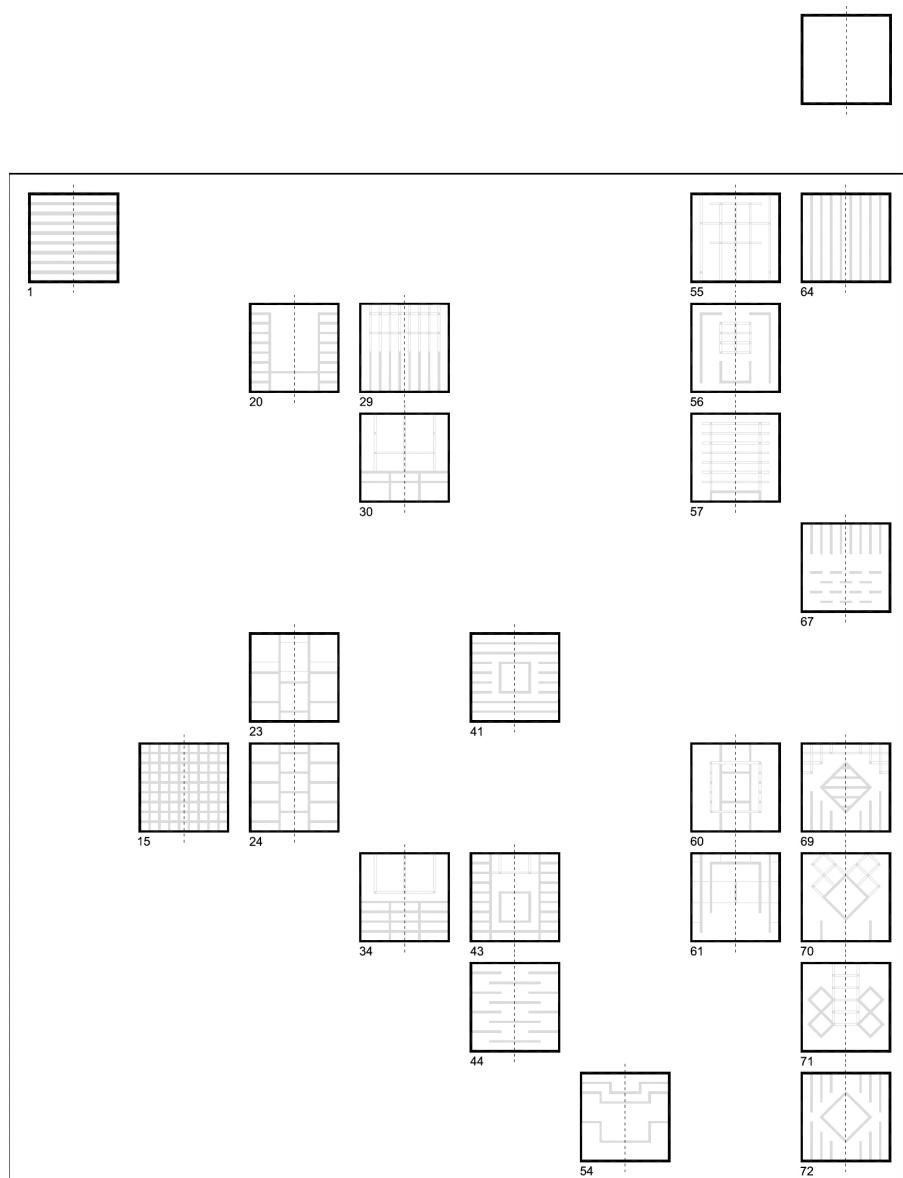


FIG. APP.1.49 Class of homogeneous compositional structures: symmetrical composition. (Author's image.)

Classification, by sections, of spatial situations

Classes of spatial situations

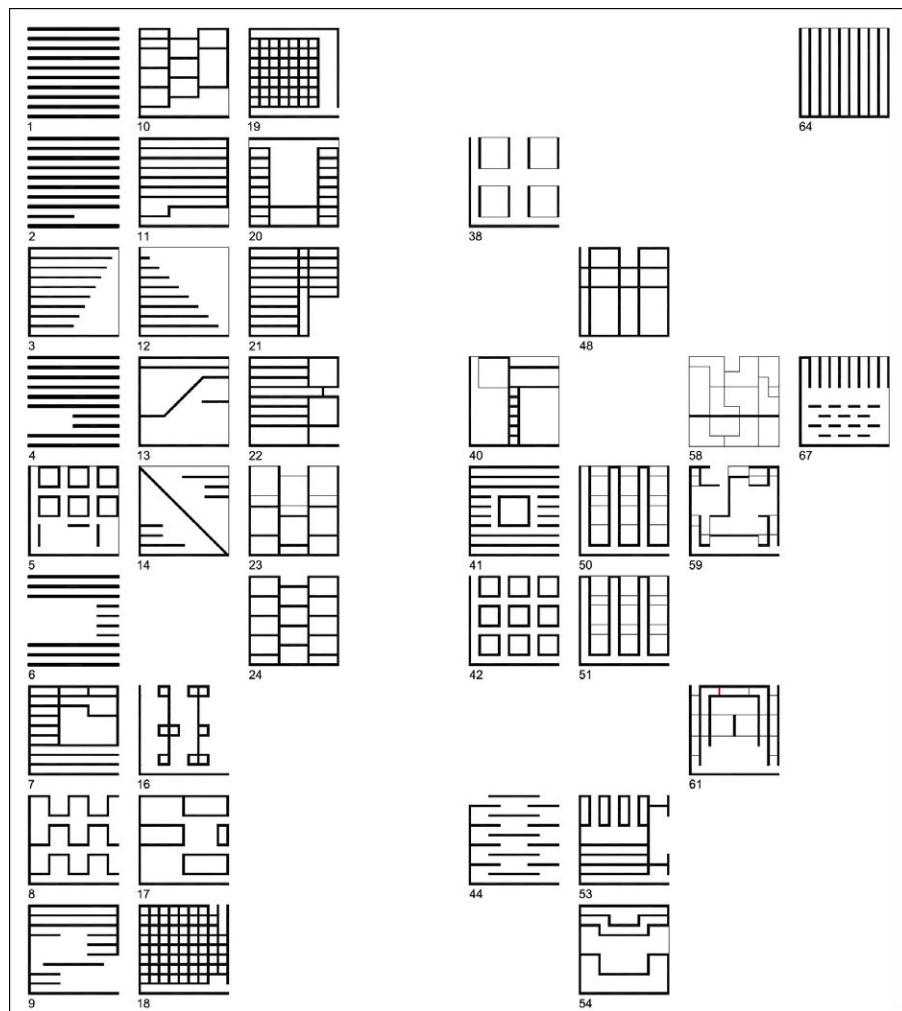


FIG. APP.1.50 Classification of elements in the plan view: 1. Only linear elements. (Author's image.)

Classification, by sections, of spatial situations

Classes of spatial situations

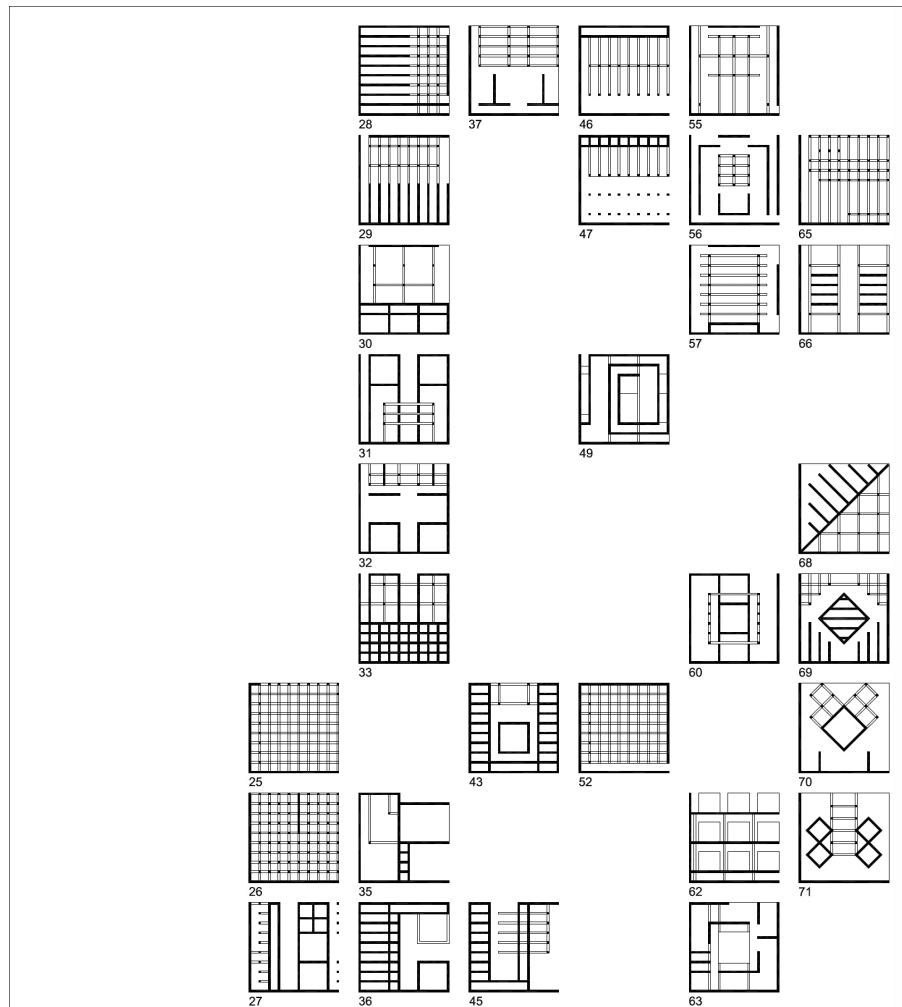


FIG. APP.1.51 Classification of elements in the plan view: 2. Linear elements and points. (Author's image.)

Classification, by sections, of spatial situations

Classes of spatial situations

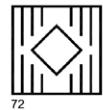
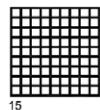


FIG. APP.1.52 Classification of elements in the plan view: 3. Linear elements within a boundary line.
(Author's image.)

Classification, by sections, of spatial situations

Classes of spatial situations

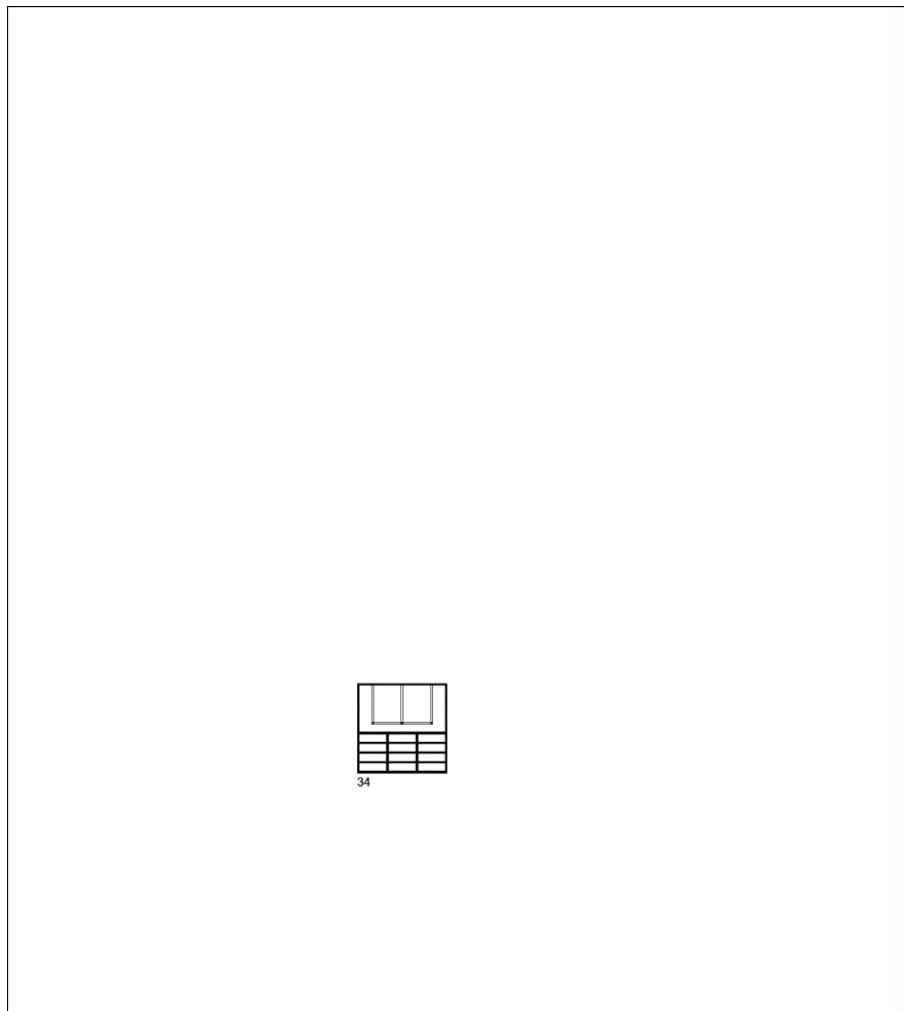


FIG. APP.1.53 Classification of elements in the plan view: 4. Linear elements and points within a boundary line. (Author's image.)

Classification, by sections, of spatial situations

Classes of spatial situations

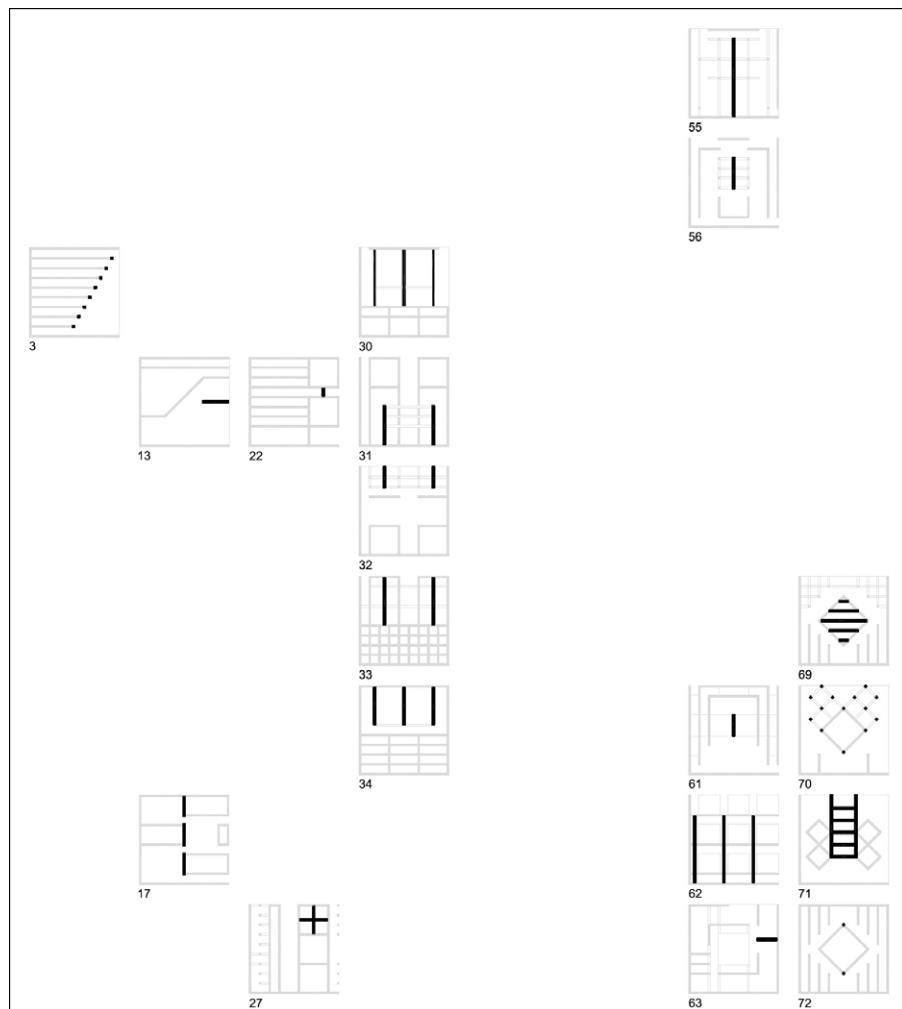


FIG. APP.1.54 Classification of sections where elements (lines and points) of the composition are displaced from the 9x9 box grid. (Author's image.)

