

# Oswald Mathias Ungers and Sol LeWitt. Variations

*One of the fundamentals of Oswald Mathias Ungers work is the definition of a new unity between art and architecture. What this investigation is focused on is the identification of the intersection point between art and architecture, considering the project for the Entrance to the Kaiserthermen in Trier (2003-2007) as case study, revealing the system of theoretical, methodological and compositional correspondences. Plastic art is Ungers' main interlocutor: one of the author's most important references is Sol LeWitt (1928-2007), an artist he admired and collected. Setting the work of Oswald Mathias Unger and Sol LeWitt side by side, offers the opportunity to underline the shared interpretation that the two authors have of the world of forms postulated by Henri Focillon (1881-1943) in *Life of Forms*, according to which form, autonomous with respect to time and place, has its own universe, governed by its own laws, space and matter. According to these premises, we propose to read Trier's building through the instruments of art, following the hypothesis that in this project art embodies a creative and positive component in the definition of architecture, a cultural stimulus that guides the author in the design process.*

**Keywords:** Art, Architecture, Form, Oswald Mathias Ungers, Sol LeWitt

## Introduction

It was 1999 when Ungers, in the introduction to the catalogue of his exhibition *Zwischenräume* held in Düsseldorf, exhibited his interpretation of the relationship between art and architecture. In a world made of palimpsests he sees art and architecture that support and overlap each other: "Art lies in architecture and in art there are elements of architecture. Layer by layer, one approaches the other. Between the spaces of architecture, art becomes visible and the space of architecture is born from art"<sup>1</sup>. In these years Ungers' visions on architecture, matured on the basis of reflections dating back to the eighties<sup>2</sup>, are aimed at building a compositional process in which art is an active component in the project. It is a process that is structured by tangencies, *interstitial spaces* and variations in a system of relationships that combines art and architecture. A few

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<sup>1</sup>Ungers, O. M. (1999) *Zwischenräume*, in A. Sieber - Albers, O.M. Ungers, (ed), *O. M. Ungers: Zwischenräume*. Hatje Cantz Verlag, Ostfildern-Ruit, 7

<sup>2</sup>From the beginning of the 1980s Ungers expressed his conception of architecture as art, especially when in 1981 he staged the exhibition *Westkunst* in which he began his investigation of the relationship between art and architecture. Since then, Ungers has concentrated on a series of exhibitions in which this theme plays an important role: in 1985 he exhibited at the Kunstverein in Cologne, in 1987 he took part in Kassel's *documenta 8* and organizes the Tilmann Buddensieg's exhibition in *Berlin 1900-1933. Architektur und Design*. In 1990 he exhibited in the Galerie Max Hetzler in Cologne a series of sculptures with the theme *Kubus*, with Günther Förg (1952)

years later he realized his last project for Trier<sup>3</sup>, the entrance to the Kaiserthermen (2003-2007) which represents the synthesis between art and architecture translated into a built building. The silent character of the opera, its calibrated dimension and the clear formal structure make the reading of this last project by the author an opportunity to identify the relationships that link the structure of the Ungers building to the experiences of contemporary art.

These considerations on the system of mechanisms that is substantiated by the combination of art and architecture in the work of Oswald Mathias Ungers founded the premises in the deep interest that the author has for art, an obvious interest if you look at his personal art collection, started in the early 1950s<sup>4</sup>. It is a collection to be interpreted as an idea and the explanation of this idea must be sought in the relationship that exists between the works of art owned by Ungers and his architecture, a relationship that feeds on analogies, similarities and overlaps, configuring a system similar to a palimpsest. It is through the study of the elements that make up this collection that it is possible to document the affinities between Ungers and art<sup>5</sup>: the works are the basis of its architecture. Ungers sees in this interweaving with contemporary art the foundation on which to structure a new unity between art and architecture. The project for Trier allows to understand the way in which art and architecture are based in the project, through not only a reading of the formal affinities between the structure of the project and the work of art, but also through a recognition of theoretical correspondences, methodological and compositive underlying the work of architecture and the work of art. According to these premises, it is proposed to read the building of Trier through the tools of art, according to the hypothesis that in this project art embodies a *creative* and *positive* component in the definition of architecture, a cultural stimulus that guides the author in the design process.

In 2007 Ungers completed the construction of the entrance building to the Kaiserthermen, a project that defines the limit of the archaeological space in a part of the city characterized by a large urban green void: the park of the Prince's Palace. The project consists of a single element which is a linear, regular and modular building. This one is a long block that defines the northern boundary of the archaeological area of the Kaiserthermen, returning the value of the size of the Roman monument, while integrating the archaeological complex in the current urban fabric<sup>6</sup>.

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<sup>3</sup>In this city, which the author defines as his adopted city, Ungers has the opportunity to build three projects over about thirty years of activity. Between 1988 and 1996 he experimented with the theme of covering excavations in which he was confronted with the presence of the history and the current configuration of the city. His project experience in Trier began in 1981, with the installation of the Konstantinplatz, finished in 1983, a project to recomposition the archaeological memory of the place

<sup>4</sup>D'Alessandro, M. (October 2022) *OMU at Belvederestrasse. Self-portrait in the studio*, in *Athens Journal of Architecture* - Volume 8, Issue 4, 405-438.

<sup>5</sup>Lepik, A. (ed) (2006): *O. M. Ungers. Cosmos of Architecture*. Ostfildern: Hatje Cantz.

<sup>6</sup>On Treviri's project: D'Alessandro, M. (2015) *Oswald Mathias Ungers a Treviri. Due musei*, Bologna, Bononia University Press.

What this survey deals with is the identification of the point of contact between art and architecture, considering as the main object of the speech the project for the entrance to the Kaiserthermen of Trier. The compositional principle of transformation, which is at the basis of the architectural choices of the project and which is true in the construction of a morphological sequence, takes on unexpected connotations and deeper meanings if observed through the tools of art. In this project, the study of form expresses all possible variations and combinations of the *cube* shape. Plastic art becomes Ungers' main interlocutor: one of the most important references for the author is Sol LeWitt (1928-2007), an artist admired and collected by OMU.

After tracing a brief review of the contributions on the subject in the second part *Literature Review*, in the third part of the contribution, he entitled *Architecture as Transformation: the Entrance to the Kaiserthermen in Trier*, the aim is to describe the significance of the principle of transformation in the cultural context of Ungers' architecture and, specifically, in the project for the new entrance to the Kaiserthermen in Trier. In the fourth part, *The research about analogy between art and architecture*, the contribution traces the system of formal, compositional and theoretical contamination between Ungers's project and LeWitt's *Variations of Incomplete Open Cubes*. In Conclusions, the aspects that make Ungers and LeWitt's research on form parallel are highlighted, offering the tools for an unprecedented reading of the two figures through the critical comparison between the two works considered as case studies.

## Literature Review

Ungers' architectural endeavors have captured the attention of critics who have delved into his work, both in its physical form and its conceptual underpinnings, over the past few decades. This growing interest has led to numerous publications, both in Germany and internationally, that aim to explore the value of Ungers' architecture from diverse perspectives. These publications encompass monographs, focused studies on specific built projects, and critical essays featured in esteemed European architectural magazines, offering a comprehensive analysis of the wide range of buildings conceived by the architect. This extensive research encompasses various themes central to OMU's architectural poetics. Critics have scrutinized his cultural and architectural education, his contemplations on urban design and the city, the theoretical framework underlying his architecture, as well as its form, language, and content. These aspects have been dissected, examined, and interpreted by scholars and critics, contributing to a nuanced understanding of Ungers' architectural exploration<sup>7</sup>. The investigation into the relationship between art and architecture

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<sup>7</sup>Jasper Ceppl's biography not only accomplishes the enormous feat of completing the bibliography on the author, but also reveals another important point of view from which to view the figure of

1 in Ungers' oeuvre has been particularly noteworthy. It has been explored through  
 2 insightful contributions that shed light on his personal collection of artworks and  
 3 rare books. Notable essays include "Eine Privatbibliothek in Köln-Müngersdorf"<sup>8</sup>  
 4 (1991), "The Visit to the Architect's House"<sup>9</sup> (2006), "Ungers and His Books"<sup>10</sup>  
 5 (2006), "The Collection of Architectural Models"<sup>11</sup> (2006), and the catalog "O. M.  
 6 Ungers: Kosmos der Architektur"<sup>12</sup> (2006), which presented the entirety of the  
 7 works from Ungers' collection during a retrospective exhibition at the Neue  
 8 National Galerie in Berlin in 2006. Furthermore, a series of publications have  
 9 explored the theme of collaboration between architects and artists in the  
 10 composition of architectural projects. Notable examples include the catalog  
 11 "Oswald Mathias Ungers, Gerhard Richter, Sol LeWitt"<sup>13</sup> (1991) focusing on the  
 12 Hypo-Bank project in Düsseldorf (1988), the essay "Dach des Wissens"<sup>14</sup> (1992)  
 13 discussing the Badische Landesbibliothek in Karlsruhe (1980-1991), and the essay  
 14 "Kunst"<sup>15</sup> (1995) examining the project for the German Ambassador's Residence  
 15 in Washington D.C. (1982-1995). In Martin Kieren's essay, "Konstellationen-  
 16 Monologe"<sup>16</sup> (2009), an intriguing reflection is presented on the surrealist elements  
 17 within Ungers' work, adding another layer of interpretation to his architectural  
 18 endeavors<sup>17</sup>.  
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Ungers. Cepl, J. (2007), *Oswald Mathias Ungers. Eine intellektuelle Biographie*, Cologne, Walther König.

<sup>8</sup>Strothoff, W. (April 1991) *Eine Privatbibliothek in Köln-Müngersdorf*, *Bauwelt*, no. 16, 830-833.

<sup>9</sup>Tasch, S. (2006) *The Visit to the Architect's House. The Art Collection of Oswald Mathias Ungers*, in A. Lepik (ed), *O. M. Ungers. Cosmos of Architecture*, Ostfildern, Hatje Cantz, 18-29.

<sup>10</sup>Cepl, J. (2006) *Ungers and His Books. The library as a Collection of Ideas*, in A. Lepik (ed), *O. M. Ungers. Cosmos of Architecture*, Ostfildern, Hatje Cantz, 30-39.

<sup>11</sup>Elser, O. (2006) *The Collection of Architectural Models, Based on His Own and Historical Designs*, in A. Lepik (ed), *O. M. Ungers. Cosmos of Architecture*, Ostfildern, Hatje Cantz, 40-53.

<sup>12</sup>Ungers, O.M. (2006) *Ungers Archive für Architekturwissenschaft, Kosmos der Architektur*, Die Qualitaner, Düsseldorf

<sup>13</sup>Hegewisch, K. (1991) *Oswald Mathias Ungers, Gerhard Richter, Sol LeWitt*, Hypobank, Düsseldorf.

<sup>14</sup>Smolik, N. (1992) *Dach des Wissens*, in *Die Badische Landesbibliothek Karlsruhe. Eine Projekt der Staatlichen Hochbauverwaltung*, ed. Finanzministerium Baden-Württemberg, Stuttgart, Verlag Gerd Hatje, 52-61.

