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To cite this article: Gerardo Brown-Manrique (2021) Oswald Mathias Ungers's completed and complete early works: attribution and acknowledgement, The Journal of Architecture, 26:6, 789-814, DOI: [10.1080/13602365.2021.1958898](https://doi.org/10.1080/13602365.2021.1958898)

To link to this article: <https://doi.org/10.1080/13602365.2021.1958898>



Published online: 20 Aug 2021.



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Oswald Mathias Ungers's completed and complete early works: attribution and acknowledgement

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This article revises the accepted catalogue of architectural works — proposed and built structures, planning studies, and other projects — by the German architect Oswald Mathias Ungers (1926–2007). Based on primary research conducted at the Ungers office in Cologne beginning in 1973 and continuing to the present at the Ungers Archiv für Architekturwissenschaft (UAA), as well as on field documentation, the article identifies a number of projects left out of the accepted catalogue that was first enumerated in the monograph *Oswald Mathias Ungers: Architetture 1951–1990*, (Milan: Electa, 1991). It discusses uncatalogued design projects based on materials found at the UAA and analyses the most significant of these related to design strategies that Ungers was exploring in the early phase of his professional life.

Introduction

In his contribution to the *Festschrift* celebrating Oswald Mathias Ungers's seventieth birthday,¹ Werner Goehner begins by quoting from Michel Foucault's 1969 essay 'What is an Author?',² where Foucault cites Saint Jerome's three criteria for determining authorship (and its attribution), and then Goehner writes:

If one exchanges 'book(s),' 'text(s)' and 'work(s),' with 'project(s) or 'building(s)' and replaces 'author,' 'writer' with 'architect'[,], one is provided with guidelines which [Martin] Kieren might have followed to edit O.M. Ungers' work.³

Goehner's observation, the essence of his contribution to the celebratory collection of essays, focuses on the absence from the accepted canon of Ungers's *œuvre* of a seminal project done at the time when Ungers the professor and Goehner the graduate assistant, absent from West Germany, yearned to return to their homeland: the competition proposal for the federal ministries precinct, officially titled 'Die Bauten des Bundes und ihre Integration in die Stadt Bonn', in Bonn, the temporary capital of the western part of the divided nation. As Goehner correctly points out, the 1971–1972 project was Ungers's first in West Germany since his 1966 entry for the Flughafen Tegel competition, undertaken while Ungers was still teaching at the Technical University in (West) Berlin.⁴

Seen on its own, the fact that this little-known project was left out of the official canon — the catalogue raisonné — might not deserve attention. However, the Bonn Ministries proposal is but one of several projects undertaken by

Ungers — some significant, others not, some realised, some only proposals — that are not assigned a 'Werkverzeichnis-Nummer' (WV) or work number by the Ungers Archiv für Architekturwissenschaft (UAA). As such, they are not included in the accepted catalogue as published in the various monographs on this distinguished architect's work. Starting with a very modest house in Cologne-Dünnwald (WV1) done in 1951 when Ungers began his professional practice in partnership with Helmut Goldschmidt as Goldschmidt + Ungers, to the publication of the last 'complete works' monograph, the Electa volume of 1998, there are about 350 projects documented in some manner at the UAA. But only 282 works are catalogued in the monographs as of 1998, with another forty or so listed in the official inventory. Of these, 116 were built. The rest are unrealised proposals or unsuccessful competition projects. His final officially catalogued project, done in summer 2007 and just months before his death on 30 September, is only a sketch for a small pavilion for an anonymous client in southern France (WV310).⁵

This reevaluation of Ungers's early body of work is based on my research of Ungers's architectural production and its publication, which I began in the summer of 1973 at the German architect's office in Cologne. At the same time as compiling all known publications about Ungers's work into successive bibliographies,⁶ I also recorded and analysed individual projects by Ungers beginning that summer of 1973, and continued to do so in the summer of 1979, 1980, and 1982, with unrestricted access to Ungers's archives in Cologne, an access that remains to this day at the UAA.⁷ The result is a thorough inventory of Ungers's production between 1951 and 1975 from the documented sources that are available at the UAA to be used by prospective researchers.