Classification, by sections, of spatial situations

Classes of spatial situations

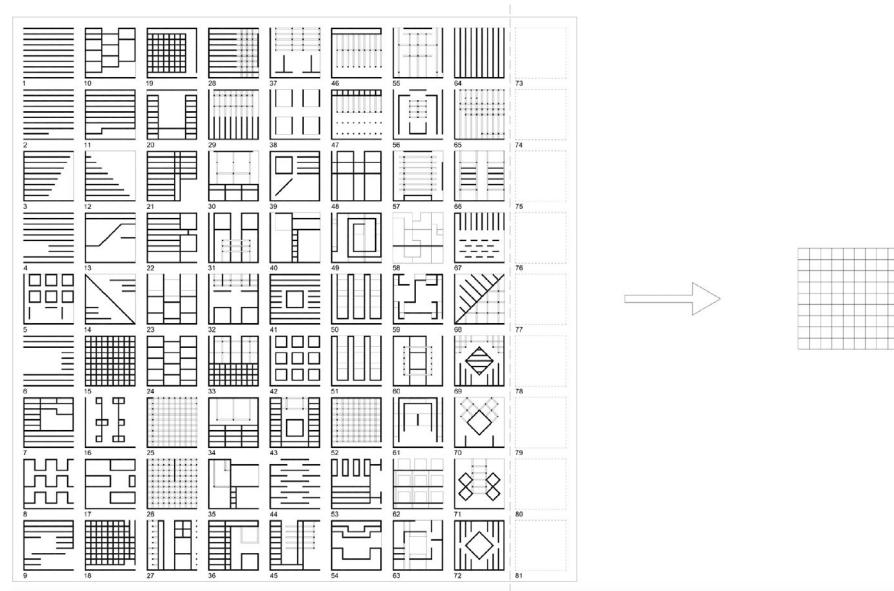


FIG. APP.1.55 CUT-UP (Author's image.)

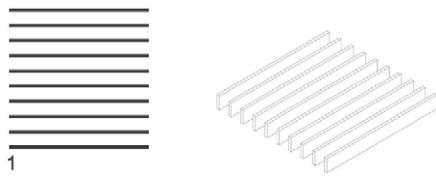
Description of the seventy-two sections of spatial situations

The description of the seventy-two sections of the classification attempts to qualify the spatial situation embedded in the compositional signs. The word 'situation' is of fundamental importance in understanding the meaning of Purini's most famous drawing. In fact, if the situations in the title can also be understood as a complement of the word 'spatial', therefore as types of spaces, then the word 'situation' should also be interpreted more literally as the circumstances in which Purini found himself when he conceived space, and as a written description of that moment, condition and action. The descriptive act is understood as a method for accessing the genesis of the abstract nature of the drawing in relation to the ideas formulated by Purini's research. Therefore, the 'spatial situation' should be understood beyond its conventional sense, and associated with the definition of 'architectural sign' and 'composition' as theorised by Purini. Each section identifies a dense compositional device. They are 'pre-formed' compositions, in Purini's words, 'rough compositional "material"', capable of orienting the formal choice of an architectural project or, more generally, of an architectural problem. The sections are interpreted both horizontally and vertically, without a predefined scale and beyond any analogy with other building types.

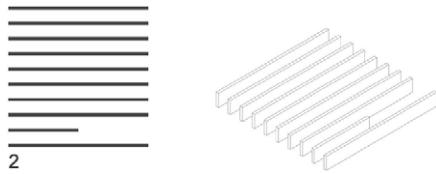
The description investigates the positions and the interrelations of the architectural elements contained in a 9 x 9 box grid and within the limits of the square. However, this *modus operandi* has also been informed by Purini's concise indications written on the drawing and, most importantly, by the series of questions raised by the arguments elaborated in this present research. The questions are listed here according to a logical progression assimilable with the reasoning developed in the classification:

- What are the spatial situations that can be identified in the seventy-two sections?
- In which way do they appear in the form of a section?
- In which way are the spatial situations represented within the compositional structure of the section?
- In which way is the construction of a spatial situation represented within the composition of the section?
- What, if any, are the clearly identifiable references for the spatial situations in the sections? For instance, is it possible to discern a correlation between instances of historical architecture (or architectural fragments) denoting a 'spatial situation' and the abstraction of the sections?
- Hence, is the whole of architectural space reduced to a cube and represented on a square the most radical reduction of architectural space? And if so, what happens during the process of abstraction?

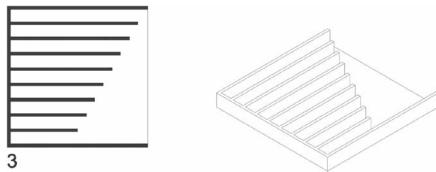
- Does the compositional structure qualify the spatial situation? If so, in which way does this also serve as a record of Purini's desire to give directionality to space?
- Is it possible to trace the generative logic in the development of a section and among the sections?
- Does this logic follow a linear progression as might be assumed from the numbering of the sections, or is the linearity only the record of the temporal sequence of the author's internal logic, thus postponing the descriptive moment? In this sense, are the sections intermediate hypothetical levels in the progression of architectural reasoning?
- Can the drawing's specificity be identified as a hypothetical stage of a reasoned architecture? Therefore, in this sense, does the drawing establish 'a hypothesis of architecture'?
- If the sections are numbered but unnamed, can the descriptive act reveal the spatial situation? What kind of relationship is established between the perceptual and the conceptual level of the classification?
- In which way do the spatial situations establish a critique of the concept of space? And is this critique systematic?
- Does the classification re-propose Piranesi's systematic critique of the concept of space, centre, type and, ultimately, of order and language?
- In which way does the grammatical exercise of the classification 'destroy' the architectural language rigorously elaborated within the three transformational series? Furthermore, where and in which way in the classification does the relation between expression and composition determine the 'destruction' of the language?
- To quote Tafuri, in which way is the 'destruction of a language as *grammaire raisonnée*' achieved? At the same time, does the destructive operation that emerges also establish a new language?
- Is it possible to highlight the characteristics of the compositional 'contradictions' in a manner comparable to Tafuri's analysis of Piranesi's work?
- In which ways are the initial motivations underpinning 'Una ipotesi di architettura' still discernible within the Classification? Moreover, what are their implications within the context of the present research? How can they be critically evaluated?
- What are the characteristics of the drawing that emerge from the research?



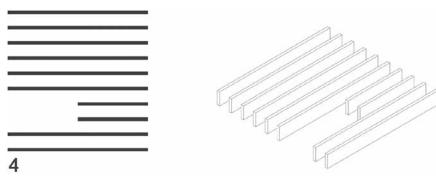
Section 1 presents ten identical parallel linear elements. The spatial complexity is found in the simple iteration of the elements, with equal intervals determining a series of spaces, all identical and identically oriented. In this section, there is no relationship between the architectural elements and the cube, which is only implied here. The spatial construction is achieved by simple iteration.



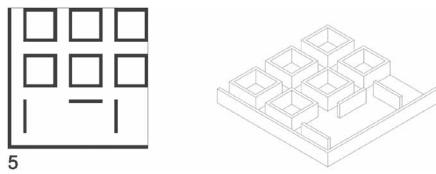
Section 2 presents the sudden interruption of one element determining an area within the homogeneity of space by the introduction of a double depth (double span, double height). This operation enables an enhanced reading of the spatial iteration of identical elements by qualifying it with a conceptual component: it is the conceptual not the perceptual dimension that enables the completion of the missing part.



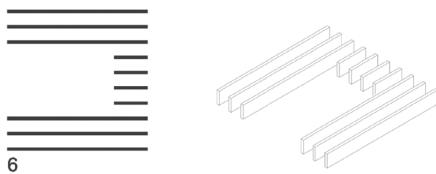
Section 3 is composed of two sets of elements: one identifies the border of the cube, the other the iteration of the linear elements, which in this case are being cut through in an oblique direction. The spatial complexity is achieved through the relationship between the cube boundaries and the iteration of a series, in this case enhanced by the shortening of its elements. This in turn identifies another spatial region open to the outside through the elimination of the right border, in addition to the one established by the regularity of the iteration.



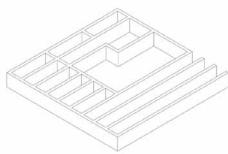
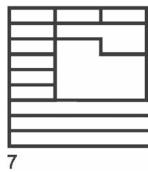
Section 4 can be compared to the analogous Section 2. However, here, the composition introduces another category: the 'double'. The complexity of the spatial situation is created by the relationship between the iteration of the linear element and the class established by the two shorter elements.



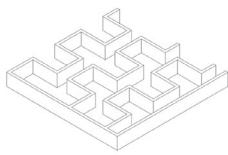
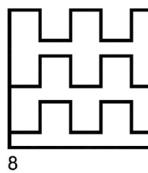
Section 5 presents a variety of spatial situations determined by the scalar relationship between the border element of the square and the class established by the series of linear constructions inside it. In this relationship, the category of the interior space is rendered ambiguous since the interior of the square would correspond to the exterior of the series of closed linear constructions in the mid-upper region of the compositional field. Moreover, the three upper elements of the interior set coincide on one side with the upper element of the border, thus establishing a spatial region where their scalar relationship can be qualified architecturally (see, for instance, the relationship between the elements of the transformational series and the case). Lastly, the constituents of the inner set can also be further interpreted by their disarticulation and rarefaction at the bottom of the compositional field.



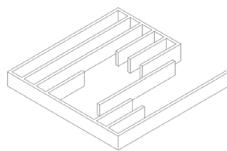
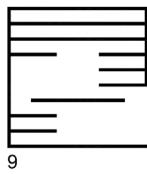
Section 6 reduces the spatial complexity described in Section 1 to support the definition of a large void in the mid-left region of the square. Here, therefore, the spatial situation identified by the iteration of identical linear elements is transformed into a method of framing an empty space.



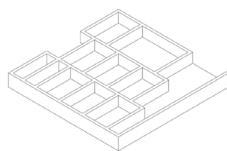
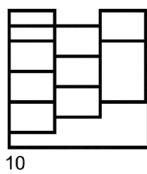
Section 7 presents a series of embedded transformations that renders the description more complex than the previous ones. The main theme of the composition is generated by the relationship between the linear boundary of the square and the iteration of a horizontal linear element, as in Section 3. Here, however, the spatial complexity is established along the upper and right borders and a large square structure situated in the upper right corner. The latter, in fact, introduces a destabilising tension that renders the composition unsteady and therefore determines a prevalent vertical reading of the section. The upper corner appears reinforced, as if carrying the weight of the square, while the bottom-left corner is freed and open to the outside. This theme will appear in its radicalised version in other sections of the Classification, such as Sections 9, 10, 17, 18, 36 and 54.



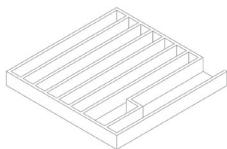
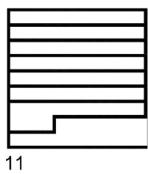
Section 8 is established by the relationship between the bottom and left linear border and three identical structures anchored on the left border element. The three linear structures present a regular and periodic transformation that is suddenly interrupted by the edge of the composition. The upper element is inverted in line with the horizontal and can be evaluated as part of the external border. The spatial complexity is to be found in the compression-dilatation and alternation of spaces generated between the horizontal elements.



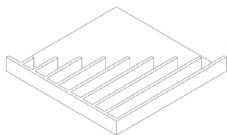
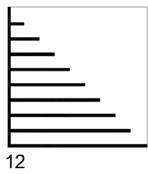
Section 9 is defined by the relationship between the border and the iteration of horizontal elements. The spatial complexity is to be found within the progressive thinning out of the horizontal elements in the lower region of the square. This spatial situation provides an analogy with Heidegger's concept of space, which implies the gesture of 'clearing', in order to make the occupation of space possible. In this sense, 'space' would become something 'that room has been made for', which occurs here in only two regions of the square: at the centre and at the periphery. One of the elements of the composition is detached from the border, thus introducing an element of instability in the compositional fields, while at the same time playing a determinant role in distributing the compositional tensions between the centre and the bottom-left corner. The spatial situation identified in this section has been the subject of a drawing titled 'Diradare' [Thinning Out] in the series 'Come si agisce. Dentro l'architettura' [How to Act: Inside Architecture] (1993).



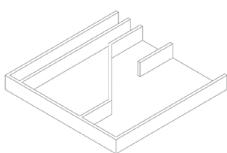
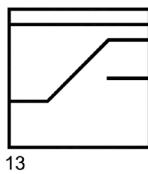
Section 10: the composition is determined by the relationship between the border and an irregular configuration of horizontal and vertical linear elements. The spatial situation is the result of a series of translations of the horizontal linear elements. Furthermore, this spatial situation is represented in two regions of the composition: at the bottom-left corner (see the progressive widening of spaces) and at the centre-top area. The instability of the composition produced by clearing the bottom space is re-equilibrated by the base, or, when seeing the section vertically, by the wall element in the background of the composition.



Section 11: the composition is established by the relationship between the border and the vertical iteration of horizontal linear elements. The spatial situation is the result of the connection of two linear elements in the lower region of the compositional field, generating two analogous spaces, one enclosed; the other, at the bottom, open to the exterior. Here, it is this latter space that more specifically establishes the spatial situation, as it also incorporates the representation of the composition's enclosed space.

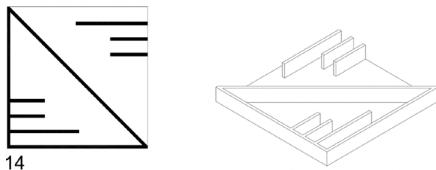


Section 12: the composition is established by the linear border element and by the sequence of parallel lines. Similar to neighbouring Section 3, a progressive shortening of all the linear elements occurs, revealing at the top and right border the presence of a background structure. Here, however, the shortening follows the diagonal of the square, and the resulting two spatial regions cover an equal surface. Therefore, in relation to Section 3, a clear dialectic is established here between the spatial situation generated by the linear elements and the opposite resulting spatial situation, freed and open to the exterior.