<sup>15</sup>Ungers, S. (1995) *Kunst/Art*, in *Deutsche Botschaft Washington, Neubau der Residenz—German embassy Washington, the new residence*, Oswald Mathias Ungers (ed), Stuttgart, Gerd Hatje, 41-55.

<sup>16</sup>Kieren, M. (2009) *Konstellationen-Monologe. O. M. Ungers rationale Versuche, falschen Problemstellungen aus dem Weg zu gehen/Confirgurazioni-Monologhi. Rational attempts of O. M. Ungers to avoid a wrong formulation of the problems*, in *Die Idee der Stadt/Idea of the city*, in U. Schröder, Tübingen-Berlin, Ernst Wasmuth Verlag, 14-53.

<sup>17</sup> On the relationship between art and architecture in Ungers' work, the author has published several contributions, including D'Alessandro, M. (2011) *O.M. Ungers: la sinestesia tra arte e architettura. Il progetto per le Kaiserthermen di Trier*, in *Il progetto di architettura fra didattica e ricerca*, C. D'Amato (ed), Bari, Polibapress/Arti grafiche Favia, 361-370; D'Alessandro, M. (2010) *Architettura come opera d'arte. Arte e architettura nell'opera di Oswald Mathias Ungers*, in A. Trentin (ed), *OMU/AR. Un laboratorio didattico*, Bologne, Clueb, 82-89.

## 1 **Architecture as Transformation: the Entrance to the Kaiserthermen in Trier**

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3 The concept of transformation, closely linked to that of variation,  
4 metamorphosis and morphology, indicates, in general, a deep interest in the study  
5 of form in its modifications. This concept is present in the history of all disciplines,  
6 from art, literature and philosophy to architecture. Ungers looks at the design  
7 process as a morphological transformation, in which the questions of function,  
8 program and technique are placed in the background, while the importance of the  
9 shape of an element and its continuous transformation is highlighted. Ungers  
10 writes: “If, for example, we mean design, the design process, as pure technique,  
11 then the results will be pragmatic functionalism or mathematical formulas. If the  
12 design is exclusively the expression of psychological experiences and attempts,  
13 then only emotional values count, and design is a religious substitute. But if  
14 physical reality is conceptually understood and understood as an analogy of our  
15 imagination and this reality, then we will follow a morphological design concept  
16 and transform the facts into phenomena that like all real concepts can be extended  
17 or condensed. They can be seen as polarities that contradict or complement each  
18 other simultaneously and mutually, and that as pure concepts rest on themselves as  
19 a work of art. For this reason we can say that if we observe physical phenomena in  
20 the morphological sense as figures in their metamorphosis, then we are able to  
21 develop our knowledge even without machines and apparatuses. This imaginative  
22 process of thought finds application in all the intellectual and spiritual spheres of  
23 human activities even if the way of proceeding in the different spheres can be  
24 different. It is always the same fundamental process of the conceptualization of an  
25 independent reality, different and therefore never equal, through the multiple use  
26 of representations, images, metaphors, analogies, models, signs, symbols and  
27 allegories”<sup>18</sup>.

28 The transformation implies a mutation traced in relation to a previous  
29 condition, a antecedent representing the figure in relation to which the successive  
30 variations are determined. In this sense, the question of continuity is closely linked  
31 to transformation: that is, by changing the shape of an object, there is no  
32 interruption of meaning but a modification that takes into account the structure  
33 from which it moves, according to a continuous process. The transformation is  
34 therefore linked to the concept of morphology, defining the process that describes  
35 not so much what it *is* but *what it becomes*, thus identifying the wide range of  
36 possibilities of morphological transformations of the elements.

37 Ungers' approach to morphology translates into a design method for a series  
38 of alternatives, not interpreted as programmatic attempts or dictated by purely  
39 functional issues, but rather based on the infinite variety of transformation and  
40 metamorphosis of forms and elements. This meaning of morphological  
41 transformation, of obvious Goethean matrix, implies not only that there are myriad

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<sup>18</sup>Ungers, O. M. (1982) *Designing and Thinking in Images, Metaphors and Analogies*, in H. Hollein (ed), *MAN transFORMS: An International Exhibition on Aspects of Design*. New York: Cooper-Hewitt Museum, Smithsonian Institution, 96-113.

1 solutions to a problem but also, and above all, that the solution is included in a  
 2 general process of transformation. This question, central to the author's work,  
 3 implies a passage to a higher level of metaphorical meaning, through a reading of  
 4 reality that does not focus on the form in which things appear but is directed  
 5 towards the interpretation of the elements in a continuous process of modification.  
 6 Ungers' work focuses on this theme in the initial part of his activity, since the  
 7 sixties, when he outlined an architecture based on morphology and transformation.  
 8 In this sense, architecture is an act of experimentation that seeks the idea of  
 9 exploring the elements, investigating the possible variations and transformations of  
 10 form, an architecture open to possible combinations of elements. This idea of  
 11 mutation also derives from the study that Ungers dedicates to Villa Adriana, which  
 12 he defines as the architecture of collective memory<sup>19</sup>: a compositional system  
 13 intended as a moment of pure experimentation in which the types, Fragments of  
 14 Hadrian's memory are continuously interpreted morphologically and transformed  
 15 into new elements.

16 "I certainly remember a journey made explicitly to see Villa Adriana and  
 17 nothing else. I spent two days in the villa and then I immediately returned to  
 18 Germany and if I look at my work and in particular at the work of the sixties we  
 19 see what was the influence of Villa Adriana and the classical architecture of Rome  
 20 such as the space of the Pantheon"<sup>20</sup>.

21 The author's interest in an architecture understood as a *continuum* of forms is  
 22 a constant element of his entire work, although with characters and themes that  
 23 over time have partially changed. Since the beginning of the Sixties Ungers began  
 24 its path towards an architecture as *assembly* of forms. A great influence was  
 25 certainly Villa Adriana that can be clearly traced in the projects for large urban  
 26 complexes, elaborated in those years (Figure 1). Ungers writes: "Adriano's villa-  
 27 idea, built in his ideal villa, is the starting point of the metric space towards the  
 28 visionary space of coherent systems, from the concept of homology, concept of  
 29 simplicity, towards the concept of morphology, concept of complexity. Therefore  
 30 the villa represents a model of formation and transformation of thoughts, facts,  
 31 objects or conditions as they occur in a continuum of time. Reality is seen in a  
 32 morphological sense, physical phenomena perceived as "Gestalten" in their  
 33 metamorphosis. This speculative process is basically an imaginative process of  
 34 conceptualization, a different and unrelated reality through the use of images,  
 35 analogies, symbols and metaphors"<sup>21</sup>.

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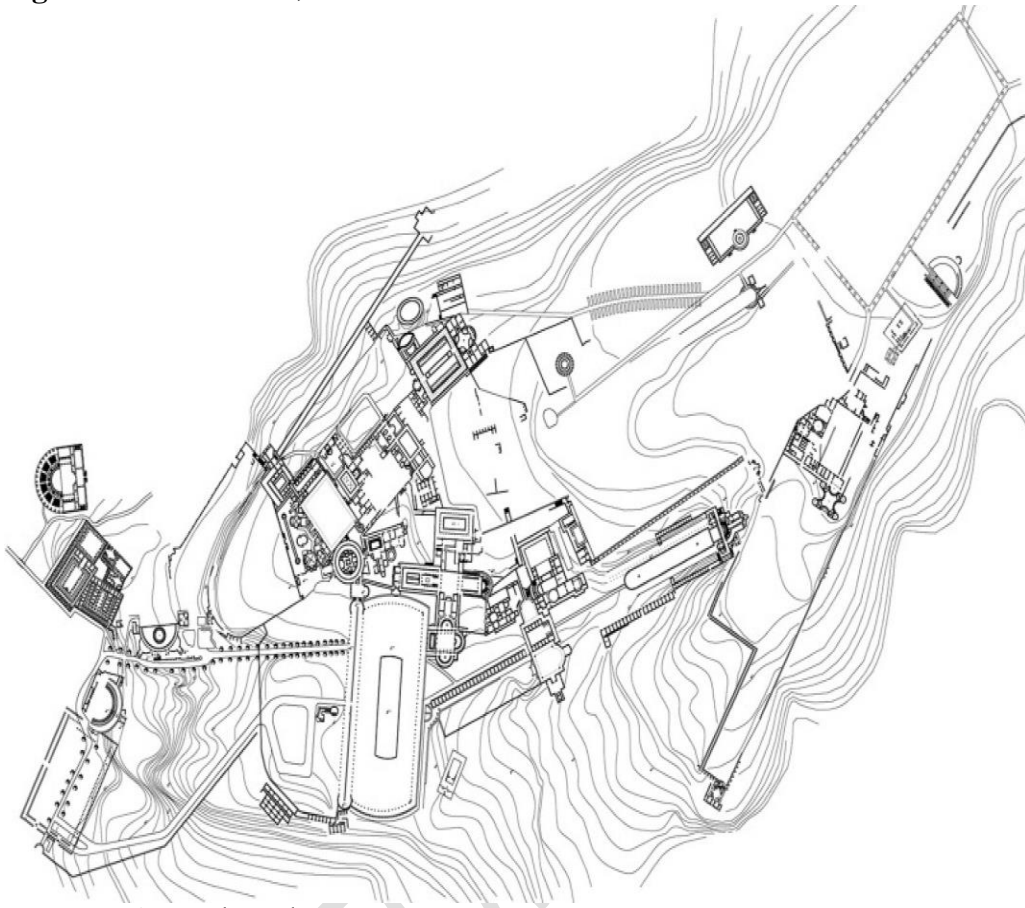
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<sup>19</sup>Ungers, O.M. (1979), *L'architettura della memoria collettiva. L'infinito catalogo delle forme urbane*, in *Lotus international* n° 24, 4-11.

<sup>20</sup>Trentin, A. (2004), *Oswald Mathias Ungers. A proposito dell'idea costruita. Conversazione con Annalisa Trentin*, in A. Trentin (ed), *Oswald Mathias Ungers: una scuola*, Milano, Electa, p. 53.

<sup>21</sup>Ungers, O.M. (1979) *La memoria collettiva*, in *Lotus international*, n° 24, 6-9.

1 **Figure 1.** *Villa Adriana, General Plan*



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3 Source: Martina D'Alessandro, 2021  
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5 The plan of Villa Adriana is analyzed, broken down and reinvented in the  
6 plan for the home of the student TH Twente in Enschede (1964), in the project for  
7 the German Embassy in the Vatican (1965) and in the Prussian Heritage Museum  
8 in Berlin (1965). They are projects in which Ungers begins to investigate all  
9 possible variations and combinations of elements deriving from simple geometric  
10 shapes, composing the individual parts in a new morphological *montage*.

11 In the seventies the interest in morphology led the author to experiment with  
12 its potential as a criterion of composition for the architectural project. The concept  
13 on which the projects are based is that of variation in a morphological continuity.  
14 The scale of the project decreases compared to the examples of plans for  
15 "miniature cities" elaborated mainly in the previous decade, and Ungers proves to  
16 be able to experiment and control with great sensitivity the idea of transformation  
17 in the architectural project.