Concluding his abovementioned essay, Goehner remarked:

If this Festschrift for O.M. Ungers is to make any sense besides wishing him well for his 70th birthday — which we all do — it is to prove those wrong who want to package his work in order to be able to digest it more easily [...] By mentioning the 1971 Bonn competition project I wanted to demonstrate that O.M. Ungers' work is far more layered than any publication allows to portrait.⁸

This essay precisely addresses this void by adding the missing projects to better expose the breadth of Ungers's architectural journey, from the simple gable-roofed house of 1951, through his middle period following his appointment as a faculty member of TU Berlin and subsequent appointment as chairman of the department of architecture at Cornell, including work done prior to his return to (thenWest) Germany in 1975.⁹ The inclusion of these projects into the official Ungers canon permits one to understand the early stages of Ungers's *œuvre complète*.

Background

Oswald Mathias Ungers — OMU — was the most influential German architect of the postwar period. A prolific practitioner, theoretician, and educator, he is recognised for his rigorous exploration of themes that grew from clear,

theoretical investigations that reflected history, place, and culture without compromising the fundamental essence of architecture as a discipline. Ungers explained his explorations in seminal publications, from the 1960 manifesto 'Zu einer neuen Architektur' ['Towards a New Architecture'] co-authored with Reinhard Gieselmann, to his 1976 essay 'Designing and Thinking in Images, Metaphors and Analogies', the 1979 essay 'Architecture of the Collective Memory', and the 1982 publication *Architecture as Theme*.¹⁰ His approach to architecture as a discipline mirrored his encyclopedic knowledge of art, philosophy, and aesthetics, and was reflected in the environment he lived within, one of art and of architectural treatises and other publications; a rich cosmos that was later part of exhibitions of his work in Cologne and Berlin.¹¹

Ungers was born near Trier in Kaisersesch, a small town in Rhineland-Palatinate, in 1926, but his family eventually moved to the nearby and larger town of Mayen. After having been conscripted into military service in 1944 and having been taken prisoner at the end of the war, Ungers attended the Technische Hochschule (TH, now Technische Universität or TU) in Karlsruhe from 1947 to 1950. There, he studied under Egon Eiermann, for whom he also worked. After completing his professional studies, Ungers moved to Cologne where he joined Helmut Goldschmidt — an older, self-taught architect for whom he had previously worked.¹² The partnership briefly included Werner Steffens (Goldschmidt Steffens Ungers Architekten), but it was not long before it became just Goldschmidt + Ungers. Work done alone by Ungers during this period included single-family houses, multifamily housing, and mixed-use buildings, many of which were documented and published in various journals. The Goldschmidt + Ungers partnership dissolved when Ungers opened his own office on 1 January 1955, after taking over a major commission for the design of the Oberhausener Institut. Initiated in 1953, this important project continued through various phases until 1969. At the same time, Ungers completed a series of social housing projects — many constructed under the 'SBZ-Flüchtlinge' programme to house refugee families from the (then) Soviet-occupied zone of Germany — which proved crucial to his evolution as an architect. Ungers was then recognised for his inventive design proposals while working under very restrictive regulations.¹³

There are three clearly defined periods in the evolution of Ungers's architecture from 1950 until his death in 2007. The first, spanning from his partnership with Goldschmidt to his early independent practice, was a productive phase characterised by projects exploring simple compositions, then evolving to structures consistent with the prevalent Brutalism of the time, highlighted by his widely published and praised own house and studio of 1958–1959, at Belvederestraße in the Müngersdorf neighbourhood of Cologne (Fig. 1).¹⁴ More abstract explorations of volumetric compositions are characteristic of the later stages of this phase, as seen in both the Köln-Neue-Stadt complex in Cologne-Chorweiler/Seeberg of 1961–1967 (Fig. 2), and the complex at the Märkisches Viertel in Berlin-Wittenau (1962–1967).