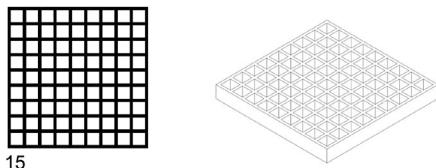
Section 13: the diagonal is no longer implicit but has become a real element. This operation – consequent to the transformations elaborated in Section 12 – could be regarded as a first derogation of the compositional (or, grammatical) rules established by Purini for the language of architectural elements. More specifically,

Section 13 presents a spatial situation that could be regarded as intermediate between those described in Sections 9 and 11, namely, the spatial situation defined by the progressive thinning out of the parallel horizontal elements, and the spatial situation as the dialectic between the two analogous spaces of the composition, which in the present section is identified precisely through the diagonal connection of two linear elements.



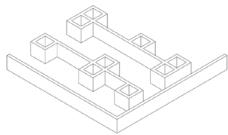
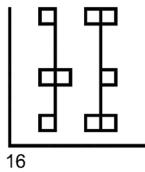
14

Section 14 demonstrates that earlier reflections concerning the diagonal are equally applicable here. In addition, the consideration formulated for Section 12 also finds resonance in this case. The diagonal no longer connects parts of linear elements inside the composition but stretches from two opposing corners of the square. The horizontal elements inside the composition are evidence of the compositional transformations that occurred in the square and, at the same time, they characterise the two triangular regions determined by the crossing of the diagonal. As a result, the composition presents a dialectic between two analogous spaces: the first contained by the diagonal, the base, and the left border element (where horizontal linear elements are anchored); the second is open to the exterior, where the elements are 'held' in place by the base/wall structure projected in the background.

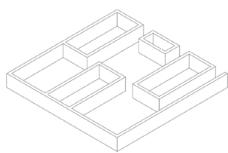
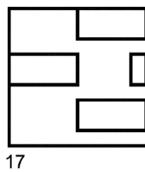


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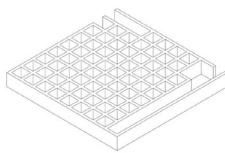
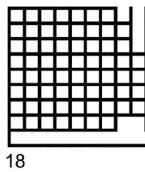
Section 15: the composition is established by the relationship between a regular pattern of horizontal and vertical linear elements. Here, the border of the composition, understood as an autonomous element, is rendered ambiguous since it could also be interpreted as part of the horizontal and vertical linear elements, stretching across the compositional field. More generally, this section introduces the spatial situation of the grid, which is identified by the iteration of enclosed spaces, all equal and covering the entire compositional field, and by the spatial tension generated by the crossing of two linear elements.



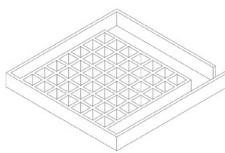
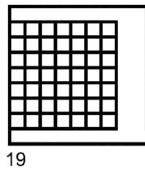
Section 16 is established by two distinct themes. The first comprises the relationship between the bottom and left linear elements of the border, and two vertical linear elements floating on the compositional field. The second consists in the relationship between a number of cells and two vertical elements that serve them as a spine. Therefore, from the two spatial situations coexisting in this composition an ambivalent role emerges: the two vertical elements are at the same time an anchoring structure for the cells and a labile element in the compositional field.



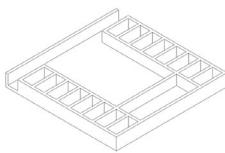
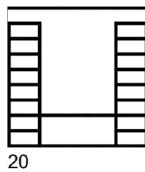
Section 17 presents a development of the theme that emerged in Section 16. The cells here do not correspond to the minimal enclosure identified by the 9×9 box grid but occupy larger portions of the compositional field in various configurations, either anchored at the border attached by the longer or shorter side, or floating inside the compositional field. Also in this case, the section presents two spatial situations: the spatial situation inside the cells and the resulting spatial region determined among the cells. A fourth cell, different in shape, seems, in fact, to have the role of closing the composition in order to render the in-between spatial situation readable. Furthermore, this section also introduces a second derogation of the rules established by Purini's language: the edges of the larger cells sit on the central axis of the square, an option that is excluded by the 9×9 box grid.



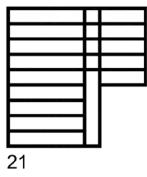
Section 18 is similar to neighbouring Section 9 in that its composition is established by ‘thinning out’ (in this case the grid in the upper right corner and at the bottom of the square). The incompleteness of the grid pattern produces two spatial niches: the first is located at the upper-right corner; the second is located at the bottom of the square, also revealing the presence of a border element in the composition.



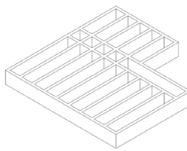
Section 19: the grid reappears in relation to the border element. More specifically, the section presents a variation on the already introduced theme of the ‘space inside a space’. Two spatial situations are established by the grid, which is clearly maintained inside the composition by the spatial situation around it, and delimited by the border element. At the bottom-right corner, the border element is interrupted, and the composition opens towards the outside.



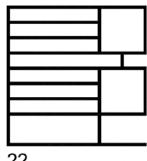
Section 20 presents a further variation on the theme ‘space inside a space’. In this case, the series of transformations prompted by the logical reasoning lead to a spatial situation constructed by a regular and symmetrical composition of cells set around the border element of the square, while leaving the central and upper region empty and open on the top left and right corners. Since the regularity and symmetry of the composition make it difficult to trace the sequence of transformations that underpin its very premises, this case becomes a simplified version of the previous section.



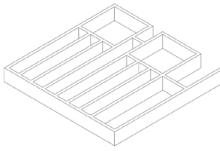
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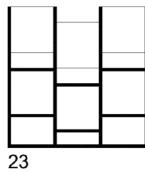
Section 21 is established by the relationship between the border elements, by the iteration of horizontal linear elements, and by two slightly off centre vertical elements. The characteristic of this spatial situation can be traced to the 'sudden' empty region at the bottom-right corner, the point of convergence for the tensions generated by the unbalanced composition. The composition comprises the presence of a square structure, an internal development with parallel line elements, and the removal of a section in the bottom-right corner, which, rather than reinstating the equilibrium in the compositional field, exposes and exaggerates the presence of a compositional tension. Therefore, in this case, the spatiality acquires mainly a conceptual dimension.



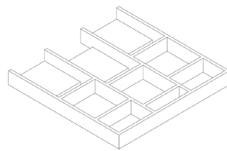
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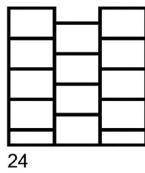
Section 22 is established by the relationship between the border elements, the series of horizontal linear elements located in the centre-left side square, and the two square elements on the right side. An analogous theme was introduced in Section 7, where the square element appeared as an exception within the composition. In Section 22, however, it introduces the very theme of the composition, namely 'the double'. This theme also appears to be signalled by the off-grid connecting element between the two squares, thereby enhancing the relationship among the supporting horizontal elements on the centre-left side.



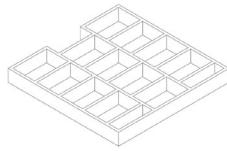
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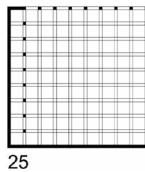
Section 23 is determined by the relationship between the border elements, the crossing of horizontal and vertical elements, and elements projected in the background. The spatial situation is the result of the series of translations of parts of the horizontal elements, and of the projected elements in the background that open the composition to the exterior at the upper border. For the first time, the projected background plays an active role in the composition.



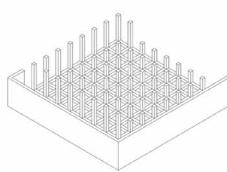
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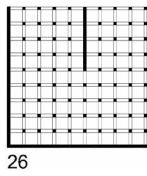
Section 24 is established by the relationship between the border element and the crossing horizontal and vertical elements. The spatial situation is the result of a translation of the vertical direction of the middle sections of the horizontal elements. The gap in the upper edge enables the composition to be read, while at the same time making the presence of the physical border ambiguous.



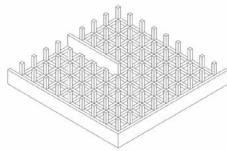
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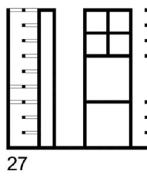
Section 25 comprises the border element and a projected grid of horizontal and vertical elements, which become a dihedral structure along the edge. The spatial situation is established at the edge of the composition between the two classes of elements: the border and the spatial grid. This relationship is enhanced in the left border region by the adjacency of the border element and dihedral structure, which are separated by a void that affects the balance of the overall composition.



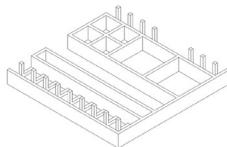
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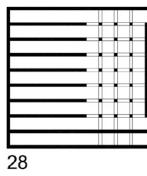
Section 26 is similar to Section 25. Here, the elements of the composition are the border reduced to the bottom and left elements, and a spatial grid extended throughout the whole field. The dihedral element of the grid also identifies the spatial situation. The composition, open towards the upper and right side, is balanced by the introduction of a vertical linear element in the upper left region of the square.



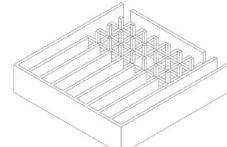
27



Section 27 is the result of two autonomous constructions, one on the left side and one on the right. On the left, the construction comprises vertical linear elements (including the border element), horizontal connecting elements projected in the background, and a column of point elements belonging to the dihedral structure. On the right, the section presents three square cells stacked along the vertical and slightly recessed from the edge of the composition. The edge is marked at the top and bottom by point elements of a dihedral structure. Furthermore, the upper cell is subdivided into four equal parts, so that the dividing elements are not aligned with the 9×9 box grid. In this section, two dominant spatial themes are identifiable: the compressed space generated between the vertical lines at the centre and left side, and the enclosed space on the right side.

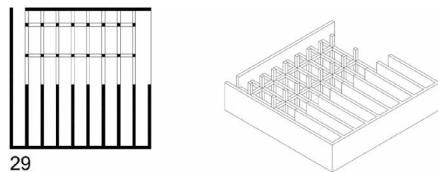


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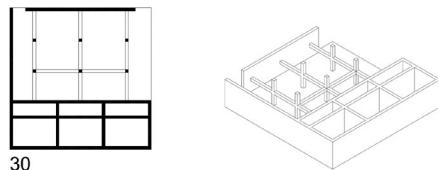
Section 28 presents all the classes of architectural elements of Purini's language: the closed figure of the cube represented by the four elements of the border and by the base/wall element in projection; the iteration of horizontal linear elements; and the

elements of the cube reduced to a dihedral structure. The composition, introduced by neighbouring Section 19, presents the relation between the border element and the iteration of the horizontal lineal element. This simple relation is challenged by the introduction on the right side of the composition of the spatial situation generated by the dihedral structure. This operation also reveals the presence of a base/wall element. In this composition the spatial situation cannot be resolved in the section plan - it requires a more complex vertical development.



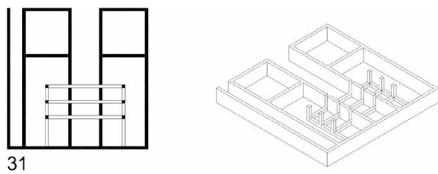
29

Section 29: the compositional elements are analogous to those of the previous section, except that here, the composition is structured along the vertical axis of the plane. Furthermore, both the composition and the embedded spatial situation are activated predominantly by the projected base/wall element on the left and right side of the square: on the left side the composition is closed by the border element; at the top, it is open to the exterior but the base/wall element is absent; while on the right side the composition is partly open and virtually delimited by the projection of the element in the background.

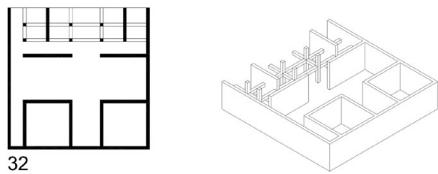


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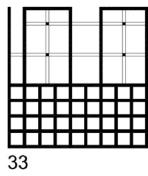
Section 30 presents a further variation of the themes elaborated in Sections 28, and 29. In this case, the composition also includes the three large square cells at the bottom, each of which is horizontally subdivided into two unequal parts. The composition is established by the border elements, by the linear cell construction at the bottom, and by the projected base/wall element in the background. The resulting configuration leaves a cleared space in the central and upper region, which is occupied by three parallel dihedral structures that are connected horizontally at one point and topped by a portion of the border element. The middle line of the dihedral construction lies outside the generative 9×9 box grid. As with the two previous sections, in this composition the spatial situation cannot be resolved in the section plan since it requires consideration of its development in the vertical direction.



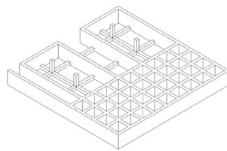
Section 31, inspired by adjoining Sections 22 and 30, presents the relationship between two identical line constructions and the border, which is reduced to the bottom and left linear elements. The theme of the double is introduced here by the two identical line constructions and enhanced by the superimposition of another construction of dihedral elements that are, in part, detached from the generative grid. On the one hand, this third construction connecting the two identical parts strengthens a symmetrical reading of the composition, while on the other, this reading is denied by the displacement of the resulting system within the generative grid, as signalled by the left border elements.



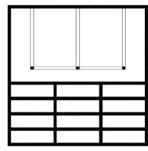
Section 32 should be understood in relation to Sections 23 and 31 since it proposes a transformation of their themes. However, here the content and its embedded form in the graphic structure (as elaborated in the previous cases) shifts away, thus necessitating an original description. The spatial theme presented in this section is again 'the double', and again, the symmetrical reading is denied by the left border element. However, here the two constructions within the compositional field are identified (and not only enhanced) by the upper construction of dihedral elements. Furthermore, in this case the derogation from the established compositional rules set by the 9×9 grid occurs by means of the vertical elements at the top of the composition. To conclude, the presence of the base/wall element in projection implies the indeterminacy of the spatial situation within the section plan, and thus the need for a more complex development of the section through the vertical direction of the plane.



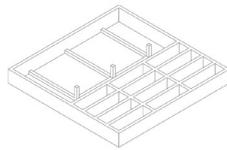
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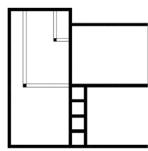
Section 33: the composition is established by the relationship between the linear elements of the border and a grid generated by horizontal and vertical lines. The grid structure occupies the lower part of the compositional field, while some of its vertical lines extend through the full span and connect at the top edge to determine two identical figures. The two constructions in the upper part are further identified and again connected by the elements of a third structure of dihedral elements set in projection. Compared to the previous section, here the spatial theme of the double is not exclusive but springs up from the dense linear construction of the lower region.



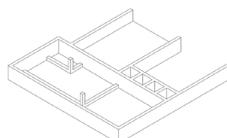
34



Section 34 presents, as in Section 33, the relationship between the border of the section and a grid in the lower part of the compositional field. The difference here is that the vertical linear elements generating the grid are less frequent and the cells are rectangular. The empty upper midfield is occupied by a dihedral structure hanging from the upper border. Its vertical elements are dislocated from the 9 by 9 box grid and are aligned to the central axis of the three vertical groups of cells, generating a connection between the composition's two spatial situations.