18 One of the unfinished projects that expresses these themes is the Morsbroich  
19 Castle Museum in Leverkusen (1976-1980). The Leverkusen building-enclosure  
20 bases the project idea on the linear and constant repetition of square modular  
21 elements, variously interpreted, which forms a long and articulated morphological  
22 sequence. The central theme is the idea of continuous wall interpreted and  
23 transformed according to a gradual morphological sequence: it starts from the



1 closed and compact module and reaches the maximum degree of transparency and  
 2 integration with nature through pergolas and tree sequences. Starting from a single  
 3 architectural element, the wall, all the possibilities, variations and expressive  
 4 richness of the theme are explored in a unique system, in which each element  
 5 maintains its own identity and recognizability. In the same period, Ungers  
 6 concentrated his research on the principle of transformation as a compositional  
 7 criterion, elaborating the project for a residential complex in Ritterstrasse in  
 8 Marburg (1976). It takes as its central theme the single-family house: also in this  
 9 case, as in the example of Leverkusen, the starting point is the identification of a  
 10 simple modular structure, consisting of elementary units, sized according to a  
 11 constant module of 6.5 meters side. The individual parts are transformed into a  
 12 sequence that characterizes and differentiates each housing unit through the  
 13 geometric division of volumes and spaces and the plastic modeling of the masses.  
 14 This principle of transformation allows to deepen the research on the theme of the  
 15 project experimenting with the different possible solutions, even within an overall  
 16 unitary project. The research on transformation exploded in the eighties in a rich  
 17 production of critical and theoretical texts that summarizes the author's propensity  
 18 to observe reality through eyes that can see the process of becoming of things,  
 19 beyond the outward appearances. The analog and metaphorical process now  
 20 becomes the object of greatest interest for Ungers, a process that sets in motion  
 21 and substantiates the entire design mechanism of its architecture. In the famous  
 22 *Morphologie. City Metaphors*<sup>22</sup> (1982) the visions of cities presented take on  
 23 *another* meaning, morphologically transformed, thanks to this new metaphorical  
 24 dimension, which educates the eye to *see architecturally*, to know how to  
 25 recognize the structure, the space, the concept and the transformation behind  
 26 things. In the same year Ungers published another text of great importance,  
 27 *Architettura come tema*<sup>23</sup>.

28 In this paper Ungers explains the need for architecture to be closely linked to  
 29 a specific theme and comments on some of his projects classifying them with  
 30 respect to the recurring themes of the project, such as transformation, assembly,  
 31 incorporation, assimilation and imagination. From this retrospective reading of the  
 32 author's work emerges precisely the ethical foundation of Ungers' architecture, his  
 33 effort to root the architecture project to a theme, refer it to a theory and not make it  
 34 float in the currents of fashions: the theme becomes the foundation of the project,  
 35 the precedent of the project. The concept of transformation in this paper is  
 36 investigated not so much as an idea underlying the meaning of architecture as  
 37 rather as an architectural theme. Following a more careful reading and verification  
 38 of the contents of the text in the projects selected in the book, however, a  
 39 clarification must be made: the transformation is not reduced to being a specific  
 40 project theme, because it is also applied in other assembly or incorporation  
 41 projects, which therefore refer to different themes. The transformation, according

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<sup>22</sup>Ungers, O. M. (1982), *Morphologie. City Metaphors*, Verlag der Buchhandlung Walter König, Colonia.

<sup>23</sup>Ungers, O. M. (1982), *Architettura come tema*, Electa, Milano.



1 to the hypotheses formulated here, must be read on a higher level of meaning, as a  
 2 general compositional principle of making architecture, applicable to different  
 3 contexts and themes.

4 Experimenting with form in its deepest semiotic dimension highlights the  
 5 difficulty that Ungers encounters in dealing with the more pragmatic aspects of  
 6 reality. In addition to expressing a theme, the metamorphosis of form, the author  
 7 must solve the issues related to function, utility, construction and economy. The  
 8 obvious difficulties of translating literally the principles of form and its  
 9 transformations in the project of architecture are partly eluded when between the  
 10 eighties and nineties Ungers curates some exhibitions dedicated to his work, in  
 11 which he manages to express, with greater freedom and rigour, the meaning of his  
 12 research.

13 In two of the many exhibitions of those years it seems that Ungers has set  
 14 itself the goal of radicalizing the themes of variation on the shape of the cube and  
 15 the relationship that the form has with the surrounding space. In 1985 he held in  
 16 Cologne the exhibition *Sieben Variationen der Raumes über die Sieben Leuchter der Baukunst von John Ruskin*<sup>24</sup>. The exhibition hall of the Kunstverein in Cologne,  
 18 a regular and elongated environment, is transformed into a space of  
 19 experimentation that combines, in a complex unity, the uniqueness of the place  
 20 and the universal validity of the form in its variations (Figure 2). Ungers, to  
 21 present his work through original drawings, sketches and models, divides the  
 22 narrow and long exhibition space of the room according to the structural scan of  
 23 the space, inserting seven elements, equal in size and placed in sequence according  
 24 to a pressing rhythm<sup>25</sup>. There are seven exhibition installations that, themed with  
 25 respect to the different contents of the collection of architectures, are structured  
 26 inside according to different spatial devices while, externally, they show  
 27 themselves as equal fences that can be accessed through small openings.

28 The square shape of the exhibition environment can therefore be interpreted  
 29 as shell, labyrinth, gallery, octagonal hall, *poché*, element and *enfilade*<sup>26</sup>. In these  
 30 seven spaces, a tribute to *The Seven Lamps of Architecture* (1849) by John Ruskin  
 31 (1819-1900), which represent the scenario in which the author's architecture is  
 32 divided and presented in seven chapters, Ungers has the opportunity to reify his  
 33 search for an architecture that, in tension between form and place, can visualize the  
 34 dynamic process of transformation of the basic modular form. He then develops an

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<sup>24</sup>The exhibition *Sieben Variationen der Raumes über die Sieben Leuchter der Baukunst von John Ruskin*, was inaugurated on 21 June 1985 at the Kunstverein in Cologne. On the occasion of the exhibition two separate catalogues were published, one specific on the exhibition (Ungers, O. M. (1985) *O. M. Ungers Sieben Variationen der Raumes über die Sieben Leuchter der Baukunst von John Ruskin*, Stocarda, Verlag Gerd Hatje) and a monographic volume on the first thirty-five years of Ungers architecture (Klotz, H (ed)(1985), *O. M. Ungers 1951-1984: Bauten und Projekte*, Friedrich Vieweg & Sohn, Braunschweig-Wiesbaden).

<sup>25</sup>Noebel, W. A. (1985) *Sette volte sette. Una mostra e un libro di O. M. Ungers*, in *Casabella* n°517, 34.

<sup>26</sup>In the original text the space variations are called as: "die Schale, das Labyrinth, die Galerie, die Enfilade, das Element, das Poché, das Oktagon".

1 exhibition architecture in an artistic space, basing it on the same clarity and  
 2 dialectical principle that nourishes its architecture. Five years later he inaugurated,  
 3 again in Cologne, the *Kubus* exhibition<sup>27</sup> in which he continues this research on  
 4 the theme of the variation and transformation of the basic shape of the square and  
 5 the cube that becomes the theme of the exhibition (Figure 3). The investigation of  
 6 reality is therefore carried out through the process of formation and transformation  
 7 of forms, specifically the cube, and this will mark the direction of Ungersian  
 8 research on architecture towards the dimension of art.

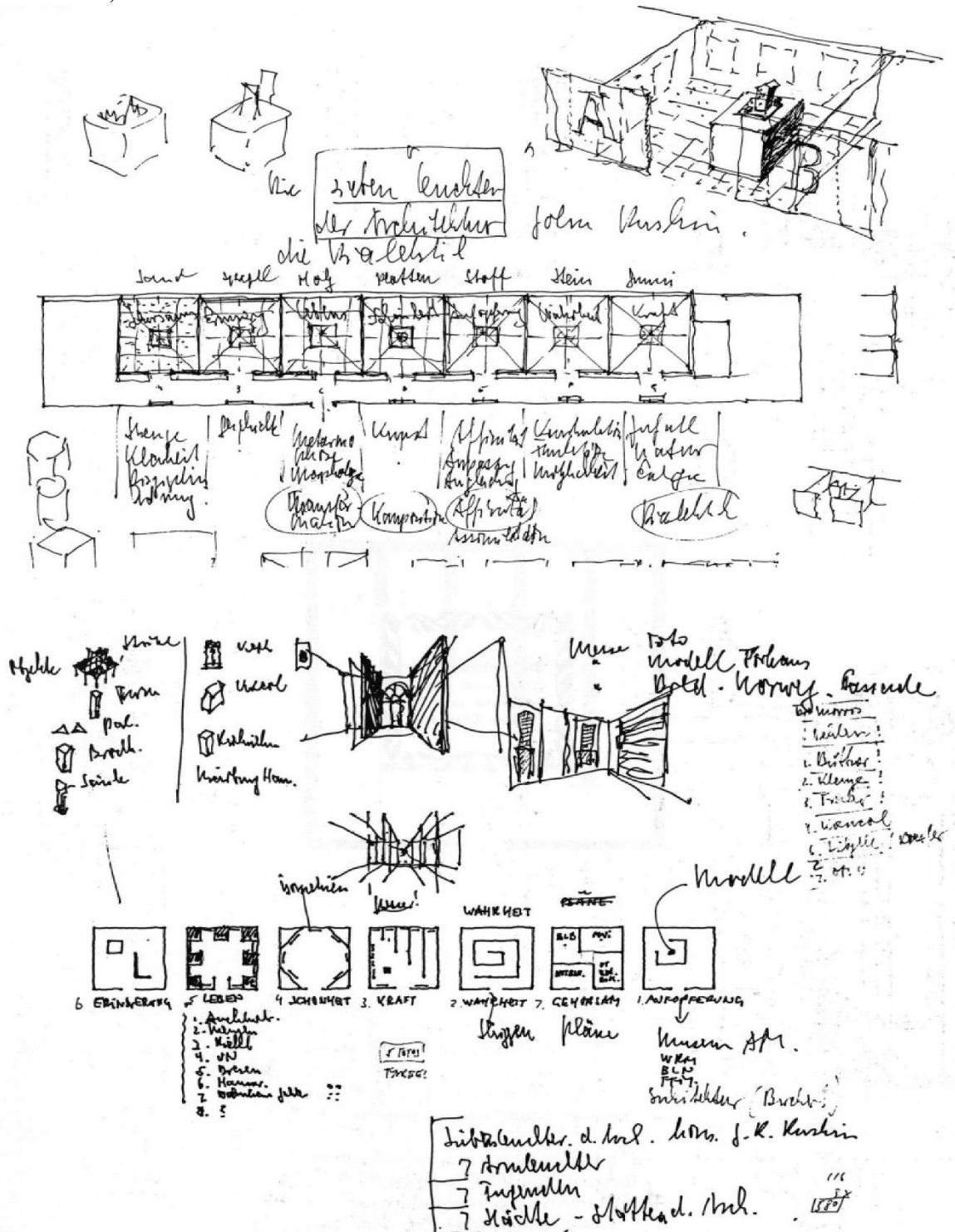
9 Precisely this constant return of the same element variously interpreted  
 10 represents the basic principle of making architecture for Ungers. The compositional  
 11 principle of morphological transformation, taken through the teaching of  
 12 architecture in history, is, as we have seen, documented and deepened in many of  
 13 Ungers' projects: its rigorous and radical application in the last project of the  
 14 author represents the possibility of building understood as the result of a research  
 15 on the same theme that lasted a lifetime.