Figure 1.
Oswald Mathias Ungers, Haus
Ungers, Belvederestraße 60,
Cologne-Müngersdorf, 1958–
1959, (left) © Ungers Archiv für
Architekturwissenschaft (UAA);
(right) photographed by Gerardo
Brown-Manrique, 2019

The middle period of Ungers's evolution follows his 1963 appointment to the faculty of architecture at the Technical University in Berlin. Projects done during this phase indicate a profound shift in theoretical investigations based on typology and morphology. It includes four unexecuted yet seminal proposals, for Grünzug-Süd in Cologne-Zollstock (1962–1965), the student housing at the TH Twente in Enschede, Netherlands (1964), the Deutsche Botschaft beim Heiligen Stuhl [German Embassy to the Holy Seat] in Rome (1965), and the Museen Preußischer Kulturbesitz [Museums of Prussian Culture] in Berlin-Tiergarten (1965). In the autumn of 1968, Ungers moved to Ithaca, New York, where he eventually became the chair of the Department of Architecture at Cornell University from spring 1969 to 1975.¹⁵ His significant works from this period, besides the ignored competition proposal for the federal ministries precinct in Bonn, include competition entries for the Landwehrkanal-Tiergarten area of Berlin-Tiergarten (1973), the winning entry in the Lichterfelde 4. Ring in Berlin-Lichterfelde (1974), the Roosevelt Island Housing Competition in New York (1975), and the first competition for the Wallraf-Richartz-Museum in Cologne (1975). All of them were influenced by the abovementioned four seminal projects of the 1960s.

But it was in his mature period, following his permanent return to Cologne in 1978, that the resulting work demonstrates a strong and consistent investigation into what Ungers finally regarded as the essence of architecture, an uncompromising focus on the architectural object, that cemented his place in postwar architectural history. The projects that stand out here are important cultural buildings such as the Deutsche Architekturmuseum in Frankfurt (Fig. 3) and the Konstantinplatz in Trier, both completed in 1984, the Staatsbibliothek in Karlsruhe (1980–1991), the Galerie der Gegenwart in Hamburg (1986–1996), the Messe Torhaus in Frankfurt (1983–1984), the new Wallraf-Richartz-Museum in Cologne (1996–2002), and the Entrée to the Kaiserthermen in Trier, completed shortly before his death in 2007. His third private house (1994–1996), the 'Haus ohne Eigenschaften' ['house without qualities']



Figure 2.
Oswald Mathias Ungers, Köln Neue
Stadt, Cologne-Chorweiler/
Seeberg, 1961–1967; (left) ©
UAA; (right) photographed by
Gerardo Brown-Manrique, 2017

also in Cologne-Müngersdorf but on Kämpschensweg (Fig. 4), and just two blocks away from his 1958–1959 house at Belvederestraße, stands as the bookend to his aesthetic investigations.

In his contribution to the programme of lectures and presentations on the occasion of the 1999 exhibition ‘O. M. Ungers: Zeiträume — Architektur — Kontext’ at the Josef-Haubrich-Kunsthalle of the Kölner Kunstverein, Kenneth Frampton wrote:

The architect as builder, the professor as architect, the professor as builder; of these subtly different roles what can one say? Certainly, Ungers had a vigorous beginning, afterwards he became an erudite teacher, a Durand almost ‘*après la lettre*,’ still later he emerged as the master of a new kind of quadratic architecture.¹⁶

The status conferred to Ungers was reiterated in numerous obituaries following his death. In *The Architectural Review*, Christian Brensing wrote: ‘At all stages in his creative life Ungers provoked strong reactions and manifested a canonical architectural system based on clarity and rationality’;¹⁷ and, in what originally was to be just an analysis of the German architect’s recent projects, Oriol Bohigas noted:

observing the work of Ungers carefully, we can see that, with regard to the principles of abstraction and neutrality, of geometrical logic, there are some sufficiently powerful cultural references that situate it as a decided and firm — often non-conformist — position within contemporary architecture.¹⁸