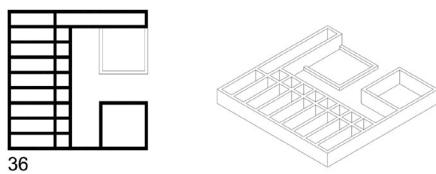


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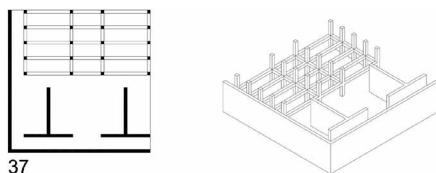


Section 35 has no apparent rule. All classes of elements seem to participate directly in the construction of the composition: the customary bottom and left border elements, a vertical linear element in the mid-left region of the square, a number of cells enabling the reading of the 9 x 9 box grid, a dihedral construction anchored

to the vertical element, and, lastly, an element in the background connecting two horizontal lines on the right side. The middle construction comprising the vertical element and the adjacent cells identify two spatial regions: one that is enclosed, vertically oriented and occupied by the two similar dihedral structures connecting the upper border with the central element on the left side; the other, open to the exterior and horizontally oriented on the right side. The middle structure absorbs the heterogeneous tensions conveyed by the two sides, maintaining a delicate equilibrium within the composition.

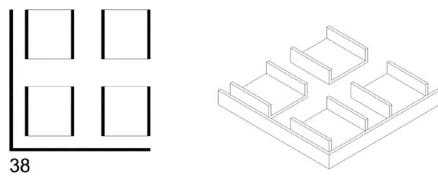


Section 36 presents a transformation of the compositional themes appearing in Sections 34, and 35, and in neighbouring Section 27. As in previous cases, the left side of the compositional field presents a solid construction, while the right side of the composition is open to the exterior. In the middle, the construction is reinforced to balance the momentum generated by a hanging square structure drawn in projection in the upper-right corner. The spatial situation can be identified by the relationship between this hanging structure and an analogous structure at the bottom-right corner. Although an immediate figurative reading of the composition would suggest a vertical construction, which is always the case when depicting the gravity of elements, it is also possible to conceive a horizontal interpretation. In fact, the delicate equilibrium between the two squared structures is maintained: the compositional weight between the heavier bottom structure and the lighter upper structure in projection is balanced by the thickening of the anchoring structure.



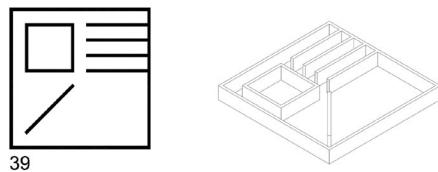
Section 37 presents transformations of adjacent Sections 28, 29 and 30. The composition is established by the relationship between the bottom and left linear elements of the border, and the base/wall element set in projection and framing the limits of the square. The top and right sides of the composition, which are open

to the exterior, are occupied by two structures: one situated on the upper side, the other on the lower side of the compositional field. The upper structure consists of a construction of dihedral elements forming a spatial grid following a 3-2-3 rhythm in the horizontal direction. The lower construction presents two identical constructions consisting of a horizontal and a vertical linear element positioned along the axis of the two external parts of the upper structure. These vertical elements, though dislocated from the 9×9 box grid, establish a binding relationship between the upper and the lower structure. However, the presence of the bottom-left border hinders any symmetrical reading of the composition.



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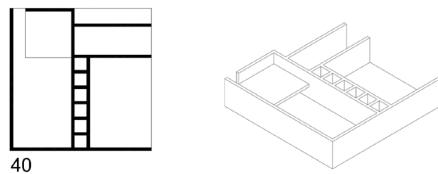
Section 38 simplifies the considerations expressed in Section 37. Here, the composition is established by the relationship between the bottom and left linear element of the border and the four identical constructions, two at the top and two at the bottom, consisting of two vertical linear elements connected by a surface element set in projection. Moreover, the four structures participate in the definition of the upper and the right borders of the square. In this case too, the regularity of the composition, identifiable in the four structures, is denied by the linear element of the border. Furthermore, in this section the four identical structures are floating on the compositional field. A vertical reading of the section implies that the definition of the four structures on an undetermined stage occurs in front of the section plane.



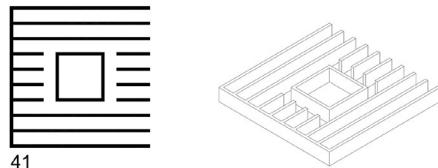
39

Section 39: the composition is established by the relationship between the border element of the square and three linear constructions localised inside the compositional field. The first of the three structures is a square situated in the upper-left corner. The second, in the upper-right corner, is defined by horizontal lines anchored on the right-side to the linear element of the border. The third, at the bottom-left corner, is an oblique linear element positioned along the diagonal of the

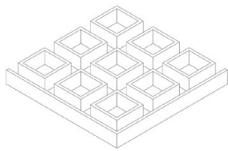
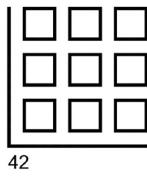
square. The resulting fourth empty region of the square serves as an indicator for reading the composition. In fact, the simple relationship between the border element and the inner structures is not enough and is denied when considering that, as in Section 38, the constructions on the right side float on the compositional field. These constructions imply a structural definition at a stage preceding the section line and, therefore, they present a different constructive situation compared with the structure in the top-right corner.



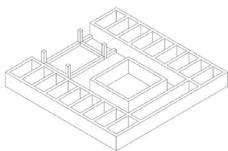
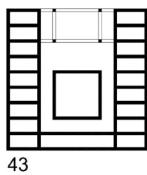
Section 40 is very similar to Section 35. However, the introduction of the base/wall element in the background, the substitution of the dihedral structures by a superficial element in projection and, above all, the absence of a linear connection on the top-left border, determine a different compositional theme. Here, the tension is produced by the elements anchored on the left and right side of the central spine, while the border element is not involved and only assumes the role of framing the composition.



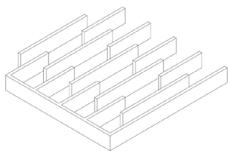
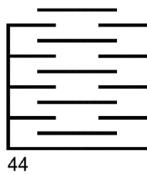
Section 41: the compositional theme is traceable to the early series of transformations. The section presents the relationship between the linear elements of the border and horizontal linear elements covering the full extent of the compositional field, while a square occupies the centre. The absence of the linear element of the border on the right side destabilises the centrality of the composition, leaving both the square structure and the horizontal linear elements on the right side of the square unanchored. When interpreting this section through the vertical, for instance, these two classes of elements imply an indeterminate structure situated in front of the section plane, and they identify a different construction compared to the neighbouring elements anchored to the border.



Section 42 develops the compositional theme presented in Section 38, reduced here to a simplified version through the use of only one class of elements. In this case, the identical structures are nine square elements homogeneously arranged in the compositional field on the upper-right side of the border element.

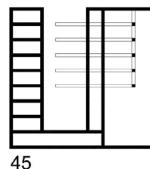


Section 43 is established by the relationship between the linear elements of the border, which are open to the exterior in the centre-top position, and the construction of linear elements that bind the U-shape of the border. Furthermore, a square structure localised at the centre-bottom houses the cavity generated by the border construction, while a dihedral structure closes the upper edge. The resulting configuration is a symmetrical composition as in adjacent Section 34 and in Sections 20, 23 and 24. However, here the different distribution of the compositional tensions through the vertical direction produces a state of precarious equilibrium, as if the square, positioned slightly below the centre, halts just before its collision with the lower boundary.

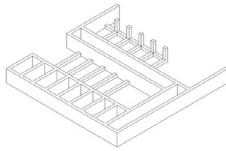


Section 44 shares some analogies with Sections 8 and 24 involving the rhythm generated by regular structures. The composition is established by the bottom and left linear elements of the border and by a series of horizontal linear elements extending throughout the compositional field. The motive, generated by the interplay of lines shifting from the edges to the centre and overlapping at the extremities,

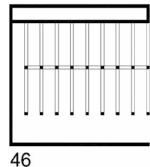
produces a variety of spatial situations. The border element, by merging with the linear elements on the left side, destabilises the regularity and reveals the instability of the symmetrical composition originated by the alternating lines.



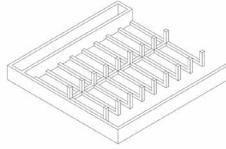
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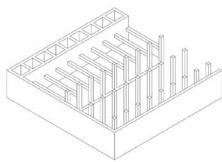
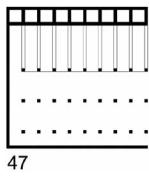
Section 45 presents a transformation of the compositional themes developed in Sections 35, 36 and 40. Again, the bottom and left linear border, reinforced here by other linear structures, balances the construction on the right side of the square. The latter is established by vertical linear elements, on which a third construction of dihedral elements hangs, extending from the upper-right side to the centre of the compositional field. The result is a delicate equilibrium of opposing tensions. Furthermore, the constructions subdivide the composition into four parts: two are occupied by the linear constructions and give stability to the composition, while the other two, open to the exterior, are occupied by the unusual configuration of the hanging structure.



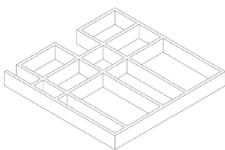
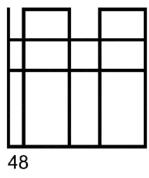
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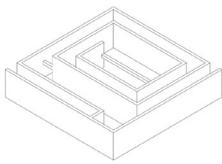
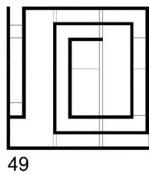
Section 46 presents a border element open on the right side and doubled on the upper side, from which hangs a dense and regular dihedral construction occupying a large part of the compositional field. As in Sections 36 and 43, the spatial situation is established between the empty space identified by the boundary of the square, and the hanging structure that occupies it, which also imposes a directionality from the top to the bottom of the compositional field.



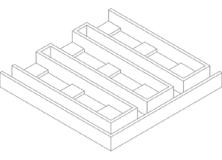
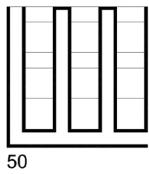
Section 47 presents a transformation of Section 46. Here, the upper border is additionally reinforced by vertical elements between the two lines that form a regular row of cells, which is coherent with the rhythm of a dihedral construction hanging from the border. In this case, the hanging structure halts before the central region of the compositional field and is bound by a superficial element set in projection. The lower part is occupied by two rows of tiny square elements, determining a composition where all identifiable structures share some of their properties with the next. The explicit directionality and relative tensions of the previous section appear in this case counterbalanced and redistributed in various regions of the square.



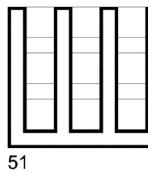
Section 48 presents a simplified version of the compositional theme introduced in Section 31. In this configuration there is only one class of elements: the linear. Here the binding of the two identical structures occurs by means of two parallel, horizontal elements on the upper side. However, whereas in the previous case the connecting element involved only the two identical structures, here the connecting elements reach the left border, thus establishing an ambivalent reading of the configuration as a unitary construction and as two identical constructions positioned on a supporting structure.



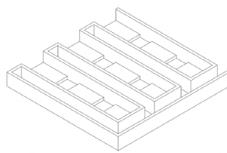
Section 49 presents a spiralling linear element held by the canonical bottom and left border element, and by other elements set in projection. The immediately recognisable spatial theme is ‘wrapped space’, a theme that has also been the subject of a drawing entitled ‘Avvolgere’ [Wrapping], part of the series ‘Come si Agisce. Dentro l’architettura’ [How to act. Inside architecture] (1993), whose inspiration clearly comes from the Classification. According to Purini, wrapping expresses the physical meaning of the architectural space. He explains how on the one hand the construction surrounding the body is perceived as an aesthetical value, and how on the other hand, wrapping also implies a separation from the surrounding context. Therefore, he concludes that this spatial situation establishes a subtle negation of visual depth and represents an extreme and alternative form of space.



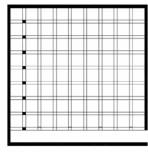
Section 50 can be read as a transformation of Section 8 and of the preceding Section 49. Here, the bottom-left border element merges in the upper-left corner with a linear element meandering with a regular rhythm inside the compositional field as far as the upper right corner. The resulting scheme presents two analogous and opposing spatial situations represented by deep and narrow fissures. The lower region is open to the exterior on the bottom-right corner, while in the upper part, the fissures are held together by superficial elements set in the background.



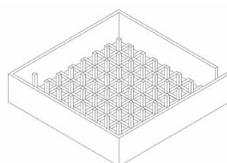
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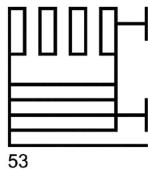
Section 51 presents the same scheme as in Section 50, except that here the superficial elements in projection which hold the deep vertical fissures in the upper spatial region are all equal and positioned according to a regular grid, therefore increasing the complexity of the spatial situation in the upper part of the section, which was also observed in Section 50.



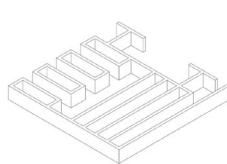
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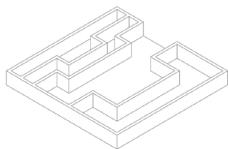
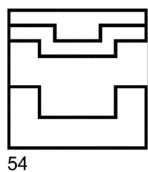
Section 52 is established by the relationship between the border of the square, which is open to the exterior at the bottom-right corner, and a dihedral structure that forms the interior connection with the left, top and right border element. In the proximity of the border on the left side, the elements of the dihedral structure adjoin the section plane as if to strengthen the side of the composition, which bears the tensions originating from the interruption of the border element on the right side. In this sense, the section should be read primarily in a vertical direction.



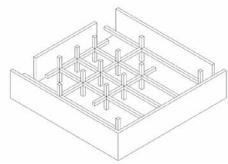
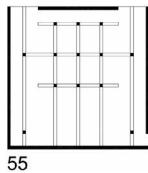
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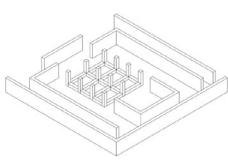
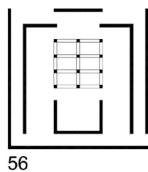
Section 53 presents only linear elements. The bottom-left border element anchors a heterogeneous and incoherent series of configurations that give rise to long, horizontal cells at the bottom, vertically oriented cells at the top, and two linear constructions on the right side that end at the edge of the square. The spatial situation is identified by the variety of resulting pochés produced by this arbitrary configuration.



Section 54 is established by the relationship between the border elements and three analogous linear constructions inside the compositional field. The spatial situation can be identified in the effect produced by the compression and dilatation of the three linear constructions. The symmetry of the composition is denied by the interruption of the border element at the centre of the right edge, which also reveals the presence of a base/wall element in the background.

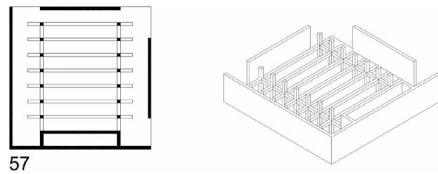


Section 55 is established by discontinuous, linear border elements held by a base/wall element set in projection, and by a symmetrical dihedral construction inside the square, which produces a dense articulation of spaces. The three structures share a number of 'situations' that establish the unitary character of the composition. Except for the bottom-left corner, all the others are open, and their construction is supported by the surface in projection. The top segment of the border and two of the horizontal dihedral elements have an equal length. Furthermore, the relationship between the two constructions is underlined by the presence of a vertical element displaced from the 9×9 box grid. A symmetrical composition is denied by the sudden interruption of the right border element at the bottom-right corner.