16 The new entrance to the Kaiserthermen represents a radical experimentation  
 17 of the principle of transformation into architecture that Ungers has the opportunity  
 18 to apply for the first time in a built work, in an extremely legible way.  
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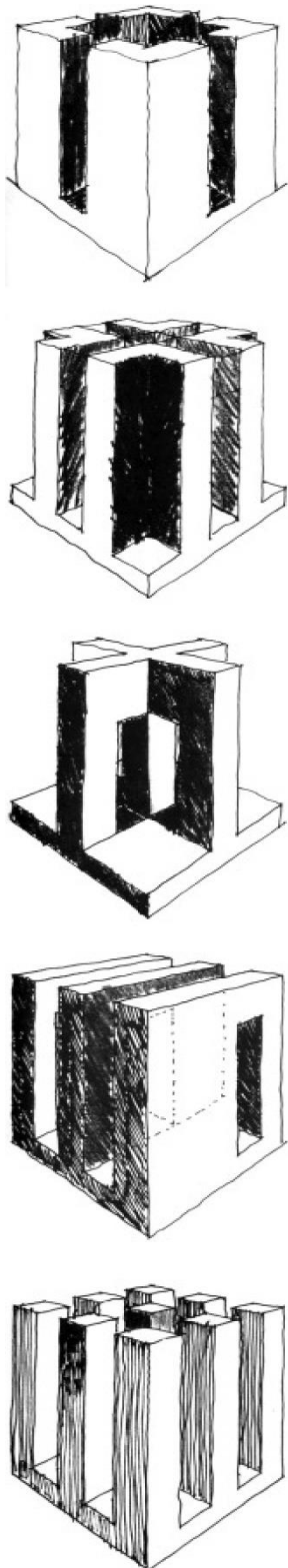
<sup>27</sup>The exhibition, entitled *Ungers-Kubus*, was inaugurated in June 1990 at the Max Hetzler Gallery in Cologne. On the occasion of the exhibition was published the catalogue Günther Förg, *O. M. Ungers. Kubus*.

1 **Figure 2.** Oswald Mathias Ungers, *studies for exhibition design Sieben*  
2 *Variationen der Raumes über die Sieben Leuchter der Baukunst von John Ruskin,*  
3 *Kunstverein, Colonia 1985.*



Source: Oswald Mathias Ungers, *Sieben Variationen des Raumes ueber die Sieben Leuchter der Bauder Baukunst von John Ruskin*, Gerd Hatje, Stuttgart 1985.

1 **Figure 3.** Oswald Mathias Ungers, study sketch for the exhibition Kubus, Cologne  
2 1990



3  
4 Source: Oswald Mathias Ungers, *Zehn Kapitel über Architektur. Ein Visueller Traktat*, DuMont Verlag,  
5 Colonia 1999, pp. 125-133.

The new entrance to the Kaiserthermen thus represents an architecture understood as pure *transformation*. In an interview, Ungers comments on the building, saying: “On this idea of transformation [...] I have always tried to transform one thing into another. Now in Trier, for the first time, I can build this idea of transformation where the same line of the building becomes a portico, becomes a street of trees, becomes just a column and passes through the different degrees of transformation”<sup>28</sup>.

What emerges from this diachronic interpretation of the search for transformation in Ungers' architecture is the permanence and fixity of his work on specific themes, attributable to the deep meaning of architecture. Looking at the overall work of the author we see that over time his interest in the value of form has followed a development that has led him, in recent decades, towards an abstract architecture. This return in the last project to the concepts of morphology and transformation does not, in our opinion, constitute a loss of coherence, much less a rethinking or an illogical trend of his research. Indeed, it is interpreted as a confirmation of the constancy with which Ungers brings every project to the essence of architecture, to the theme. See in this way, transformation into architecture means nothing more than the continuous fixity on the internal forces of architecture that, although varied, combined, transformed or represented in the most abstract form, always remain at the center of his making and thinking architecture.

### **The Search of the *Analogy* between Art and Architecture**

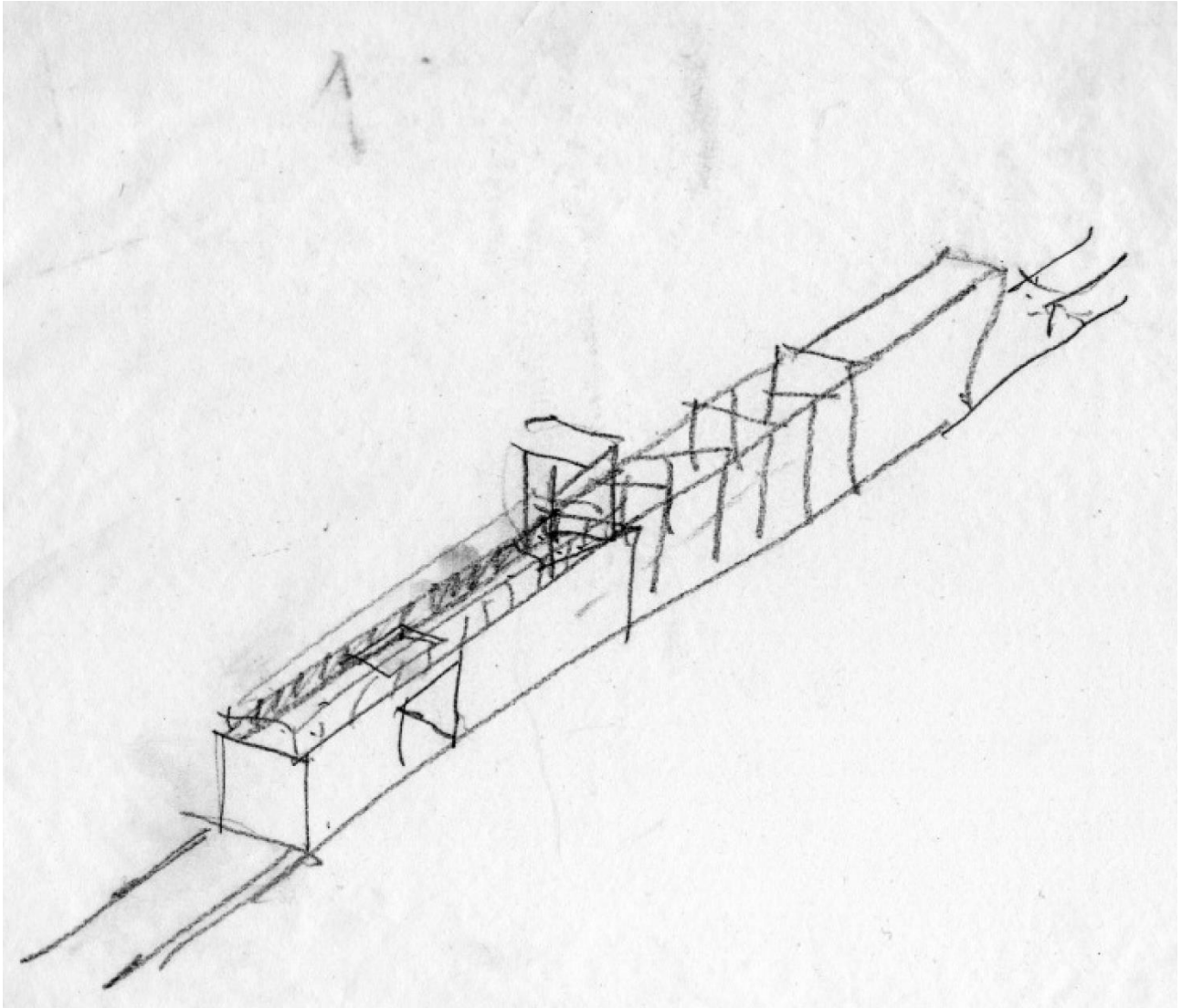
After investigating the different meanings embodied by the concept of *transformation* in the work of Oswald Mathias Ungers, and in particular in the architectural composition that underlies his latest project for the monumental complex of the Kaiserthermen in Trier, it remains to be clarified what is the immanent meaning that this principle assumes if put in relation to the concept of *form* (Figure 4).

The etymological meaning of the term *transformation*, from Latin “*transforma*” indicates an induced operation that involves a change of form. An operation that therefore shows not so much what the form is, its static and fixed meaning, but rather what the form can become through the application of the meta-morphosis process. On this consideration is based the interest and the concept of transformation for Ungers: “Architecture behaves like nature. It has the ability to transform from one form into another. Forms are never in themselves concluded; they always contain their opposite”<sup>29</sup>.

<sup>28</sup>Trentin, A. (2004), *Oswald Mathias Ungers. A proposito dell'idea costruita. Conversazione con Annalisa Trentin*, in A. Trentin (ed), *Oswald Mathias Ungers: una scuola*, Milano, Electa, 60.

<sup>29</sup>Ungers, O.M. (1998), *Pensieri sull'architettura*, in *Casabella* n. 657, 20.

1 **Figure 4.** Oswald Mathias Ungers, project sketch for the Entrance to the  
2 *Kaiserthermen*, axonometry



3  
4 Source: Ungers Archiv für Architekturwissenschaft, Cologne, *Projektordner EKT*.  
5

6 It's through the use of the meaning of form in the relationship between the  
7 architectural and the artistic dimensions that becomes possible to understand how  
8 the principle of transformation is translated into architecture. In this context, the  
9 studies of Henri Focillon (1881-1943), published in *Vita delle forme*, represent a  
10 clear connection between art and architecture through the study of form, in all the  
11 meanings that it assumes as the essential content of the work of art. For Focillon  
12 "[...] the work of art is motionless only in appearance. It expresses a desire for  
13 fixity, it is a stop; but in the manner of the past. In reality the work is born from a  
14 change and prepares another. [...] The strictest rules, which seem made especially  
15 to dry up formal matter and reduce it to extreme monotony, are precisely those that  
16 best highlight its inexhaustible vitality, with the richness of variations and the  
17 stunning fantasy of metamorphosis. [...] Form can become formula and canon, that

1 is, abrupt stop, exemplary type, but it is primarily a mobile life in a changing  
2 world. The metamorphoses continue indefinitely<sup>30</sup>.

3 Transformation therefore understood as an antinomic expression par  
4 excellence in which the process of formation and transformation is an open system  
5 without borders, within which form is understood not as a fixed and immutable  
6 element but as a generator of meaning in its continuous movement and change.  
7 The antinomy, therefore, both in the vision of Focillon and in that of Ungers,  
8 becomes a tool to accept one element without excluding another.