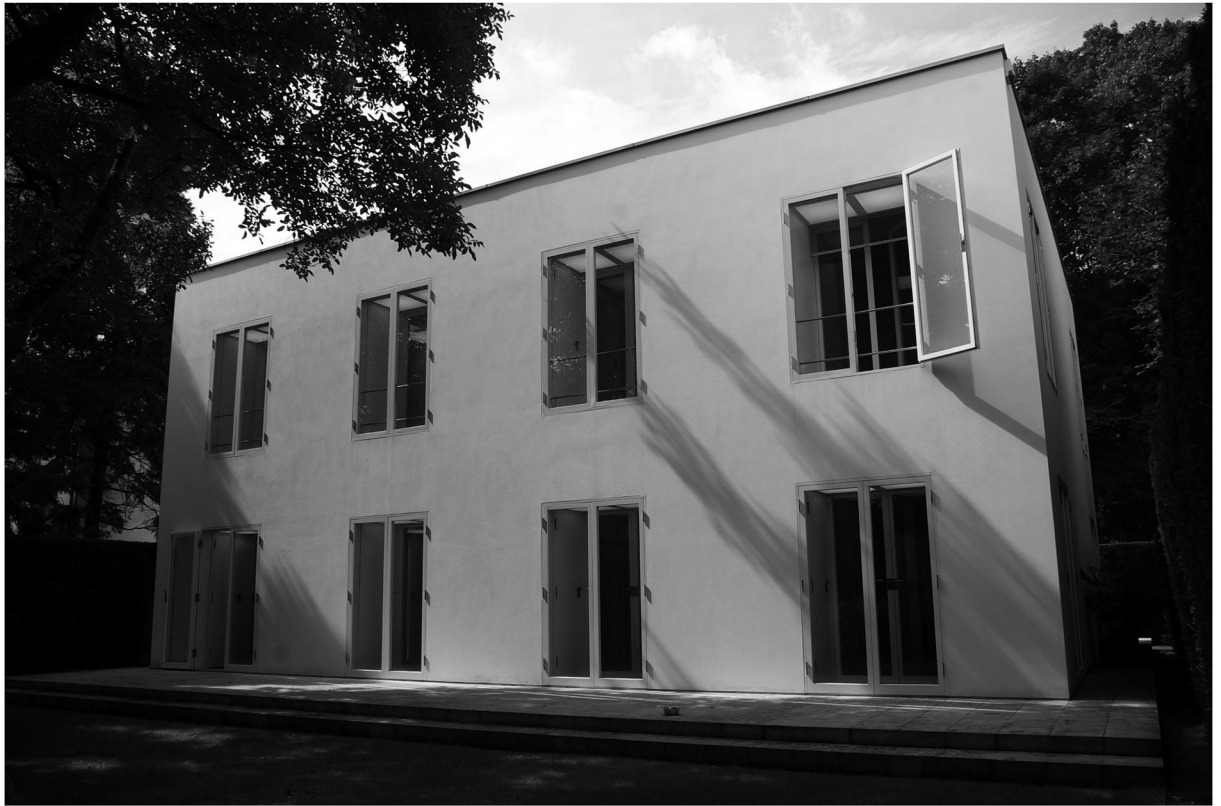
The canon and the missing early works

The accepted list of projects undertaken by Ungers as kept by the UAA indicates that his very first project, done while in the partnership Goldschmidt + Ungers, was a small single-storey house on Oderweg in Cologne-Dünnwald (with the designation WV1 in the UAA list). The house is distinguished by its clear plan based on a nine-square grid, with the living and sleeping spaces separated by the service spaces of the entry hall. It includes a dining area, bathrooms, utility closet, and galley kitchen, while the roof, a shallow zig-zag with