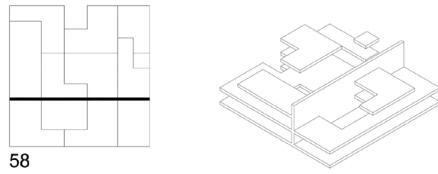


Section 56 is established by discontinuous linear border elements as in Section 55, except that here there is no structure holding them. Instead, the margins of the composition are reinforced by L- and C-shaped linear structures inside the square,

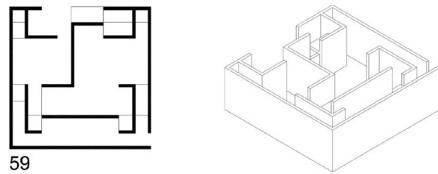
nesting at their centre an independent dihedral structure. However, since the two constructions have some common proportions and dimensions, the overall result is a unitary configuration: the relationship between the two constructions is underlined by the presence of a vertical element displaced from the 9×9 box grid. Symmetry is denied by the interruption of the right border element at the bottom-right corner.



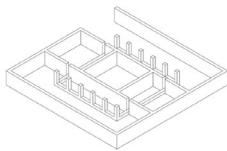
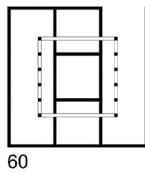
Section 57 is an alternative interpretation of the compositional themes introduced in Section 55.



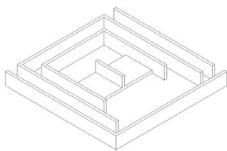
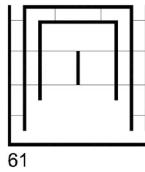
Section 58 presents a horizontal linear element crossing a mosaic of fragmented surface structures. The composition has no rule beyond the hierarchy established by the linear element, which determines an upper and a lower spatial region.



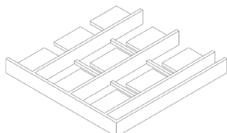
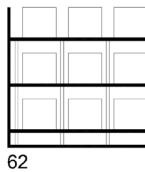
Section 59, as in Section 58, presents the relationship between the border of the square and a number of linear constructions and small surface structures. The resulting configuration is a fragmented composition where the elements reciprocally participate in the construction of a space. Although it is difficult to identify a compositional rule in this case, there are reciprocities among the linear constructions distributed in the four corner regions of the square.



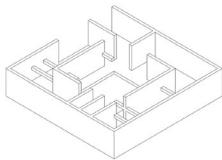
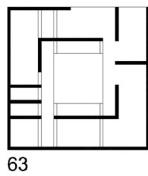
Section 60 presents a threefold partition of the square. The middle part is further subdivided into three vertical parts. The resulting centrality of the configuration is underlined by a surrounding construction of dihedral elements. However, the centrality of the composition is negated by an opening in the top-right border, exposing the right side of the composition to the outside.



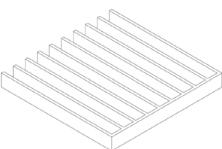
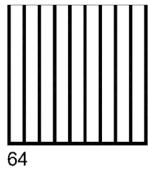
Section 61 is informed by the themes previously elaborated in Sections 49, 56 and 59. Here, the composition is established by discontinuous linear border elements. The canonical bottom and left element hold the composition. At the top, the border is configured by a series of concentric constructions that are open at the bottom. These constructions converge on an autonomous vertical line that identifies the centre of the composition. Centrality and symmetry are denied on the right side by the detached border element at the corner. All the linear constructions are connected and consolidated by horizontally oriented surface elements that give stability to the composition.



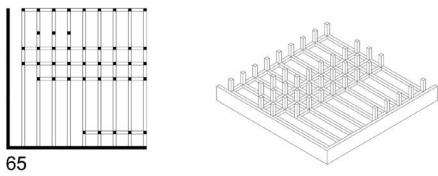
Section 62 has a bottom-left border element supporting three horizontal linear elements. At the same time, each of these supports three square elements set in projection. A third structure of vertical linear elements – set in projection and dislocated from the 9×9 box grid – participates in the stability of the composition. Here, an irreducible compositional tension is maintained between the supporting construction and the regularity established by the nine square elements.



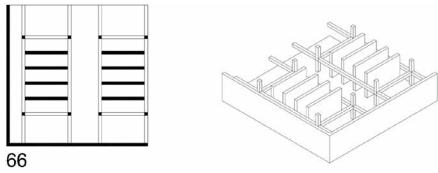
Section 63 is established by the linear element of the border and the base/wall element, which is set in projection and hollow at the centre. Given this main theme, other linear constructions gravitating around the centre of the composition determine an interplay that both confirms and denies the centrality. In addition, the linear construction is held together by a number of vertical elements in projection.



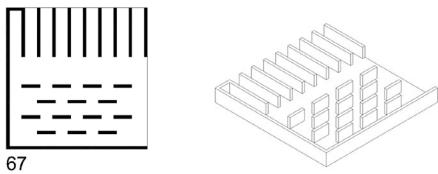
Section 64 presents the relationship between the border element, which is open on the upper side revealing the presence of a base/wall element in projection, and the iteration of vertical linear elements. Compared to the analogous Section 1, the spatial situation created here by the iteration of the vertical elements is more complex. The complexity derives on the one hand from the ambiguous nature of the left and right border element, which can be interpreted as part of the iteration of vertical linear structures and, on the other hand, from the presence of the bottom line, which gives directionality to the composition: from bottom to top and extending to the exterior.



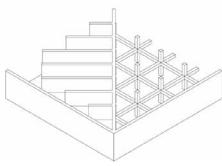
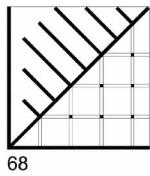
Section 65: although this scheme presents some analogies with Section 64, the content is radically different. This configuration comprises the recurrent bottom-left border element and a dihedral structure established by the iteration of parallel vertical elements in projection, connected in different ways by other horizontal elements. Three of the connecting elements are of equal size, thus suggesting a class of elements. The others vary. Ultimately, the composition stages the delicate equilibrium resulting from an interplay between the simple order set by the vertical elements and the disorder of the connecting lines, most of which lie outside the 9×9 box grid.



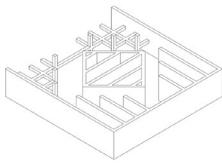
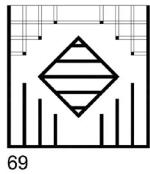
Section 66 is part of the class of configurations elaborating the theme of the 'double', also found in Sections 31, 32, 33 and 48. As in most of the other cases, the composition presents the bottom-left border element supporting two identical constructions comprised of a dihedral structure framing a series of parallel linear elements. The novelty presented here is the introduction of a background element to compensate for the lightness of the dihedral elements.



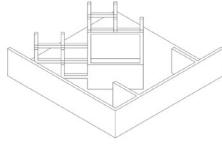
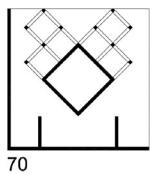
Section 67 is established by the bottom-left border element and the base/wall element in the background. The upper region of the square, open to the exterior, is identified as far as the upper right corner by the iteration of vertical elements. The lower region is occupied by rows of short, alternating horizontal elements. The spatial situation is thus identified by the relation between the regularity and verticality of the upper region and the alternating pattern of the horizontal elements in the lower region.



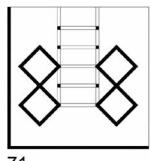
Section 68 presents a bottom-left border element and the base/wall element in the background. In this configuration, the theme of the diagonal is reintroduced, extending from the bottom-left corner to the upper-right extremity. The diagonal identifies two regions consisting of two constructions that correspond to two distinct spatial situations: at the bottom-right side is a dihedral grid structure, while in the upper-left area a series of parallel lines depart perpendicularly from the diagonal. Therefore, in this case, the diagonal is not only a derogation from the rule but also the base of a construction.



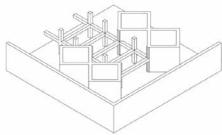
Section 69 presents a further development of Section 68. The symmetrical scheme comprises the border element open at the top to reveal the presence of a background structure; a central, square element rotated 45 degrees that contains a series of horizontal linear elements; a construction of dihedral elements at the top; and a construction of vertical lines at the bottom. The particular configuration of the last two constructions enumerated has them positioned as if they were the result of the rotation applied to the square element. Here, the two spatial situations recognisable in the upper and lower parts are mediated by the central element.



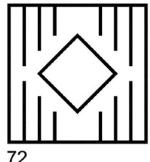
Section 70 presents another transformation of the theme. The novelty introduced into this configuration is that the rotated central element now becomes the base for a construction: the upper dihedral structure.



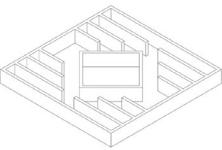
71



Section 71: here the procedure presented in Sections 68, 69 and 70 becomes intricate. Although a direct reading of this configuration appears to show a central structure containing pairs of rotated elements, its proportions and dislocation from the 9×9 box grid lead to an alternative reading. In the compositional field established by the bottom-left border and the background element, two pairs of square elements are rotated 45 degrees and connected to the vertexes: one on the left and one on the right. The dimension of the two-unit square is coherent with the 9×9 box grid system. The two pairs of rotated elements generate a connecting dihedral structure at the centre of the square.



72



Section 72 presents a simplified version of the theme developed in Section 69. Here, in fact, there are only linear structures. Furthermore, whereas in the previous case the rotation of the central square element produces a perturbing effect on the surrounding structures, in this section the result is a symmetrical and regular composition.

House in the Roman countryside

Franco Purini, 1971

Originally published as 'Casa nella campagna romana'

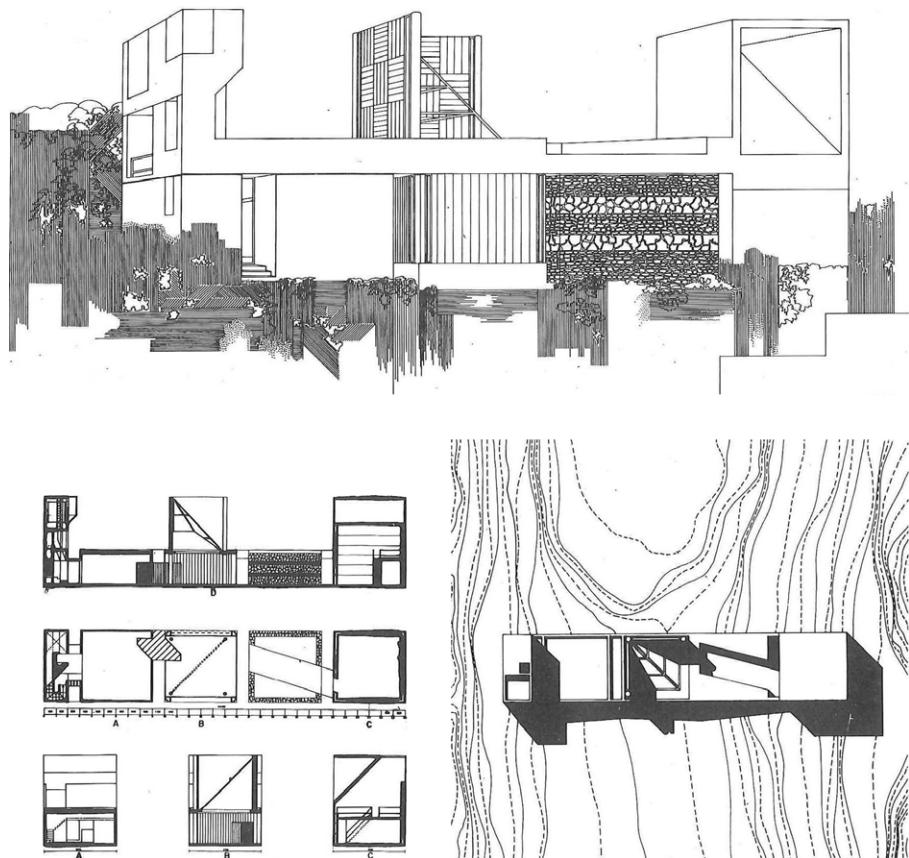


FIG. APP.1.56 From top to bottom, left to right: Perspective view; Longitudinal section, plan and cross sections; Top view..

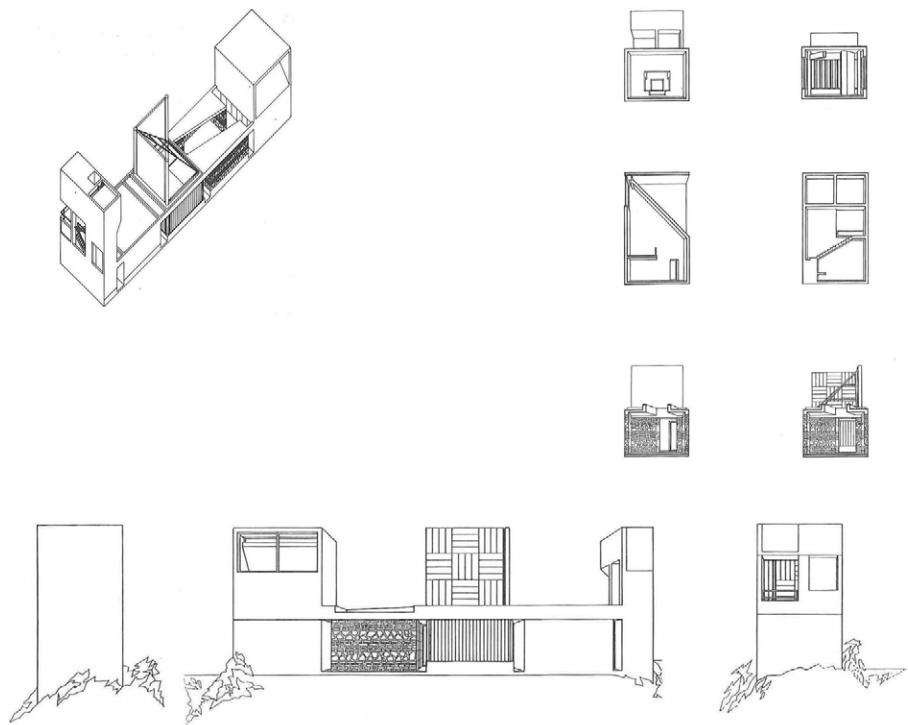


FIG. APP.1.57 From top to bottom, left to right: Axonometry; Sections; Elevations.