9 Thanks to the concept of antinomy it is possible to define for the German  
10 architect a method that allows to hold together the maximum plurality of principles  
11 and elements. The dialogue between art and architecture investigated here is based  
12 in this space, which is defined by antinomic contrasts. Entering into the merits of  
13 this dialogue, we can see how the dimension of architecture and art intertwine,  
14 touch or chase each other on parallel lines, instigating a close relationship between  
15 distinct areas in an ideal metaphorical sphere that unites the two systems. The  
16 search for a point of connection between architecture and art in Ungers' work  
17 reveals how many references exist between these two worlds. Both in the  
18 correspondence on theoretical, compositional and methodological issues and in the  
19 collaborations between architect and artist, compositional criteria are defined in  
20 synergy between the tools of the architect and those of the artist. The close  
21 relationship, sometimes of a private and personal nature, between these two  
22 complementary figures has determined the co-existence of art in architecture.

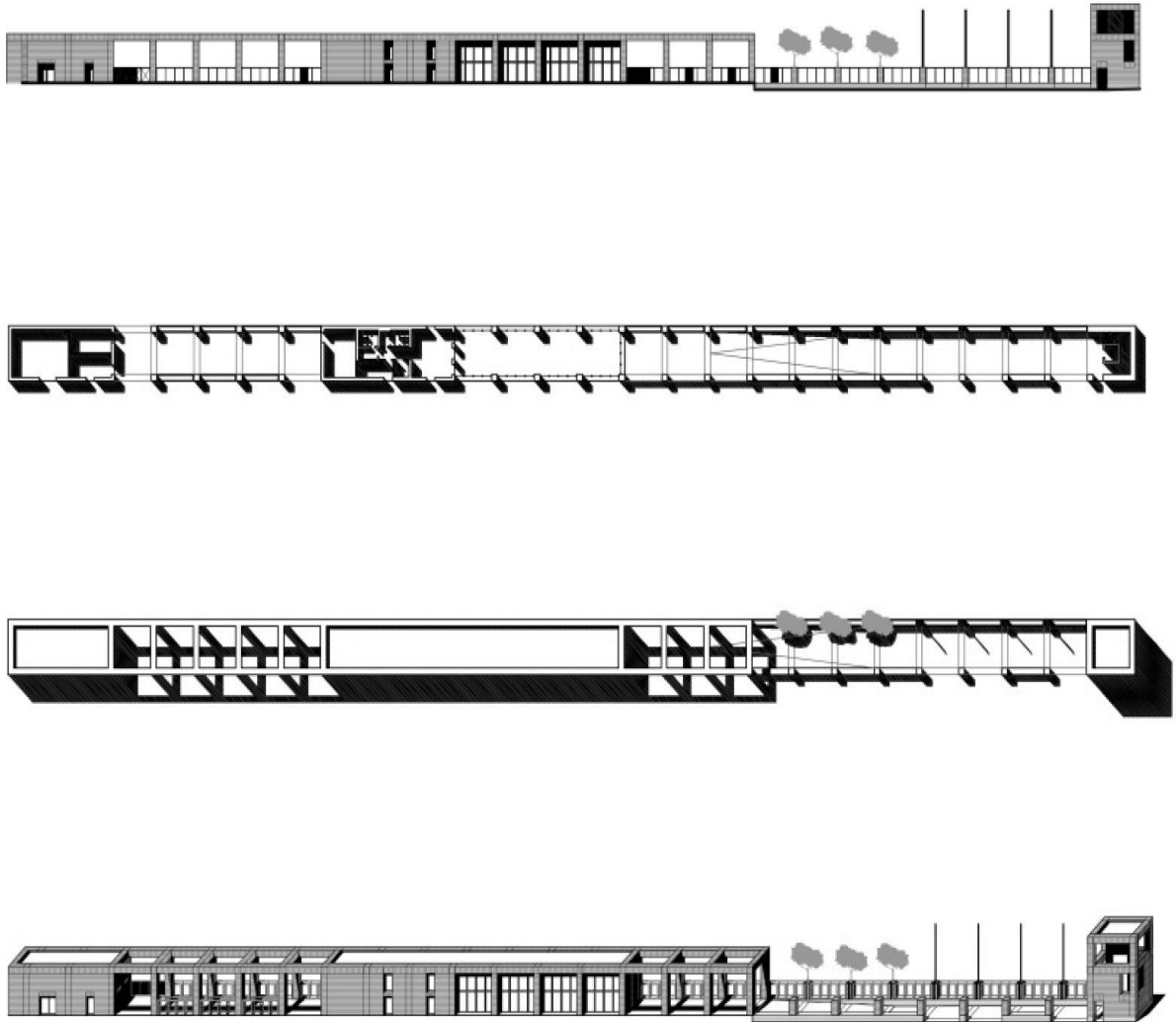
23 This survey is concerned with identifying points of contact between these two  
24 worlds, considering the project for the new entrance to the Kaiserthermen in Trier  
25 as the starting point and main object of the discourse (Figure 5).  
26  
27

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<sup>30</sup> Focillon, H. (1945), *Vita delle forme*, Padova, Le tre Venezia, 12-13.



1 **Figure 5.** *Oswald Mathias Ungers, Entrance to the Kaiserthermen, Trier, 2007*



2  
3 Source: Martina D'Alessandro, 2012

4  
5 The project, in its genesis and conformation, offers the opportunity to explain  
6 what are the compositional and formal links that link Ungers' architecture to the  
7 world of contemporary art.

8 The first aspect to deepen in this system of correspondences is the personal  
9 relationship that Ungers builds over time with some contemporary artists, focusing  
10 on the project action in collaboration with artists. The purpose of the joint work  
11 between Ungers and the artists is to obtain, through the deepening of a shared  
12 interest on some issues, such as the characterization of outdoor spaces through  
13 installations, the composition of the interior environments with paintings and  
14 sculptures, and the structure of the external space through the green project, a  
15 unique concept of space, an architecture understood as a work of art. There are  
16 many examples that support the hypothesis that in the buildings of Ungers the  
17 symbiosis with different artists represents an intrinsic value of the project,  
18 demonstrating how this interweaving between space and work of art is a  
19 fundamental instance in the design method of Ungers, investigated and

1 experimented with continuity from the projects of the eighties until the last  
 2 building built in 2007. The structure of the works, their placement, both inside and  
 3 outside of the architectures, their definition of space are questions that reflect the  
 4 conception on which Ungers structures the building.

5 What is evident is the ontological value that works of art embody in the  
 6 buildings of Ungers, not considered as mere applications or decorations of space,  
 7 but rather as valuable vehicles promoting a dialogue between art and architecture,  
 8 artist and architect, in a shared understanding of the concept of composition. The  
 9 collaborations that OMU has made with different artists, before elaborating his  
 10 latest project, are multiple<sup>31</sup>.

11 Ungers sees in this intertwining of close and continuous collaborations with  
 12 contemporary art one of the possible paths in which art and architecture can merge  
 13 into a new unity. If looking at the project for the Kaiserthermen one tries to  
 14 imagine the building without the place for which it was conceived, without any  
 15 linguistic, functional, technical and constructive characterization, without fixtures,  
 16 without the homogeneous skin of bricks that covers it, without plants or hedges,  
 17 then you would have an unprecedented vision of the formal structure of the work.  
 18 It would be impossible not to perceive the charm of the allusions and references  
 19 that the building, brought back to its pure structure, would establish with the  
 20 research on form conducted by some of the artists that Ungers collects and works  
 21 with. This new image of the building, which suggests the second point of view  
 22 from which to observe the work and the relationship it establishes with the world  
 23 of art, highlights how pure geometric shapes are constituted by the same basic  
 24 structures and that, In the common research on form, new compositional  
 25 correspondences between artistic tendencies and architectural conceptions can be  
 26 investigated. The same compositional principle of transformation, which is at the  
 27 base of the architectural choices of the project and which turns into the  
 28 construction of a morphological sequence, takes on unexpected connotations and  
 29 deeper meanings if observed through the tools of art. On the contrary, precisely by  
 30 the fact that the works of art in all the different manifestations, be they paintings or  
 31 sculptures, express their contents more freely, without questions of function or  
 32 utility, allows us to identify a new research that reveals correspondences and  
 33 values other than those already known about this theme. In this last project of the  
 34 author the study of form opens the door to the most rational and controlled, but at  
 35 the same time radical, experimentation of the *cube* form in all its variations,  
 36 combinations and modifications. In this work on shape, Ungers focuses primarily  
 37 on plastic art.

38 As Jasper Cepl has pointed out, in these years Ungers seems indifferent to  
 39 what is architecture and what is sculpture, because in the end he sees them as two  
 40 *arts* united in the conception of form, which pursue the same task and objective,

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<sup>31</sup>D'Alessandro M. (January 2023), *Contaminations between architecture and art. Oswald Mathias Ungers and artistic collaborations*. International Journal of Civil Engineering and Architecture (IJCEA) Vol.01, No.1, 1-13.

1 that is to give spirituality to a monument<sup>32</sup>. The tension of architecture towards  
 2 sculpture is also present in his early works, as in the house of Cologne in  
 3 Belvederestrasse. But the approximately thirty years of work, during which the  
 4 long path towards reduction and abstraction has developed, have transformed his  
 5 way of conceiving sculpture in architecture. “It’s true, my works of the fifties are  
 6 very sculptural. At the beginning they were predominant. At the same time, and  
 7 you can see this in my works over time, there is a tendency to abstraction. [...] For  
 8 this reason, therefore, it is necessary to be less sculptural! By sculptural I mean  
 9 everything that protrudes or falls, and it’s a very bourgeois, very simplified  
 10 concept. There are the wonderful sculptures of Constantin Brancusi, Barnett  
 11 Newman or Sol LeWitt, completely reduced figure, which are, nevertheless,  
 12 significant sculptures”<sup>33</sup>. And here recalls Sol LeWitt, an artist admired and  
 13 collected by OMU. Ungers refers to the “wonderful sculptures” of the American  
 14 artist to explain the relationship between plastic art and architecture in his work.

15 LeWitt represents for him an exemplary artist and he considers his bodies as  
 16 completely simple and plastic elements, but not expressive, while showing a high  
 17 degree of spiritualization. If we look at the general production of the American  
 18 artist we discover a multiplicity of assonances and references to that of Ungers.  
 19 There are many questions that motivate and structure a comparison between the  
 20 two figures. First of all, the frequent and continuous collaborations, of which we  
 21 have already spoken, have allowed the architect and artist to get to know each  
 22 other on the work table, establishing a dialogue on the issues that bind the  
 23 respective projects. I believe that this aspect is the confirmation of a long process  
 24 of knowledge and a deeper reflection of Ungers on LeWitt’s work. Approach and  
 25 knowledge that then led him to the inclusion of the artist in his personal art  
 26 collection<sup>34</sup> and the desire to confront his work in the architectural project. Sol  
 27 LeWitt’s long artistic activity, lasting about forty years, - a pioneer of conceptual  
 28 art that has most influenced the artistic development of his generation -  
 29 concentrates between the sixties and the end of the seventies the production of  
 30 works and theoretical writings on which is based all his poetry and his way of  
 31 making art (Figure 6).