Figure 3.
Oswald Mathias Ungers, Deutsche
Architekturmuseum, Frankfurt-am-
Main, 1979–1984, photographed
by Gerardo Brown-Manrique, 2001

overhangs at both ends, shades the windows of the main spaces (Fig. 5). Demolished a few years after its completion, this house is the first project in the first monograph of Ungers's work edited by Heinrich Klotz.¹⁹ As such, it is also indicated as the initial project in subsequent monographs. The next two projects in the UAA list are the apartment building at Hülzstraße (WV2) and the Kleiderfabrik 'Jobi' at Aachener Straße (WV3), both in Cologne-Braunsfeld,



one behind the other, and undertaken for the same client between 1951 and 1953 (Fig. 6). While the WV list indicates three additional projects done by Ungers during the period of the Goldschmidt + Ungers partnership (1950–1954) — the Tanzschule Dresen (WV4), the building of the cabaret ‘Moulin Rouge’ at Maastricher Straße (WV5),²⁰ and the early phases of the Oberhausener Institut zur Erlangung der Hochschulreife (WV6) — there are four additional projects from this period documented in the archives. These need to be considered part of the complete list of Ungers works.

The first documented project not included in the WV list is a house identified as being either in Cologne-Lindenthal or Cologne-Junkersdorf in the UAA materials (Fig. 7). It is dated 1950–1951, but according to Goldschmidt’s biographer Wolfram Hagspiel it dates from 1952–1953, and its owner was Heinrich Krome. Its design characteristics suggest that the earlier date is correct, rendering it Ungers’s very first (and uncatalogued) work. In any case, the Haus Krome was mentioned by Martin Kieren in an article discussing Ungers and his mentor at the TH Karlsruhe Egon Eiermann.²¹ In this article, Kieren also included two other early projects: the single-family Haus Camps at Belvederestraße 102 in Cologne-Müngersdorf (1951–1953) and the mixed-use

Figure 4.
Oswald Mathias Ungers, Haus
Ungers 3 ‘Haus ohne
Eigenschaften’ [House without
Qualities], Kämpchenweg,
Cologne-Müngersdorf, 1994–
1996, photographed by Gerardo
Brown-Manrique, 2015

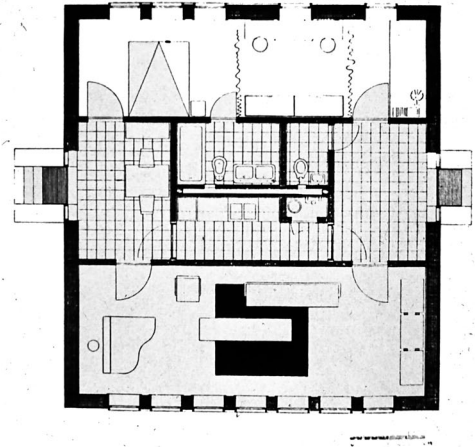
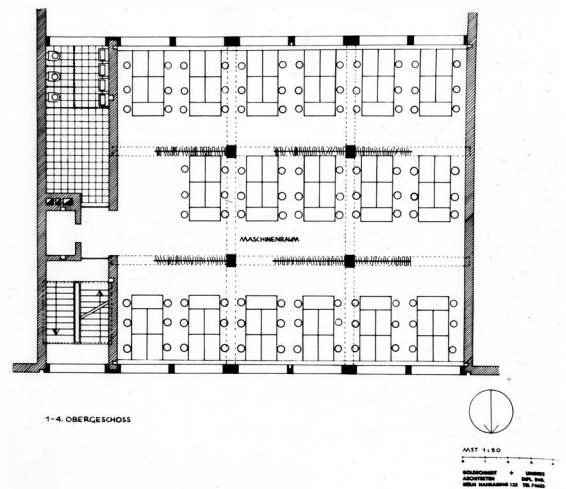
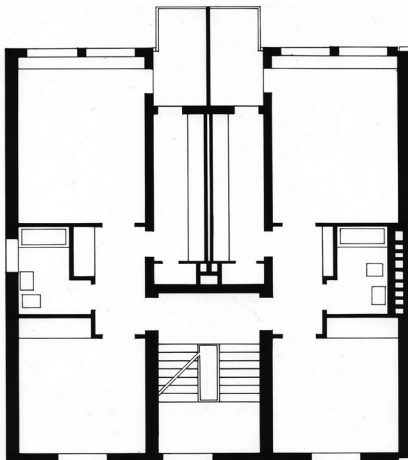
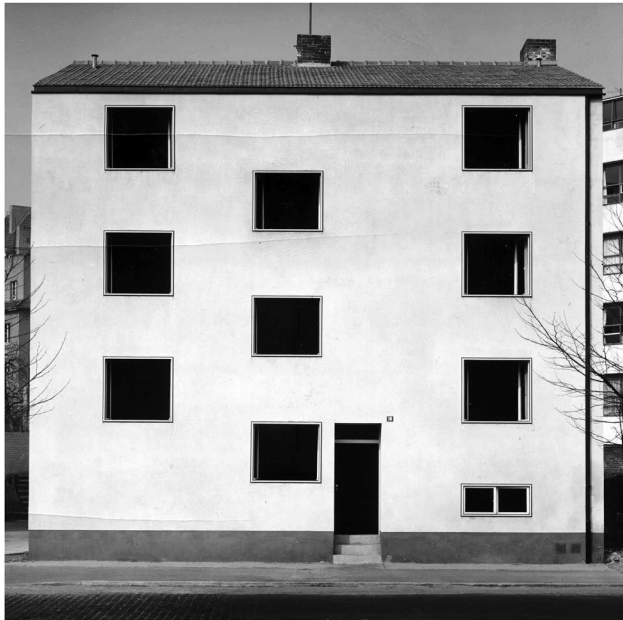