Houses in the Roman countryside

Franco Purini, 1970-1971

Originally published as 'Casa nella campagna romana'

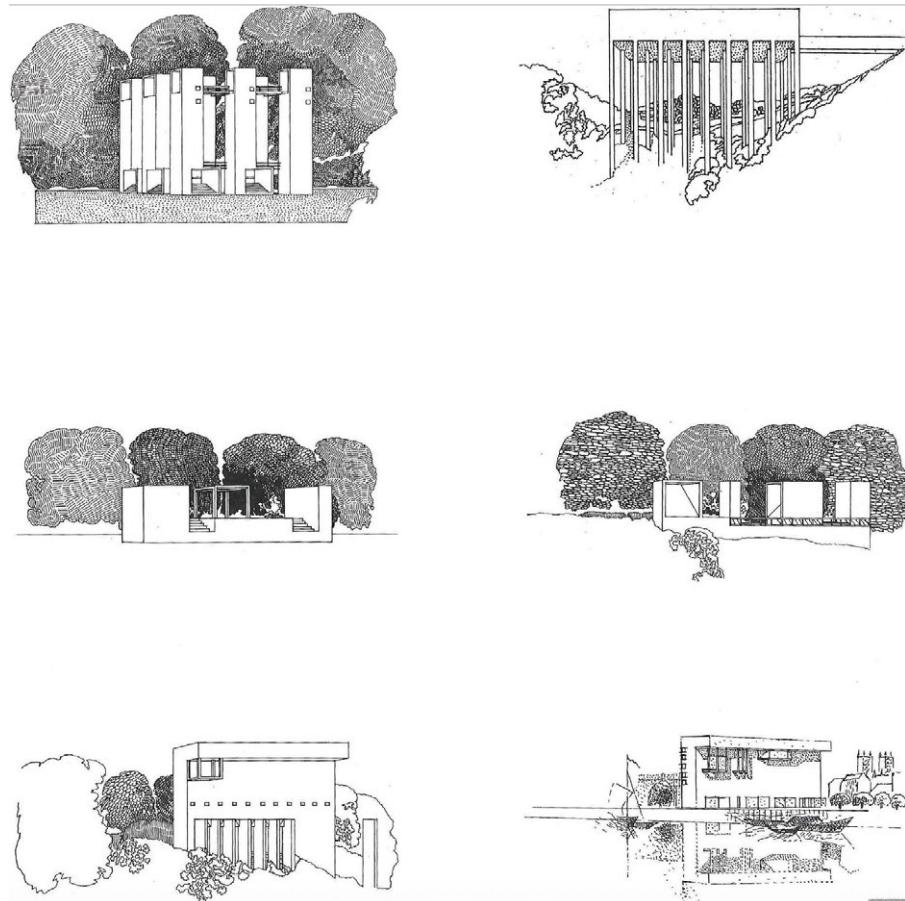


FIG. APP.1.58 From top to bottom, left to right: Towers (1971); Study for a building block (1971); Study for a building block (1971); Study for a building block (1971); Built on a series of volumes, lines and planes (1970); Built on a series of volumes, lines and planes (1970).

Project for a concrete and glass pavilion

Franco Purini, 1976

Originally published as 'Progetto per un padiglione in cemento e vetro'.

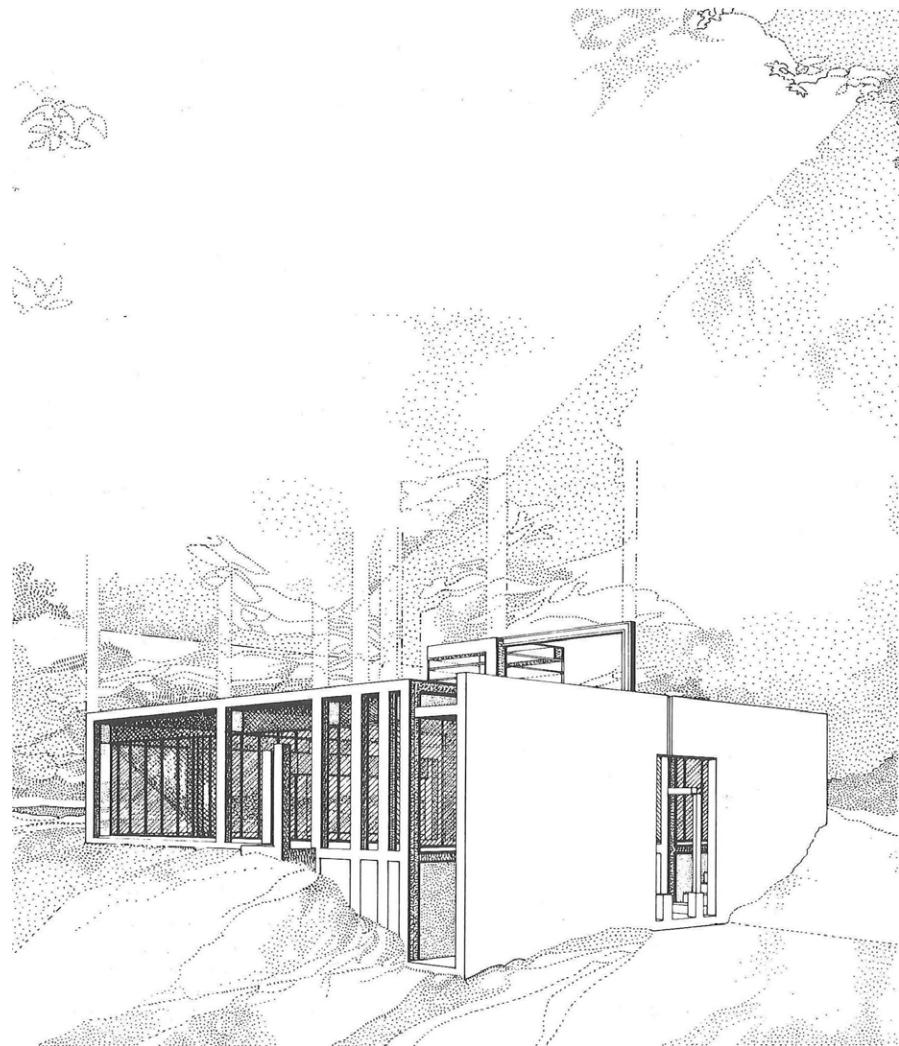


FIG. APP.1.59 Perspective view

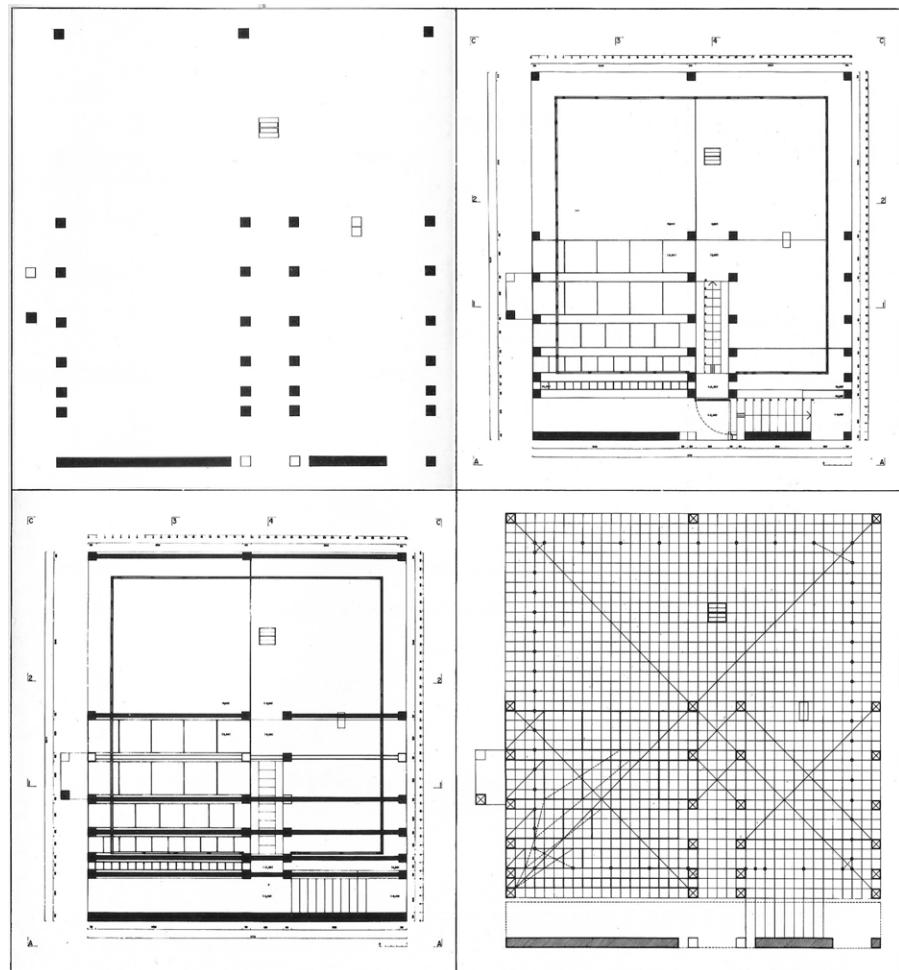


FIG. APP.1.60 From top to bottom, left to right: The rhythm of the vertical structures; Plan: The sequence of beams supporting the roof structure; Modular diagram of the plan.

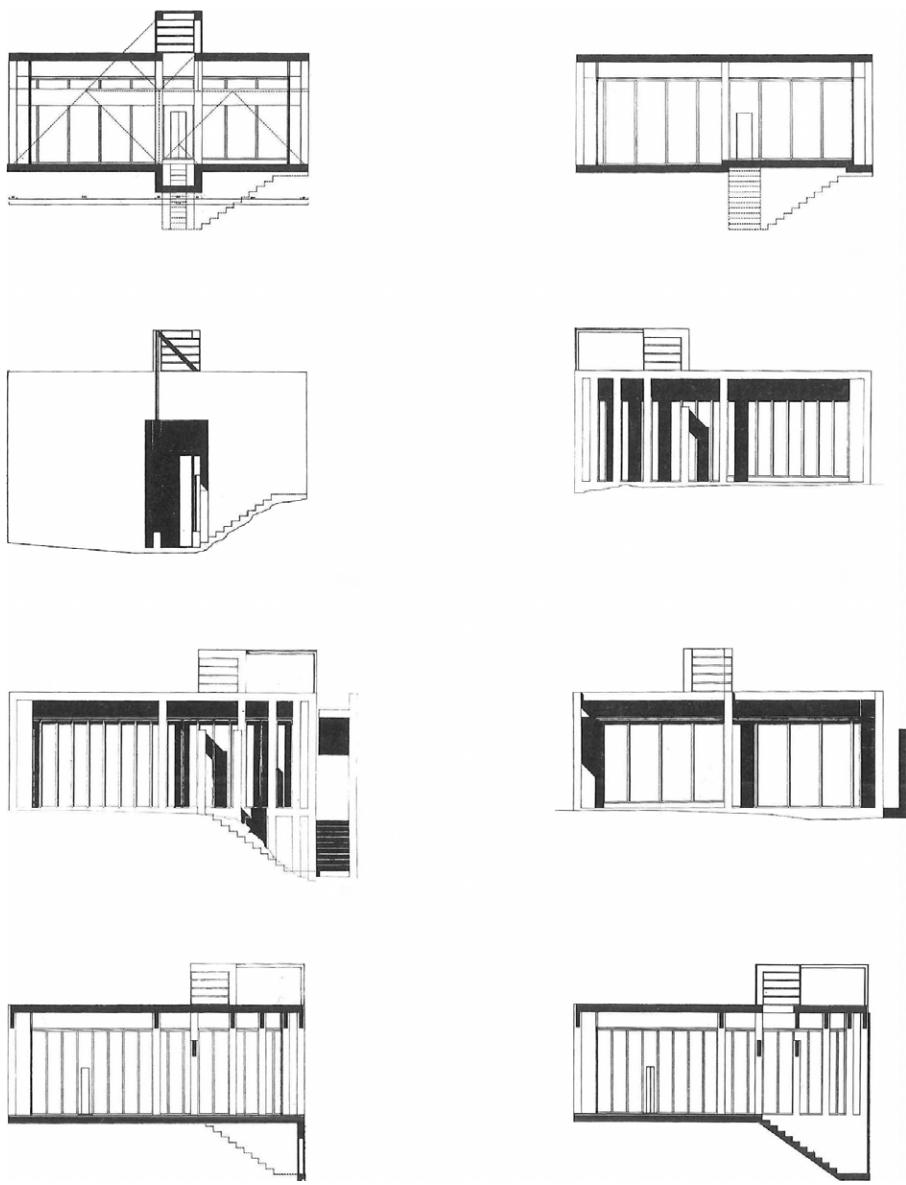


FIG. APP.1.61 From top to bottom, left to right: Sections; Façades.

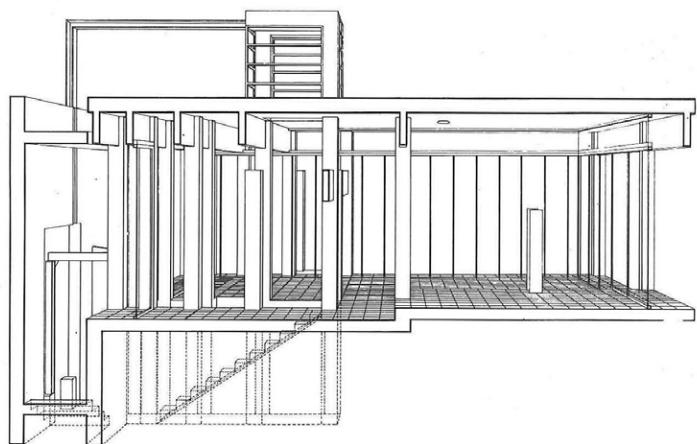
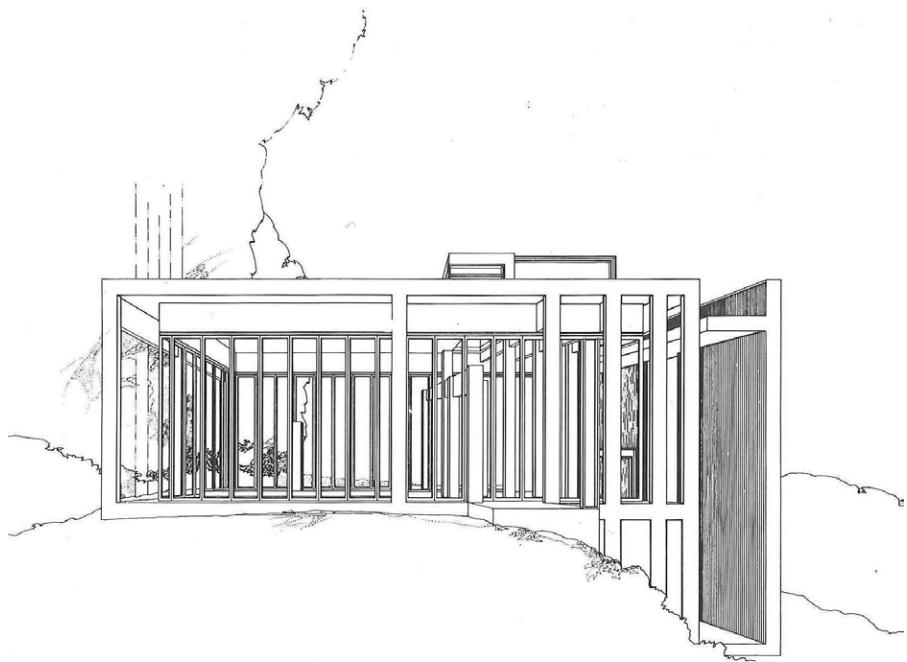


FIG. APP.1.62 Left: View of the exterior; Right: View of the interior.