32 In June 1967 he published his *Paragraphs on Conceptual Art*<sup>35</sup> followed by  
 33 *Sentences on Conceptual Art*<sup>36</sup>, published in January 1969, considered by critics as  
 34 two of the most important writings published in those years, in which the author

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<sup>32</sup>Cepl, J. (2007) *Oswald Mathias Ungers. Eine intellektuelle Biographie*, Colonia, Walther König, 507.

<sup>33</sup>Jäger, F. P., (2004) *Es geht um Ausgewogenheit, Klarheit und Stimmung., conversazione con Oswald Mathias Ungers*, in F. P. Jäger (ed), *Dorotheenhofe. Oswald Mathias Ungers baut in Berlin*, Berlino, Jovis, 32-41.

<sup>34</sup>Ungers' collection of contemporary art includes the sculpture *Lines in Four Directions* from 1982. For further information on Ungers' personal collection, see the texts Lepik, A. (ed) (2006): *O. M. Ungers. Cosmos of Architecture*. Ostfildern: Hatje Cantz; Ungers Archiv für Architekturwissenschaft (ed) (2006): *O. M. Ungers. Kosmos der Architektur*. Düsseldorf, Die Qualitaner.

<sup>35</sup>LeWitt, S. (1967) *Paragraphs on Conceptual Art*, in *Artforum* vol. 5, n° 10, 79-83.

<sup>36</sup>LeWitt, S. (1969), *Sentences on Conceptual Art*, in *Art-Language* vol. 1, n° 1, 11-13.

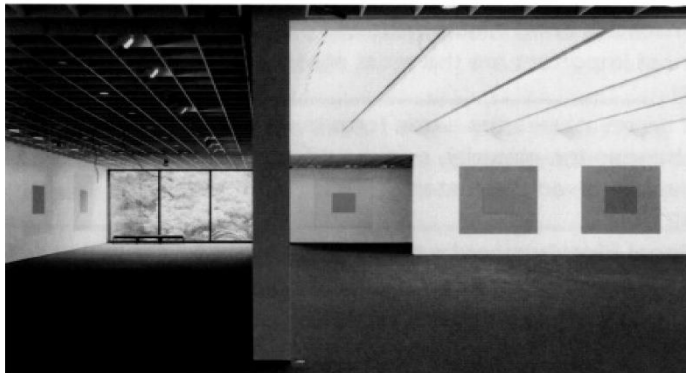
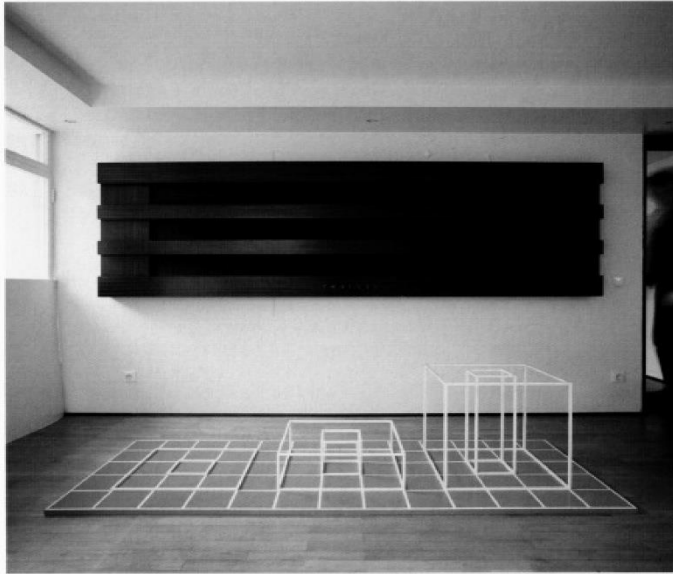
1 crystallizes in brief peremptory assumptions his point of view on the true meaning  
 2 of art and method in the artistic process. Since 1968 he has been involved in wall  
 3 painting, starting a research of almost twenty years with the production of *Wall*  
 4 *Drawings*. In 1974 the structures of *Variations of Incomplete Open Cubes* saw the  
 5 light.

6 Both works, in their investigation of themes related to the concept of  
 7 variation, seriality and geometry, represent the synthesis of the artist's reflections  
 8 on art and constitute the beginnings of a long and profound research on the role of  
 9 form in art. In these years Ungers is in America to carry out the teaching activity at  
 10 Cornell University and breathes the atmosphere of change that has irreversibly  
 11 changed the underlying coordinates of artistic research in the direction of a  
 12 definitive breakthrough of borders traditional painting and sculpture. In analyzing  
 13 the work of Ungers and LeWitt, it appears clear how the system of  
 14 correspondences between the theoretical and methodological approaches to the  
 15 project, as well as the common tendency to the purity and formal simplicity of  
 16 their works, is here interpreted as a ground for comparison between the two  
 17 figures.

18 It seems that putting one close to the other the work of Oswald Mathias  
 19 Ungers and Sol LeWitt offers an opportunity to shed light on the shared  
 20 interpretation that the two authors have of the world of forms postulated by Henri  
 21 Focillon. In the conception of art as a system of formal relations and not as a  
 22 symbolic expression, Focillon bases the absolute autonomy of the artistic form  
 23 with respect to time, place and environment in which it manifests itself. Form has  
 24 its own universe, governed by its own laws, with its own space, development and  
 25 matter. The work of Ungers and LeWitt finds itself and meets in these  
 26 interpretations on the value of form. In view of these coincidences, with this  
 27 reading of Ungers' work the dimension of sculpture and architecture in relation to  
 28 the idea of form, understood as the lowest common denominator between the two  
 29 areas. The aim is to verify and demonstrate how and if in the project for the  
 30 Kaiserthermen of Trier Ungers pursues, with the tools of the architect, the same  
 31 principles that Sol LeWitt expressed in his works of art, trying to propose a  
 32 reading of the building that explores in depth the system of cultural and formal  
 33 values on which it is based.

34 Immediately emerges the limit of this critical reading that can't consider in  
 35 depth all the many nuances of theoretical reflections and the complete production  
 36 of works of LeWitt, because it would risk to cross the boundaries that this research  
 37 has set itself. The art-architecture nexus is then analyzed narrowing the field of  
 38 investigation to just two works, the project for the Kaiserthermen of Ungers and  
 39 LeWitt's *Variations of Incomplete Open Cubes*, one of the most significant works  
 40 of Sol LeWitt's career, work that marked a turning point in the author's art.  
 41 *Variations of Incomplete Open Cubes*, elaborated on the occasion of the  
 42 homonymous exhibition held at the San Francisco Museum of Art, expresses, in  
 43 the most sophisticated form, the LeWitt way of thinking and making art (Figure 7).  
 44

- 1 **Figure 6.** *From above: Ungers art collection: above Gerhard Merz, Trieste, nd;*  
2 *Sol LeWitt, Untitled (1984); Sol LeWitt, Wall Drawings 1176, Seven Basic Colors*  
3 *and All Their Combinations in a Square within a Square For Josef Albers (2005);*  
4 *Sol LeWitt, Variations of Incomplete Open Cubes (1974)*



5 Source: Andreas Lepik, *O. M. Ungers. Cosmos of Architecture*, Hatje Cantz, Ostfildern 2006, p. 24. Sol Lewitt,  
6 *Wall Drawing 1176. Seven Basic Colors and All Their Combinations in a Square within a Square For Josef*  
7 *Albers*, Richter Verlag, Düsseldorf 2006, p. 112. Nicholas Baume, *Sol LeWitt: Incomplete Open Cubes*, The  
8 Wadsworth Atheneum Museum of Art, Hartford 2001, p. 1.  
9  
10

1 The work is generated by a simple and at the same time paradoxical idea: the  
 2 artist carries out an exhaustive, complete investigation into how it is possible to  
 3 think and visualize *not completely* the shape of a cube. The complexity of the idea  
 4 and the richness of meaning of this work is also revealed in the structuring and  
 5 presentation of the work in different and complementary sections. It consists in  
 6 fact of a series of drawings, representing isometric axonometries, photographers  
 7 and in black and white, a book and a long series of one hundred and twelve three-  
 8 dimensional structures in white wood of cubes of the same size, of about twenty  
 9 centimeters per side, placed on a gray plane marked by the design of a white grid.  
 10 LeWitt makes the shape of the cube explode, multiplies it, determining the  
 11 configuration of each three-dimensional structure based on a variable and  
 12 progressive number of sides ranging from three to eleven. The series, defined and  
 13 refined over the years through a copious production of work tables, drawings and  
 14 sketches, begins with a unit consisting of three sides, the minimum number to  
 15 build a three-dimensional figure, and ends with the last incomplete structure  
 16 consisting of eleven sides.

17 The genesis of *Variations of Incomplete Open Cubes* revolves around three  
 18 central themes, typical of LeWitt's work and also found in Ungers' building: the  
 19 reflection on the shape of the cube, the seriality and the non-completeness of the  
 20 composition<sup>37</sup>.

21 First of all, since the sixties LeWitt denounces its deep attraction for the shape  
 22 of the square and the cube, so much to summarize in the famous text *The Square*  
 23 *and the Cube*, to which Ungers often refers: "The best that can be said for either  
 24 the square or the cube is that they are relatively uninteresting in themselves. Being  
 25 basic representations of two- and three- dimensional form, they lack the expressive  
 26 force of other more interesting forms and shapes. They are standard and  
 27 universally recognized, no initiation being required of the viewer; it is immediately  
 28 evident that a square is a square and a cube, a cube. Released from the necessity of  
 29 being significant in themselves, they can be better used as grammatical devices  
 30 from which the work may proceed. The use of a square or cube obviates the  
 31 necessity of inventing other forms and reserves their use for invention"<sup>38</sup>.

32 These words identify precisely the field of investigation in which Ungers'  
 33 interest moves,<sup>39</sup> offering a key to understanding his work in architecture and, in  
 34 particular, the logical compositional structure that underlies the project for Trier.  
 35 The entrance building to the Kaiserthermen summarizes with surprising clarity

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<sup>37</sup>Baume N. (2001), *The music of forgetting*, in Baume N. (ed), *Sol LeWitt: Incomplete Open Cubes*, Hartford, The Wadsworth Atheneum Museum of Art.

<sup>38</sup>LeWitt S.(2006), *Das Quadrat und der Würfel - The Square and the Cube*, in Liesbrock H., *Die Idee der Farbe. LeWitts S. Wall Drawing For Josef Albers - The Idea of Color. Sol LeWitts, Wall Drawing For Josef Albers*, in *Sol LeWitt Wall Drawing 1176. Seven Basic Colors and All Their Combinations in a Square within a Square For Josef Albers*, Düsseldorf, Richter Verlag, 114-115. The text, originally untitled, is published for the first time in L. R. Lippard (1967) *Homage to the Square*, in *Art in America*, n° 4, 54.

<sup>39</sup>Ungers O. M. (1992) *Dal quadrato al cubo. Biblioteca di casa Ungers*, in *Lotus international* n° 72, 50-55.

1 how the shape of the cube takes on the role of grammatical form that, in its  
 2 variations, aggregations and dematerializations, builds the syntactic structure of  
 3 architecture.