Figure 5.
Oswald Mathias Ungers, exterior
view and floor plan of Haus Z,
Oderweg, Cologne-Dünnwald,
1951, © UAA; now demolished,
this project is assigned WV1 in the
UAA chronological listing of
buildings and proposals by Ungers

building on the Kaiser-Wilhelm-Ring in Cologne (1953–1955). That the first of these is left out of the WV listing is curious, since it was published in various journals at the time of its completion, and is identified in one of the photographs in the archives as Ungers's second house project (Fig. 8).²² The building on Kaiser-Wilhelm-Ring was not published when it was completed. But it is a significant structure that responds to the acute-angle intersection of this major boulevard with a secondary street (Fig. 9).²³ Another structure, a more modest early commercial building from 1951–1952, is also documented in the Ungers Archiv. But it is misidentified as being on Schildergasse, while it is found one block away on the parallel Brüderstraße (Fig. 10).²⁴ There is one more project documented in the Ungers archives that merits attention: the competition entry for the Israeli Mission that was to be built in Cologne (Fig. 11). This project dates from 1953–1954, and interestingly, Hagspiel only lists it without illustration. He explains that it was initially being designed by Ungers in collaboration with two Israeli architects, but the project was eventually awarded to another architect, Hanns Koerfer.²⁵ It is also missing from the WV list.

The first built phase of the aforementioned Oberhausener Institut (WV6) was completed after Ungers started his independent practice in January 1955,²⁶ followed by a series of housing projects that are crucial in understanding the evolution of his design process. The first of these housing projects that appears in the list (WV7) is the multifamily house 'H' in Cologne-Dellbrück (1955–1957),²⁷ although its address is misidentified.²⁸ However, preceding it were two crucial blocks which instigate an important aesthetic investigation that Ungers would eventually follow in the Dellbrück block and other similar projects. These are the Balinger Straße and Rottweiler Straße blocks in Cologne-Nippes (of 1955 and 1955–1956, respectively), which were included in the overview of Ungers's social housing projects of the 1950s and 1960s.²⁹ Another key



building in this evolution, missing from the UAA list, is the multifamily infill building at Alsdorfer Straße 11 in Cologne–Braunsfeld (1955–1957).³⁰ The next project in the WV list is the multifamily block at Edenkobener Straße in Cologne–Nippes (WV8), another of the social housing complexes that Ungers designed between 1955 and 1957, in a period which also encompasses the infill block at Garthestraße in Cologne–Riehl (WV10), the multi-building complex at Mauenheimer Straße in Cologne–Nippes from 1957–1959 (WV12), the infill