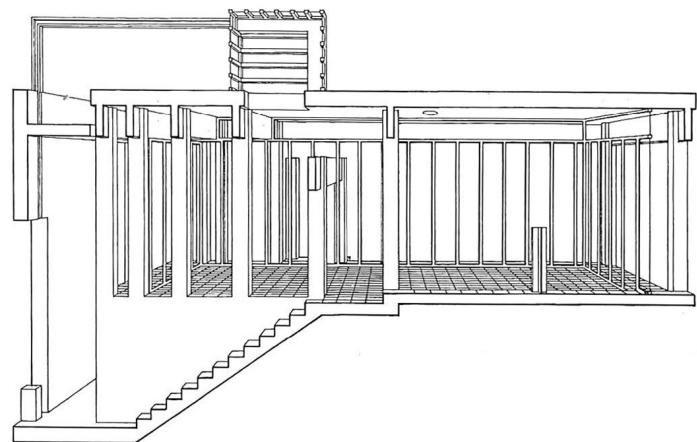
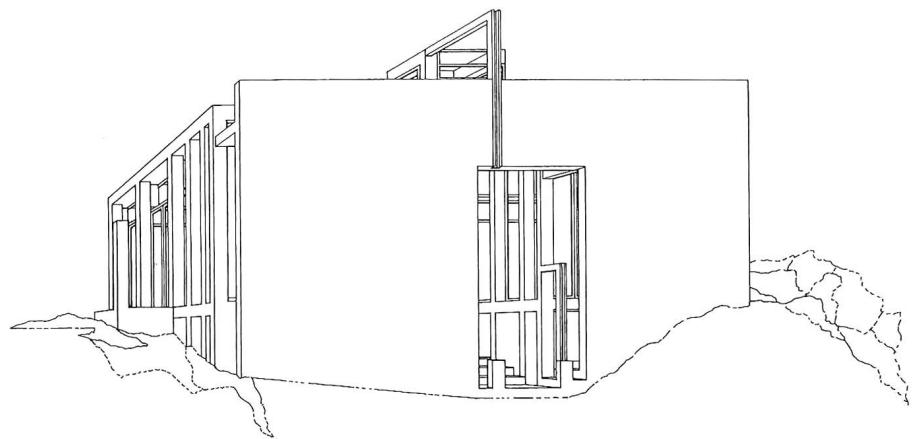


FIG. APP.1.63 Left: View of the exterior; Right: View of the interior.



FIG. APP.1.64 Elevation detail.

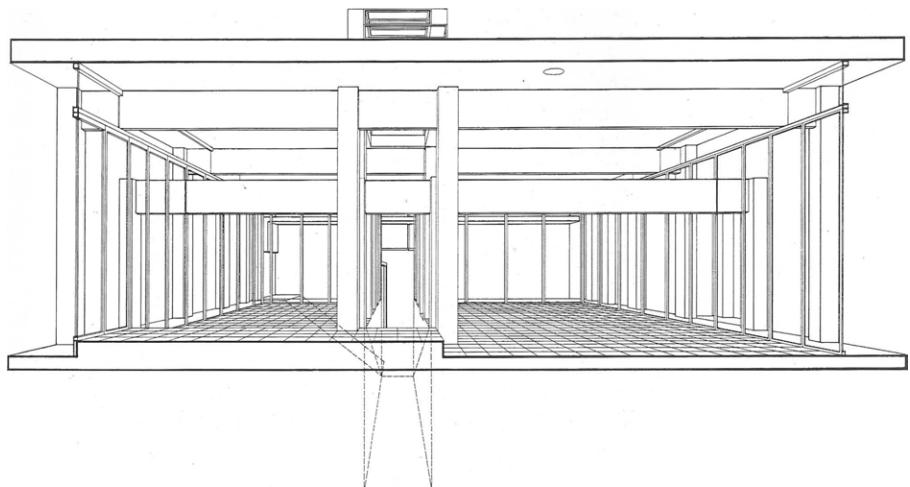


FIG. APP.1.65 FIG. 134 Perspective cross section

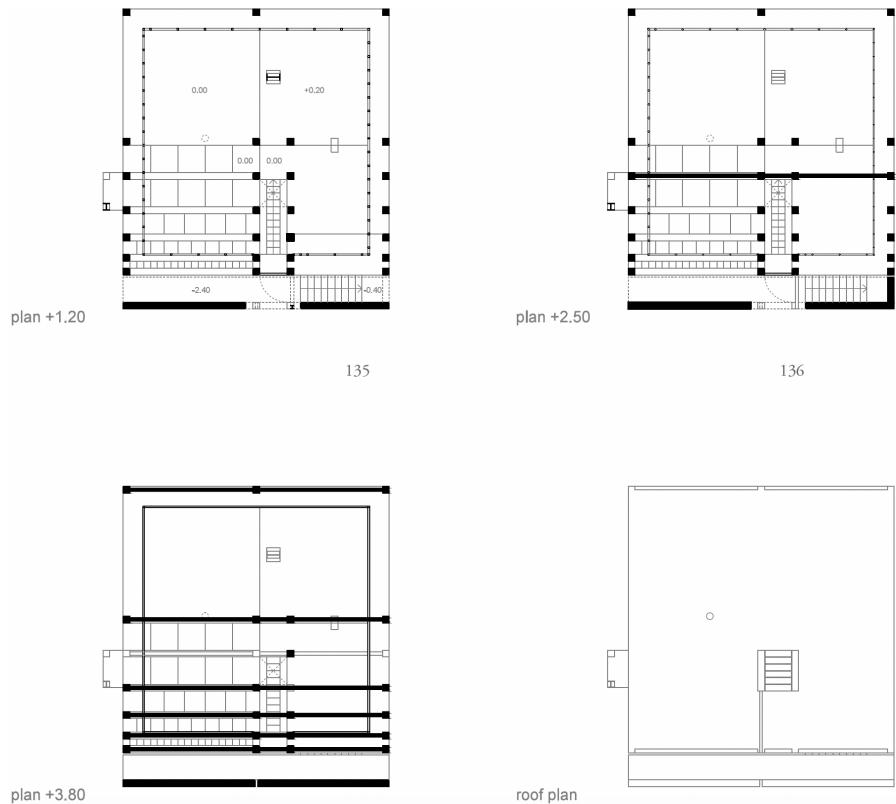


FIG. APP.1.66 From top to bottom, left to right: Plan (+1.20); Plan (+2.50); Plan (+3.80); Roof plan.
(Author's images.)

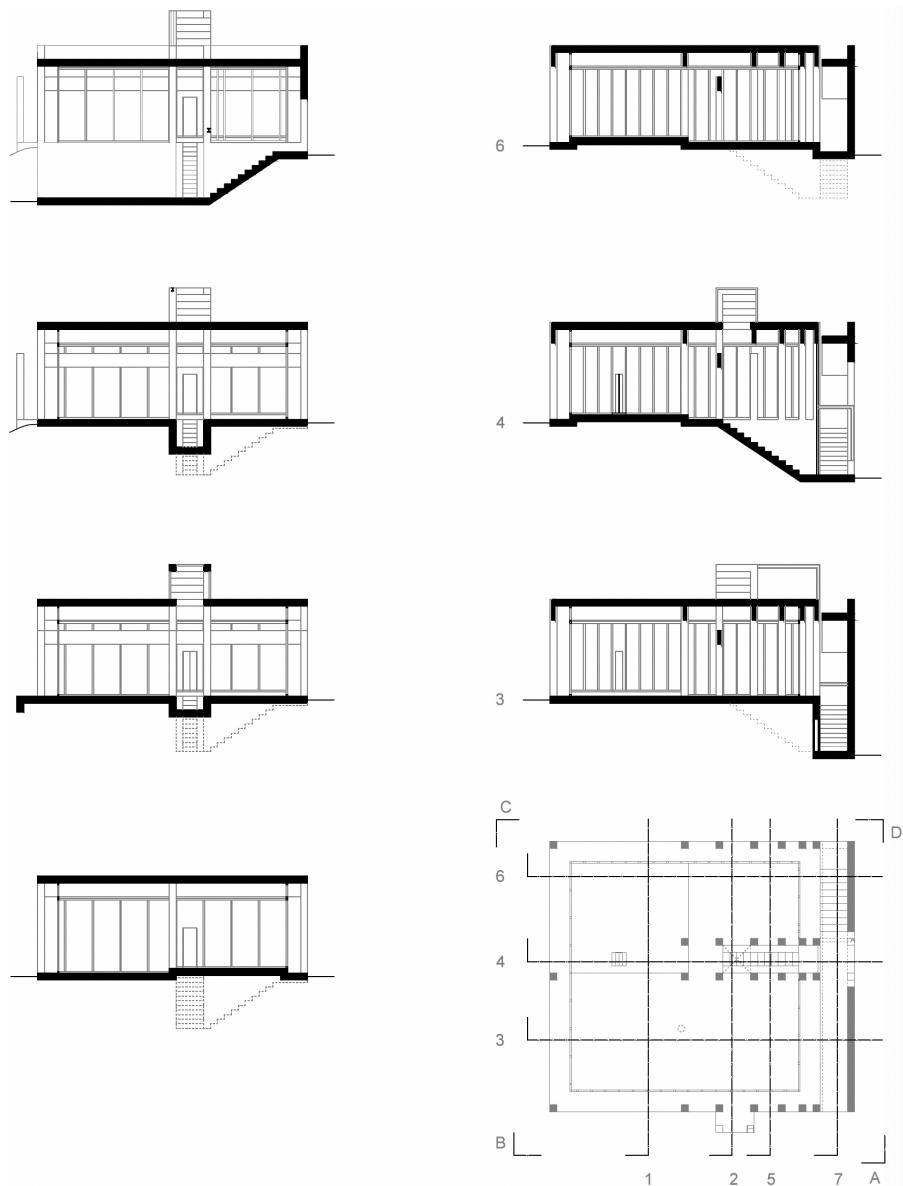


FIG. APP.1.67 Sections. (Author's images.)

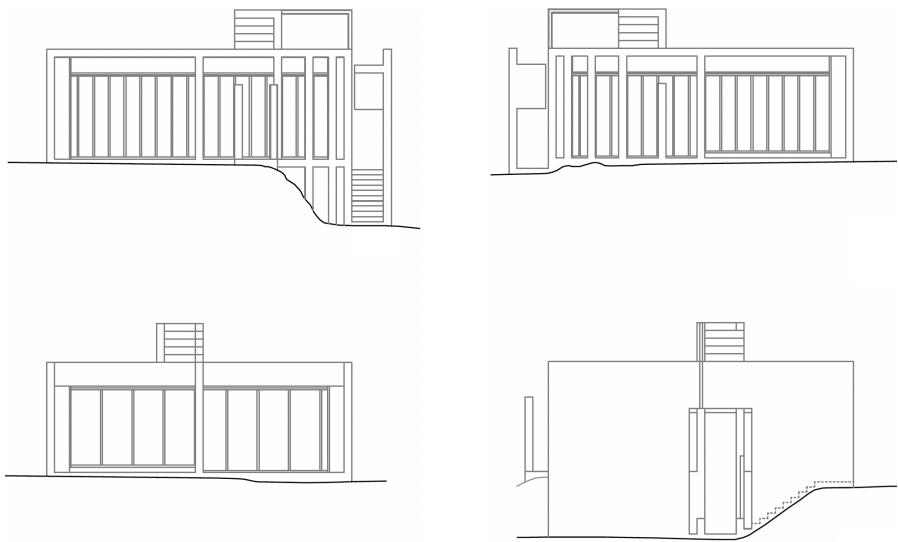


FIG. APP.1.68 Façades. (Author's images.)

Analysis of the project for a concrete and glass pavilion

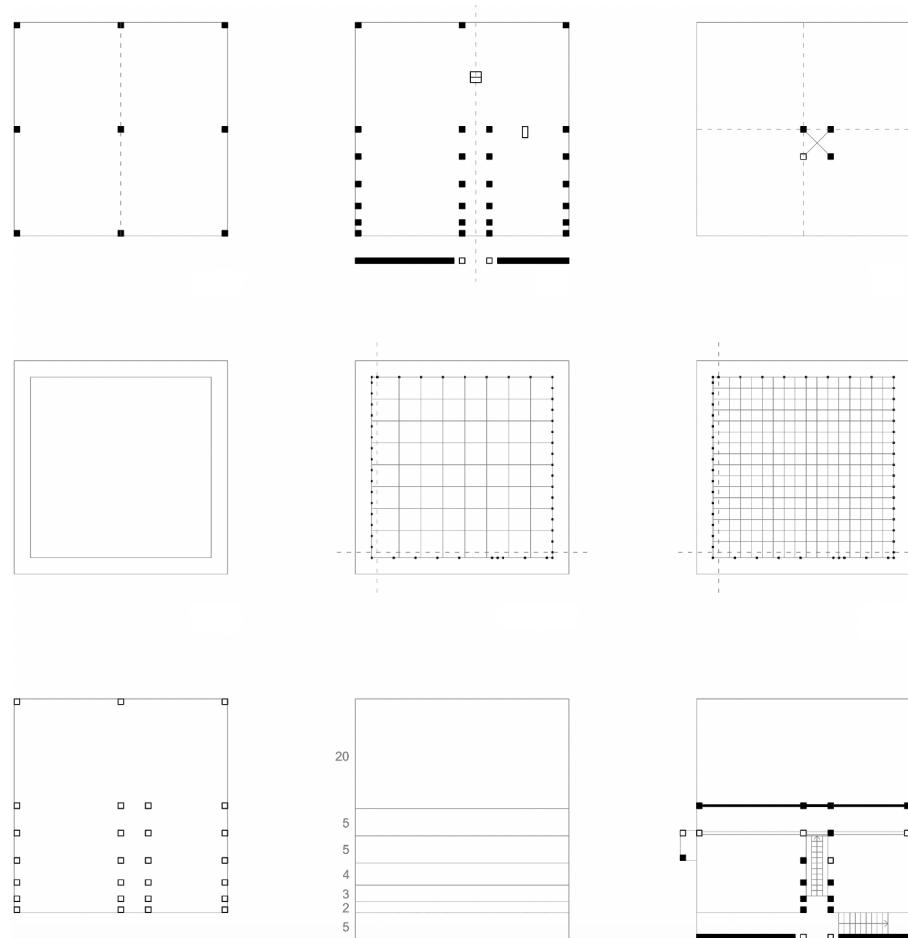
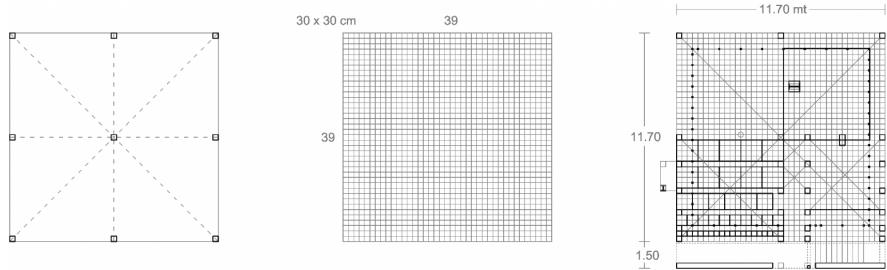


FIG. APP.1.69 From top to bottom, left to right: Symmetry of the structure; Shifting of the entrance axis; The centre of the plan; The façade and the structure of its modules; Study of the main elements and modules of the structures. (Author's images.)



4 Spatial Situations

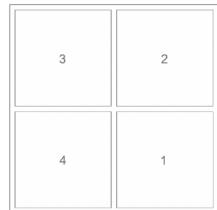


FIG. APP.1.70 The four spatial situations of the pavilion. (Author's image.)