4 Both works examined here are the final result of a research on how, starting  
 5 from a complete basic modular element in all its parts, it is possible to explain all  
 6 the possible ways of representing a cube through the different variations of the  
 7 incomplete shape of the cube. Variation is the idea from which the two works are  
 8 generated.

9 The idea of variation gives rise to two different levels of meaning: first,  
 10 Ungers as LeWitt is fascinated by the thought of being able to transform the static  
 11 shape of the cube into a multiplicity of different forms that, despite their diversity,  
 12 retain their belonging to the sphere of the pure figure, that is, they do not turn into  
 13 a different form but represent *another way* of being cube. Secondly, the two artists  
 14 feel it is necessary to describe this path of transformation, to explain every single  
 15 passage, in order to make understandable to those who observe the logic that holds  
 16 together all the individual variations. As already mentioned, for Ungers the  
 17 *transformation* is the change from one state to another, a concept that implies  
 18 strong links with nature if understood as a cyclical process of formation-  
 19 transformation.

20 The transformation, unlike the one-sided and unilateral processes, allows to  
 21 establish complex systems of *relationships, correlations and interdependencies*  
 22 between different, heterogeneous and contrasting elements and as a free principle  
 23 that establishes relations of reciprocity and complementarity between concepts and  
 24 elements, is a *dialectical thought*, which always leads to a higher level of  
 25 complexity and knowledge. The process of transformation therefore puts different,  
 26 sometimes opposite, elements into a new conceptual and formal organism, in  
 27 which all the different passages from one state to another of transformation are  
 28 clear and legible, making the new reality full of complexity and stratification. In  
 29 *Architettura come tema*, text in which Ungers speaks of transformation as a  
 30 compositional principle, we read: "Therefore also the language of architecture can  
 31 be enriched and made more expressive thanks to transformation; then, instead of  
 32 neutral assertions, generalizable forms and selected specific elements reappear"<sup>40</sup>.  
 33 He returns to the same principle a few years later when he writes in *Modificazione*  
 34 *come tema*: "[...] This presupposes on the one hand that reality is recognized as a  
 35 formal reality and on the other that every form can be transformed into another,  
 36 into a new, and that no form is absolute or exclusive, but always inclusive and  
 37 understood as a system of dialectical relations. Each form has its complementary  
 38 counter-form. Each form has its complementary and modified counter-figure"<sup>41</sup>.  
 39

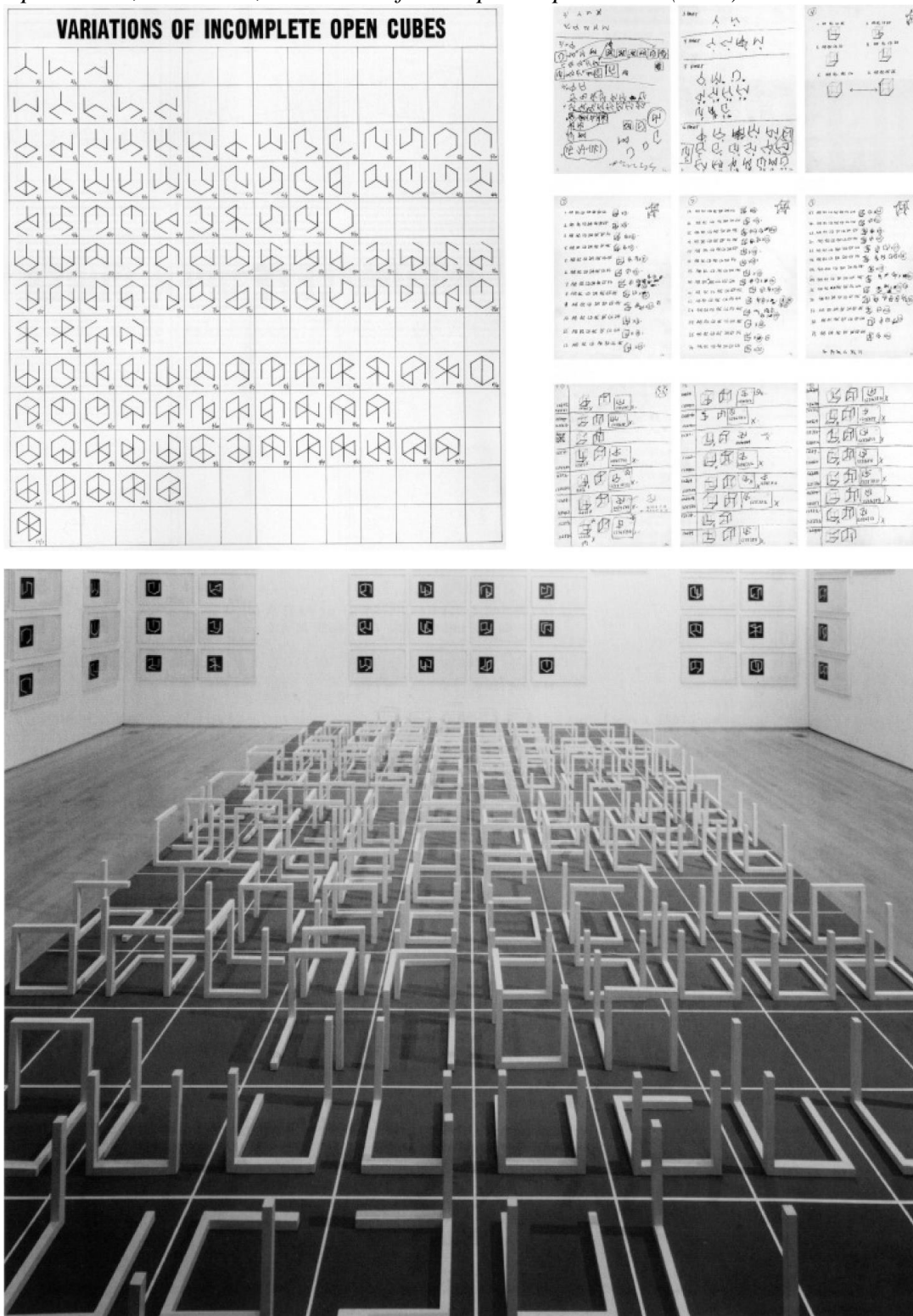
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<sup>40</sup>Ungers O. M. (1982) *Architettura come tema*, in *Quaderni di Lotus*, n.1, Milano, Electa, 14-15.

<sup>41</sup>Ungers O. M. (1984), *Modificazione come tema*, in *Casabella*, n. 498-499, 28.



- 1 **Figure 7.** From above: Sol LeWitt, Schematic Drawing for Variations of
- 2 *Incomplete Open Cubes* (1974); Sol LeWitt, sketch for Variations of Incomplete
- 3 *Open Cubes*; Sol LeWitt, *Variations of Incomplete Open Cubes* (1974)



- 4 Source: Nicholas Baume, *Sol LeWitt: Incomplete Open Cubes*, The Wadsworth Atheneum Museum of Art,
- 5 Hartford 2001, p. 13; 24; 50.
- 6

1        Reading the structure of the Trier building as a long progression that connects  
 2        the form to the complementary counter-form reveals the relationship of dialecticity  
 3        that binds the individual parts together in a single general system. The building, in  
 4        fact, if dismantled and brought back to its basic modular unit, that is a cube of  
 5        about seven meters on the side, is told to the observer, guiding it step by step,  
 6        module by module, in the path of shape exploration in all possible variations.  
 7        Ungers starts by considering the cube as a compact and completely closed block  
 8        and, as he aggregates the individual volumes, he begins to work on the mass. Dig  
 9        the block, first carving small open surfaces and then completely empty the  
 10       compact volume and reduce it to pure structure. Ungers continues his research on  
 11       the shape and its transformation until isolating the different elements of the  
 12       skeleton of the cube: the sequence of pillars, trees and column rocks starts.  
 13       Borrowing Focillon's words, looking at the formal structure of this project one  
 14       could say: "Nothing is more seductive - and nothing, in certain cases, is better  
 15       founded - than showing the forms subject to an internal logic that organizes  
 16       them"<sup>42</sup>.

17       Similarly LeWitt's work originates from the explosion of an inductive energy  
 18       that explores and experiences the potential of the idea, proceeding in a rational  
 19       chain of reasoning and logical steps. This inductive method, which unites the work  
 20       of the two authors, reveals the meaning of the work: "The differences between the  
 21       parts are the subject of the composition. If some parts remain constant, it is to  
 22       punctuate the changes.[...] The series would be read by the viewer in a linear or  
 23       narrative manner even though in its final form many of these sets would be  
 24       operating simultaneously, making comprehension difficult. The aim of the artist  
 25       would not be to instruct the viewer but to give him information"<sup>43</sup>.

26       The second theme of comparison between the two works is the use of  
 27       seriality as a design criterion that derives directly from the narrative choice  
 28       embodied by the works. Seriality becomes an important device in the work of the  
 29       two authors because it represents the tool to reify the concepts of variation and  
 30       transformation in a constructed form (Figure 8). Seriality, an artistic mechanism  
 31       common to the work of other artists of the LeWitt generation and present in the  
 32       private collection of Ungers, "[It is] a way of creating art that did not rely on the  
 33       whim of the moment but on consistently thought out processes that gave result that  
 34       were interesting and exciting"<sup>44</sup>.

35       The subsystems that constitute LeWitt variations follow a sequence that is not  
 36       based on a unitary system that structures the work in its entirety.  
 37

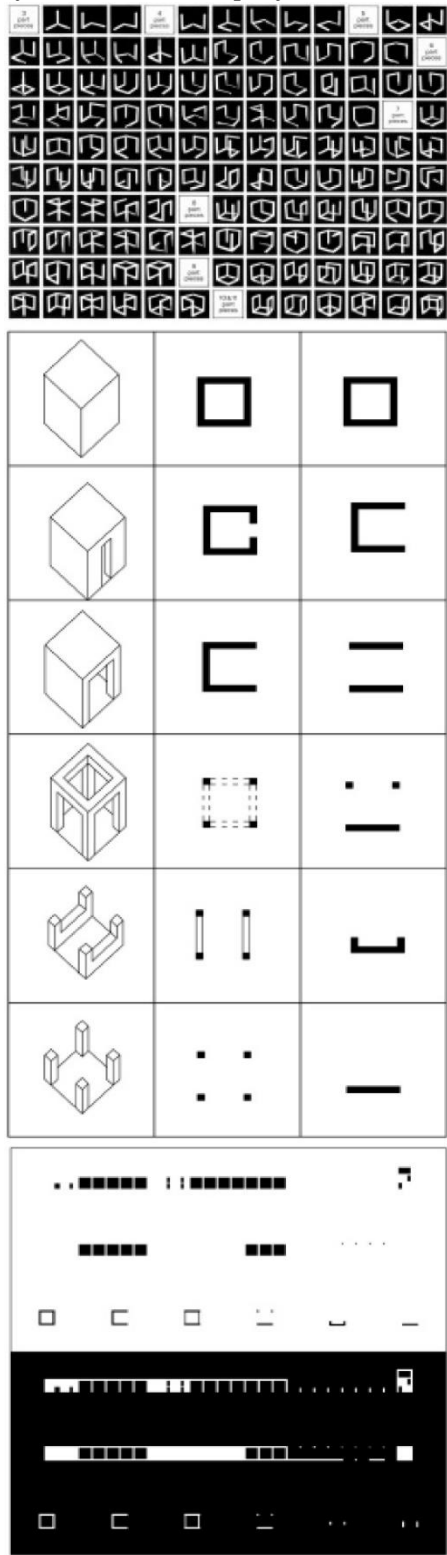
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<sup>42</sup>Focillon H. (1987), *Vita delle forme*, Einaudi, Torino, 15.