Figure 6.
(From left to right) Oswald Mathias
Ungers, street views and typical
floor plans of Mehrfamilienhaus Z,
Hültzstraße 10, 1951–1953, and
Kleiderfabrik 'Jobi',
Aachenerstraße 421, Cologne–
Braunsfeld, © UAA

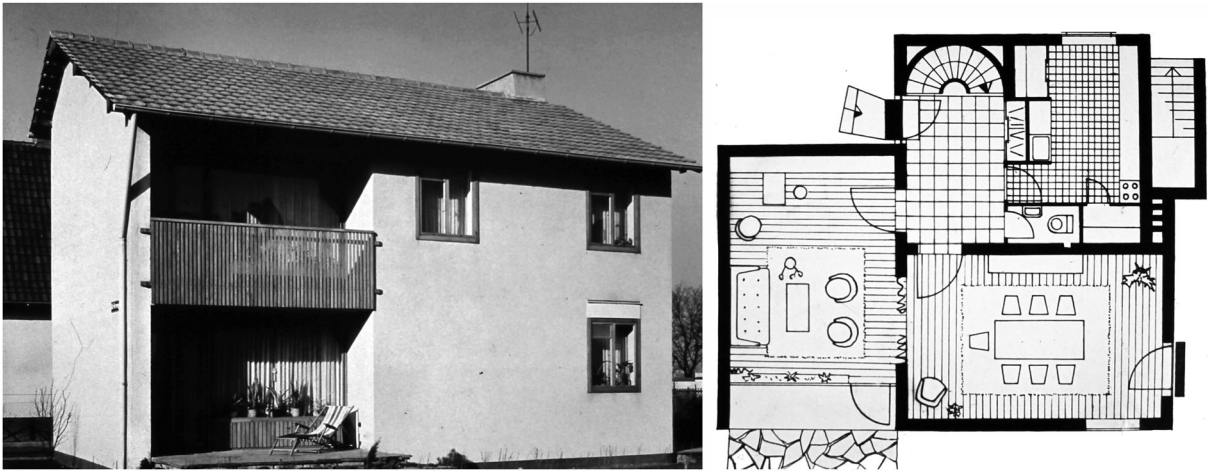
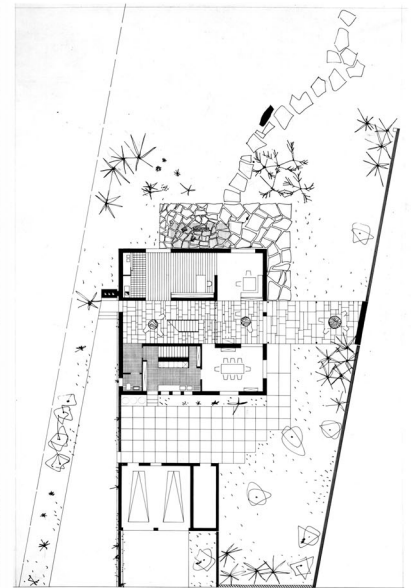


Figure 7.
Oswald Mathias Ungers, street
view and ground floor plan of Haus
Krome, Abt-Herwegen-Straße 17,
Cologne-Lindenthal, 1950–1951,
© UAA

building at Aachener Straße in Cologne-Braunsfeld from 1958 (WV13), and the complex at Jakob-Kneipe-Straße in Cologne-Poll of 1958–1959 (WV14). Again, other housing projects, which were also built in the same period and form part of the same evolution in Ungers's design trajectory, are left out. All of them were done between 1957 and 1958 and were included in publications of the time. These projects include one multifamily building at Frankenthaker Straße in Cologne-Nippes, another at Graditzer Straße in Cologne-Niehl, and one at Ravensburger Straße in Cologne-Nippes.³¹