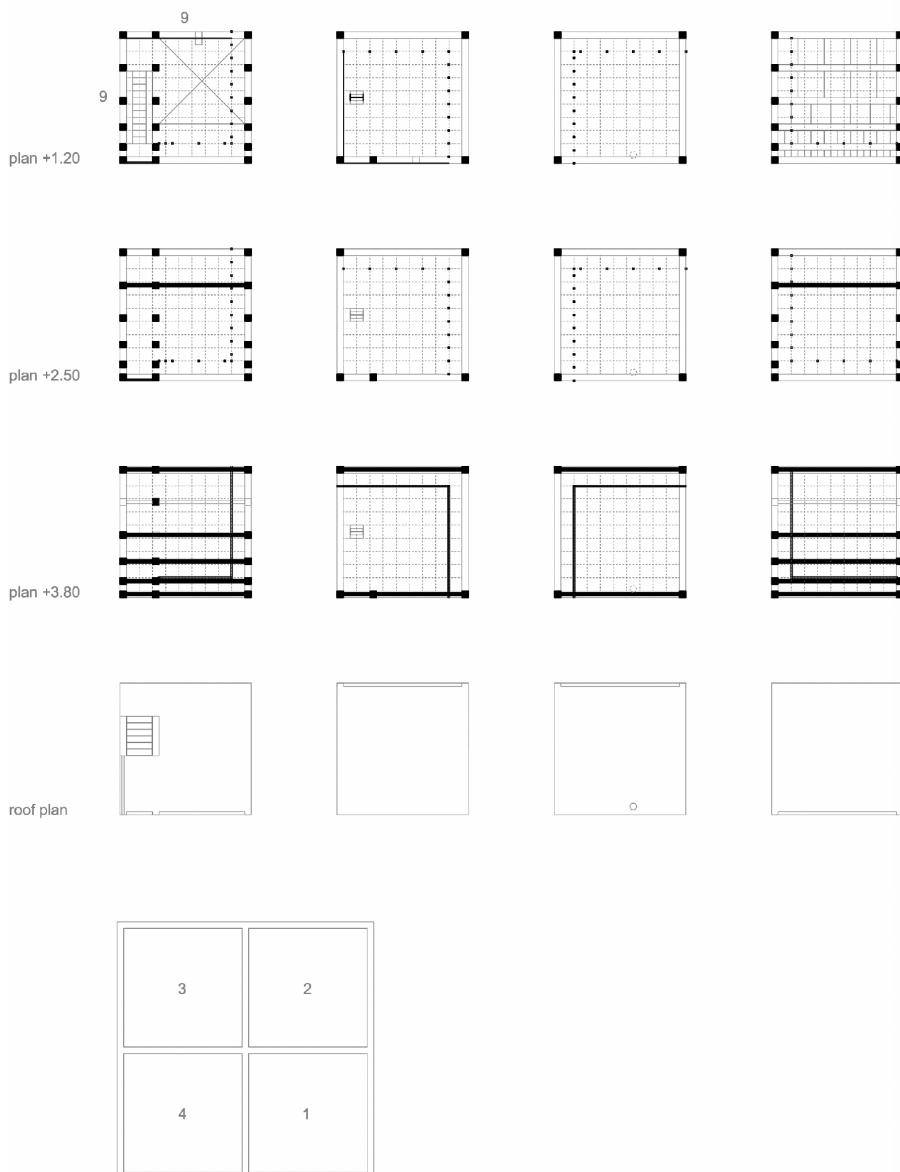


FIG. APP.1.71 Analysis of the four spatial situations of the pavilion. (Author's image.)

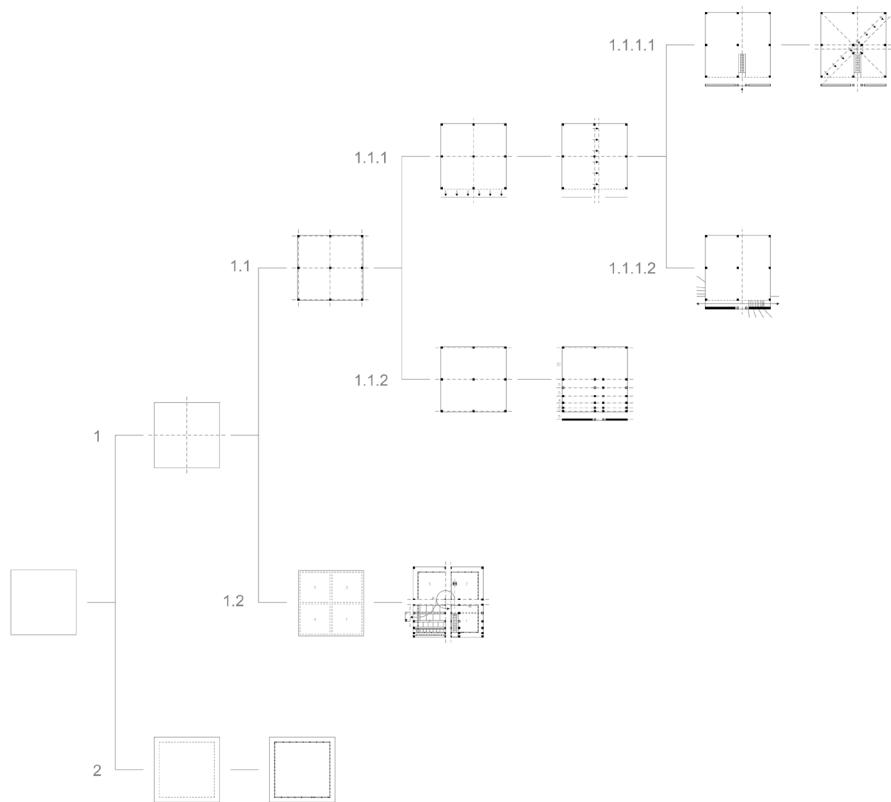


FIG. APP.1.72 Hypothetical step by step reconstruction of the design process. (Author's image.)

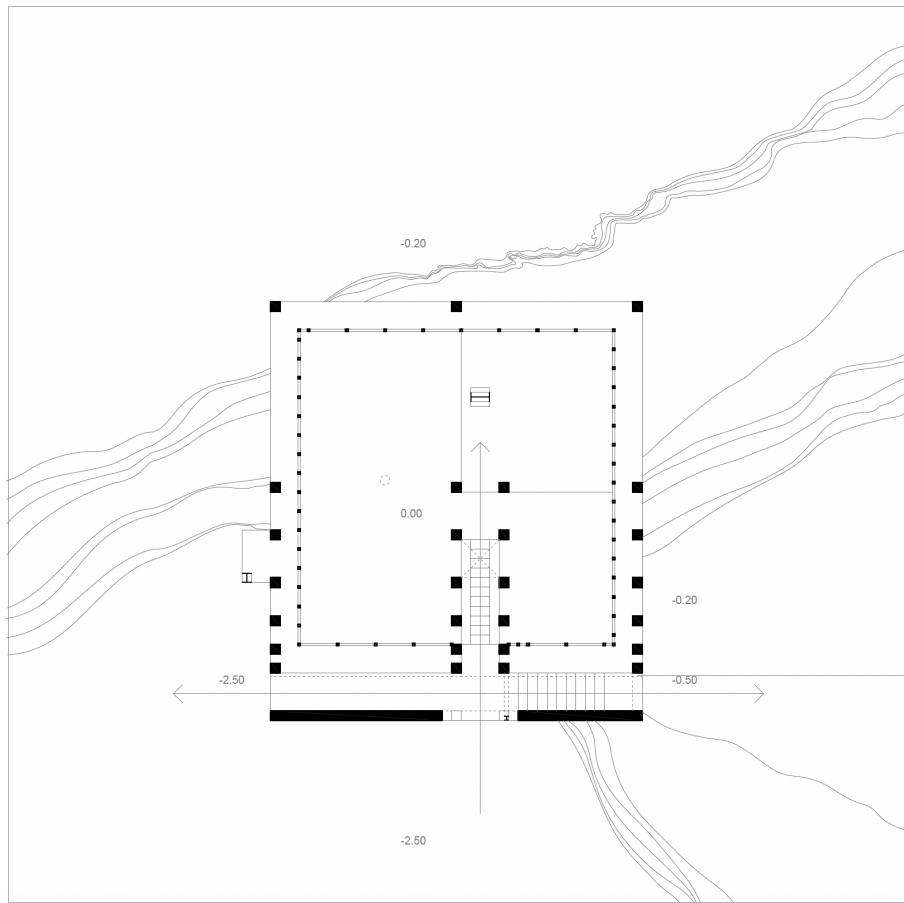


FIG. APP.1.73 Interpretation of the pavilion site plan. (Author's image.)

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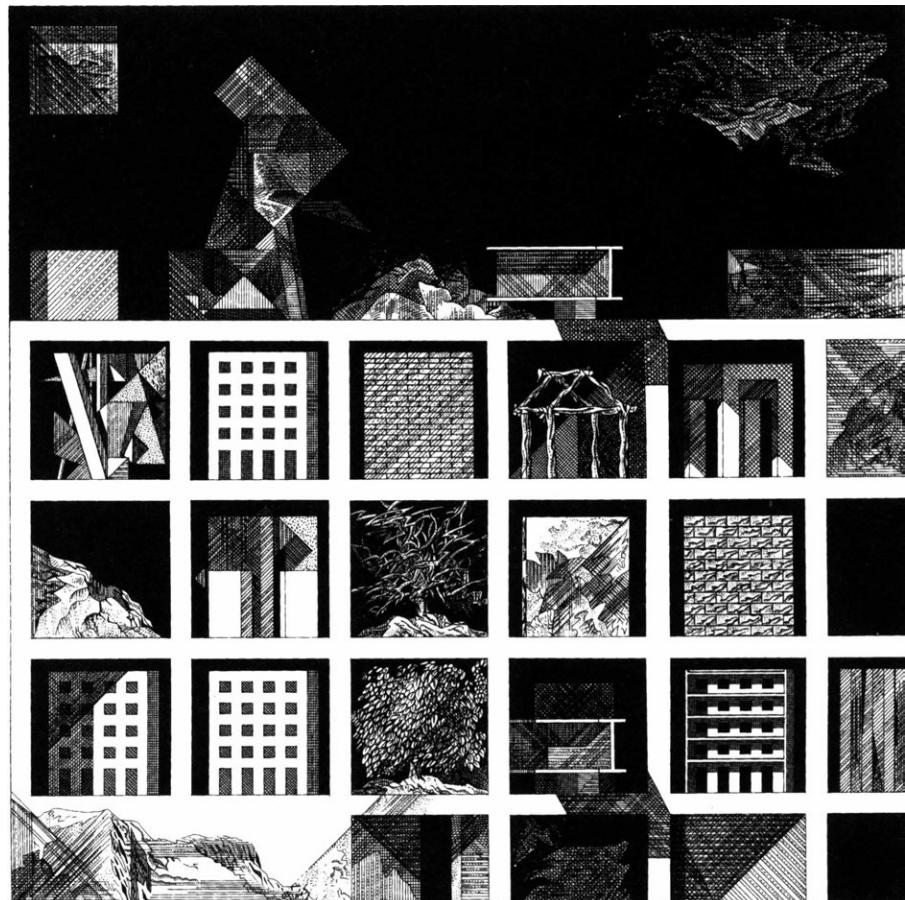


FIG. APP.1.74 Franco Purini, *Elencare* [Indexing], from the drawing series 'Come si agisce. Dentro l'architettura' [How to act. Inside architecture] (1993)

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Curriculum vitae

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2004-Present

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Since April 2004, 0.6 FTE; since September 2011, 0.8 FTE

Researcher, PhD candidate, graduation studio mentor, instructor, coordinator, committee member

Teaching activities (recent)

Designing for Ecosystems in Transition: Venice Lagoon (2025)

Elective course Experiments in Drawing Theory: Giovanni Battista Piranesi (2025)

Elective course Experiments in Drawing Theory: Franco Purini (2025)

Graduation Studio: Transient Liquidities along the New Silk Road #5:

Chongqing (2024-2025)

MSc2 International Design Studio: Venice Lagoon (2025)

Coordination

Education coordinator section *Theories, Territories, Transitions*,

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Additional Academic Experience

2023-Present

Academy of Architecture, Amsterdam Academy of the Arts, Amsterdam, NL

Instructor AUL P6 Studio spring semester

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Visiting Scholar, School of Architecture, CUHK, Hong Kong, SAR
Architectural design studio and seminar instructor

2012-2016

The Berlage, Delft, NL
Seminar instructor, thesis advisor, and guest critic

2009-2012

Visiting Scholar at the Faculty of Architecture, University of Cagliari, IT
Architectural design studio instructor, participation in PhD research colloquia

Architectural Professional Experience

2014-2019

Studio Razionale, Rotterdam
Founder, architect

2005-2011

UFO Architects, Delft
Co-founder, architect

2006

10th Venice Architecture Biennale, Venice
Invited architect

2001-2005

Nio Architecten, Rotterdam
Project architect

Selected Publications

Stefano Milani, 'Herbeschrijvingen/Re-descriptions', in *OverHolland* nos. 18/19 (Amsterdam: Vantilt, 2017), 188-197.

Stefano Milani, 'Notes on Dogma's Projects/Aantekeningen bij het project van Dogma', in *OverHolland* nos.14/15, (Amsterdam: Uitgeverij Vantilt, 2014), 73-91.

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Stefano Milani, 'The New Ductus. A Reflection on Manfred Mohr Drawings', in: Michiel Riedijk ed., *Architecture as a Craft* (Amsterdam: SUN Uitgeverij, 2011), 141-157.

Filip Geerts, and Stefano Milani, 'Empty Whole' in: *OverHolland* no.10 (Amsterdam: Sun Uitgeverij, 2009), 31-51.

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Stefano Milani, 'Empty Whole' in Franco Purini, Livio Sacchi, Nicola Marzot eds., *The new city Italia-y-26: welcome to Vema. The italian pavilion at the 10th International architecture exhibition* (Bologna: Editrice Compositori, 2006), 178-185.

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Education

1991-2000

Master of Science, IUAV Istituto Universitario di Architettura Venice, IT
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2001

Archsho(w)p – Postgraduate Master Course in Design and Management for the "New Economy", San Donà di Piave, IT

1986-1991

G. Boaga Highschool, Padua, IT

Language Skills

Italian: native proficiency

English: full professional proficiency

French: professional working proficiency

Dutch: elementary proficiency

Franco Purini

The Drawing of Architecture and the Architecture of Drawing

Stefano Milani

This doctoral research investigates Franco Purini's work 'Una ipotesi di architettura' (1966–1968), examining it as both a foundational architectural inquiry and a hypothesis on drawing. Through a detailed analysis of Purini's research, the dissertation develops the concept of an "architecture of drawing"—a critical framework in which drawing is not merely a representational tool but a form of architectural thought and theoretical investigation. Central to this work is the assertion that architectural drawing is inherently double: it generates and questions architectural meaning. This dual role reflects the tension within Purini's method, in which drawing serves as both a tool and a conceptual field for dismantling the systems it constructs. The dissertation further explores how Purini's grammar-based architectural language emphasises the autonomy and poetics of drawing. The investigation revolves around visual analysis and analytical drawings whose findings have been applied to reinterpreting a series of Purini's projects. Finally, the thesis posits that the structure underlying the "architecture of drawing" is paratactical, enabling drawing to function as an open-ended form of architectural inquiry. Consequently, drawing can both reinforce and resist conventional design logic—a capacity that lies at the heart of its ongoing relevance and poetic potential in architectural practice. In summary, this research not only repositions 'Una ipotesi di architettura' as a critical episode in contemporary architectural thought but also affirms drawing as a mode of theoretical production. It establishes the architecture of drawing as both a methodological tool and a conceptual framework through which architecture itself can be reimaged.