<sup>43</sup>LeWitt S. (1994), *Serial Project No. 1 (ABCD)*, in A. Zevi (ed), *Sol LeWitt: Critical Texts*, Roma, I libri di AEIOU, 99.

<sup>44</sup>LeWitt S. (1978), *Commentaries*, in A. Legg (ed), *Sol LeWitt*, New York, The Museum of Modern Art, 81.

1 **Figure 8.** From above: Sol LeWitt, *Variations of Incomplete Open Cubes* (1974);  
2 *Abacus of transformations of the basic module of Kaiserthermen' project*; *Variations*  
3 *of Kaiserthermen' project*



4  
5 Source: Nicholas Baume, *Sol LeWitt: Incomplete Open Cubes*, The Wadsworth Atheneum Museum of Art,  
6 Hartford 2001, p. 8; Martina D'Alessandro, 2012.

1       The American artist does not rely on a systematic method in the processing of  
 2 sequences, but starts from the simplest passage and then continues to work in  
 3 progression through the most complicated solutions. The arrangement of the  
 4 different combinations in series and morphological sequences becomes the most  
 5 complete and elaborate criterion to express, in the simplest way, the idea of the  
 6 work.

7       In the same way Ungers seems to start from a logical and orderly mental  
 8 structure for the construction of the sequence of parts of the building. If you refer  
 9 to the image *Logarithmische Transformation*, published in *Zehn Kapitel über*  
 10 *Architektur. Ein Visueller Traktat*<sup>45</sup> a few years before Ungers began work on the  
 11 latest project for Trier, there is a surprising harmony between the idea of seriality  
 12 in logarithmic transformation and that of sequence in the architectural  
 13 transformation elaborated in the project (Figure 9). It seems that the abstract image  
 14 of the ordered, progressive and gradual succession of elements in a growing  
 15 logarithmic order was, a few years later, used as a basic lucid for the new project,  
 16 translating the same idea into architectural form. The strict and coercive order of  
 17 the logarithmic sequence is divided to leave room for a reassembly of the  
 18 individual parts, taking into account, at the same time, also the distribution and  
 19 functional needs of the project and the characteristics of the place. Finally, in this  
 20 “narrative choice”, which is reversed in the sequence of elements in the work of  
 21 Ungers and LeWitt, the process of composition is carried out. In the path that  
 22 translates the idea into form, the *ratio* is transformed from an initial impulse into a  
 23 narrative structure, aimed at explaining the work. The individual elements of this  
 24 serial chain are no longer individually controlled and isolated, but are inserted into  
 25 a compositional system.

26       Understanding the project for the Kaiserthermen and *Variations of*  
 27 *Incomplete Open Cubes* necessarily implies considering the single module as a  
 28 dense element of meaning only if related to the system general, understood as  
 29 unity. The very concept of unity, however, is a concept of itself *open*, elusive,  
 30 temporary. The work of the two authors in fact stubbornly moves right into the  
 31 dimension of *incompleteness*: to tell in a single unitary system how different cubic  
 32 shapes can be obtained starting from a basic module, the compositional process  
 33 sequences several incomplete forms, which have been subjected simultaneously to  
 34 subtraction and addition. The starting cube, complete in its parts, is gradually  
 35 disassembled, deprived of one of its components: in one case, LeWitt subtracts a  
 36 corner of the skeleton of the cube, in the other Ungers eliminates a vertical wall or  
 37 horizontal ceiling. But the incompleteness of the fragments in succession is denied  
 38 by the repetition of the module transformed into an additive process potentially  
 39 without limits. In this conception of composition as an *open* and *incomplete*  
 40 system, we can read in the building of Ungers, which evokes the image of a very  
 41 long wagon train with unlimited extension, the intention to underline the

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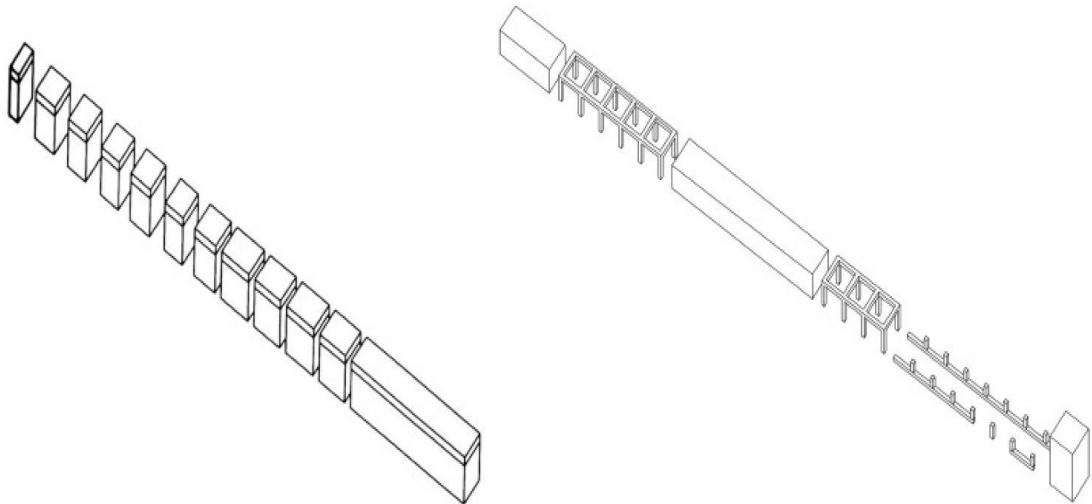
<sup>45</sup>Ungers O. M. (1999), *Zehn Kapitel über Architektur. Ein Visueller Traktat*, Cologne: DuMont Verlag.

incompleteness of the possible variations of the basic module through the opposition of the initial half module, which serves as the head block of the whole system on the Weberbachstrasse and the double final module of the lookout tower that closes the sequence (Figure 10).

## Conclusions

From the elements that emerge from the comparison between these two works, it is clear that Ungers' and LeWitt's parallel research on form is rooted in a contradictory and sometimes paradoxical interpretation of the artistic impulse. So Ungers describes the process from which its architecture derives: "Emotion is controlled by rational thought and rational thought is stimulated by intuition. The dialectical process between two polarities is almost essential in a creative process that is directed towards a gradual improvement of ideas, concepts, spaces, elements and forms"<sup>46</sup>.

**Figure 9.** *Logarithmic Transformation.*



Source: Oswald Mathias Ungers, *Zehn Kapitel über Architektur. Ein Visueller Traktat*, DuMont Verlag, Colonia 1999, p. 369; Martina D'Alessandro, 2012.

The simultaneous presence of contradictory ideas and stimuli frames the work of the two authors in the mental form of the *varietas in unitas*, in which the work of art and architecture are born from the dialogue between rational and irrational, between order and chaos, between intuition and logic, between the whole and the single part. It is precisely in this universe of contradictions that the boundaries of the dialogue between the project for the Kaisertheremen by Oswald Mathias Ungers and *Variations of Incomplete Open Cubes* by Sol LeWitt are revealed. This comparison between Ungers' work and that of LeWitt brings out the

<sup>46</sup>Ungers O.M. (1983), *The New Abstraction*, in *Architectural Design* n. 53, vol.7-8, 37.

1 fundamental autonomy between the world of architecture and that of plastic art:  
 2 they underlie different, albeit close and parallel, systems of formal relations.  
 3 Returning to Focillon's reflections on forms in space, it is evident that this  
 4 autonomy, in its contradictory and antinomic meaning, leaves room for moments  
 5 of coherence and contiguity between the two dimensions. "The form is not  
 6 indifferent architecture, sculpture and painting. Whatever may be the exchanges  
 7 between techniques, however decisive is the authority of one of them over the  
 8 others, the form is first qualified by the special field in which it is exercised, and  
 9 not by a desire of the intellect, and so it is true of space that it demands and is  
 10 built"<sup>47</sup>.

11 The architect, however, reveals in his work all the interferences with the other  
 12 arts: "thus the builder envelops, not the void, but a certain stay of forms, and,  
 13 working on the space, models him, outside and inside, like a sculptor. He is a  
 14 surveyor when he draws the plan, mechanic when he composes the structure,  
 15 painter for the distribution of effects, sculptor for the treatment of masses. All this  
 16 he is time to time and more or less, according to the needs of his spirit and  
 17 according to the state of the style"<sup>48</sup>.

18 The process by which Ungers elevates the archaeological complex of the  
 19 Kaisertheremen to the rank of a work of art is an interpretative path in which the  
 20 rational component joins the emotional one, in which knowledge is  
 21 complementary to the invention, where architecture is confronted with art. Ungers,  
 22 in this project, implements a compositional process aimed at achieving and  
 23 identifying a new configuration of the monumental complex through a  
 24 transformation of the artifact into a work of art, in which a new system of  
 25 relationships, of spaces and forms contributes to attribute to the artifact *other*  
 26 meanings and unprecedented possibilities for development. In this compositional  
 27 structure underlying the project, the experience of the city, its spatial conformation  
 28 and its history, the knowledge of the value of the archaeological component are  
 29 elements that enter the project as active parts of the compositional process.  
 30  
 31

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<sup>47</sup>Focillon H. (1987), *Vita delle forme*, Torino, Einaudi, 28.

<sup>48</sup>Focillon H. (1987), *Vita delle forme*, Torino, Einaudi, 36-37.

1 **Figure 10.** *Entrance to the Kaiserthermen*



2  
3 Source: Martina D'Alessandro, 2009.  
4

5       The relationship with the city, the superimposition of the archaeological  
6 layers on which the Kaiserthermen are built, are not considered by Ungers as  
7 stable and concluded elements in the compositional process, but are interpreted as  
8 texts that, while showing the palimpsest of the previous writings, they are never  
9 closed and defined in a unique and decisive way. Ungers writes about the city and,  
10 in this act of rewriting and transformation, reveals a new identity. The  
11 contamination between sculpture and architecture seems to have occurred. It  
12 seems that the fascinating artistic impulse, released by the incomplete cube  
13 structures of Sol LeWitt, has captured Ungers' interest, stimulating a poetic  
14 reaction in his architecture. In this sense, the synergy between *Variations of*  
15 *Incomplete Open Cubes* and the *Entrance to the Kaiserthermen* reveals itself as a  
16 response of form in Ungersian architecture to the stresses emitted by the  
17 progressions and serial sequences, that are the basis of the work of the American  
18 artist. In this interpretation of the project, art is seen as an open system, in which  
19 the boundaries between the different categories, between architecture and  
20 sculpture, are deliberately transgressed to arrive at a new dimension dense of



meanings, correspondences, contradictions and variations, with infinite cultural and design implications.

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