In addition to these important housing projects, Ungers designed other very significant buildings that indeed form part of the official canon. But some of the unlisted projects of the same period illustrate alternative directions. Among the works that are not included in the canon are: the competition project for the Katholische Volksschule in Euskirchen from the early days of his independent practice (1955); a structure on a barge used in a religious procession along the Rhine in commemoration of Catholic Day in Cologne (1956);³² and the single-family Haus Scheidt in Cologne-Rodenkirche (1956–1957) that was widely publicised.³³ The listed projects of this period, namely the Studentenwohnheim 'Nibelungenhaus' in Cologne-Lindenthal from 1956–1957 (WV9),³⁴ the two-family house at Werthmannstraße in Cologne-Lindenthal of 1957–1958 (WV11), and his own first house at Belvederestraße 60 in Cologne-Müngersdorf of 1958–1959 (WV15; see Fig. 1), are all significant works that illustrate what was Ungers's primary, evolving aesthetic direction. Lastly, the 1963–1965 renovation of the Deutschordenshaus Kommende in the Sachsenhausen district of Frankfurt-am-Main, a building of considerable historical significance, is curiously missing from the WV list; only a later renovation of part of its cloister into the Ikonenmuseum is included in the accepted catalogue.³⁵

What is included in the WV list and what is not does not seem to follow a clear pattern; some non-winning competition entries (such as those for the



Römisch-Germanisches-Museum in Cologne, WV19, and the Kunsthalle in Düsseldorf, WV20, both from 1960) make the grade, while others are left out (including one for the Friedrich-Wilhelm-Gymnasium in Cologne, and another for the BEWAG office building in Berlin, both done in 1957, as well as the unrealised proposal for the Pfarrkirche Heilige Familie in Cologne-Höhenhaus of 1958); similarly, some modest yet built homes (such as the single-family house in Overath, 1960–1961, WV21) are included, while others are not (such as a proposal for a single-family house in Bensberg of 1959–1960), even when they had been published.³⁶

Extra Publica album: a thematic evaluation of canon and non-canon projects

To evaluate the work of a significant architect — of any architect — it is of supreme importance to make the assessment beyond what is found in the official, sanctioned, catalogue. But this can only occur when the actual documentary evidence is available and catalogued in some manner. There is a wealth of materials at the UAA that documents the projects missing from the official canon, which in turn facilitate a thorough analysis of Ungers's architectural production. The UAA's holdings are organised beginning with the accepted list of works, the *Werkverzeichnis-Nummer* (WV) or works' number catalogue discussed earlier. Each listed project is documented in individual binders (the 'Rotpunktordner', indicated by a red dot on the upper part) that contain A4 size reproductions of drawings, photographs of the completed structures or scale models, and other materials. Additional materials documenting Ungers's

Figure 8.
Oswald Mathias Ungers, exterior
view and ground floor plan of Haus
Camps, Belvederestraße 102,
Cologne-Müngersdorf, 1951–
1953, © UAA

Figure 9. (overleaf)
Oswald Mathias Ungers, mixed-use
building on Kaiser-Wilhelm-Ring,
Kaiser-Wilhelm-Ring 10, Cologne-
Neustadt-Nord. View, 1953–
1955, © UAA



professional activity include the actual drawings for the various projects, most of which are currently preserved rolled in tubes and listed in the 'Planarchiv' catalogue, large format (A0) portfolios, A2 size sketch portfolios, A3 size brochures and sketch portfolios, as well as binders with photographs and other materials of buildings and projects not included in the WV list, mounted 35 mm film diapositives in A4 slide holders as well as stored in archival boxes, and an inventory of wood models. These are supplemented by a digital bibliographical catalogue of all publications of the projects, copies of which are part of the UAA collection.³⁷

In the first phase of his career, spanning from the partnership of Goldschmidt + Ungers to his appointment to the faculty of the TH Berlin, Ungers explored not only themes that he later dropped, but also others that he pursued, transformed, and continued to explore. By including the non-canon projects to the list, more specifically the residential work but also some of the unsuccessful competition entries, a complete overview of the breadth of his architectural explorations is possible. This in turn allows for a full understanding of Ungers's professional evolution.

Theme 1: nine-square plans

The earliest projects identified in the UAA canon of Ungers's work clearly fit into one trait. Based on simple forms and geometries, their plan usually follows the nine-square grid. As such, they form the foundations for his explorations of the 1980s that were later identified as the 'New Abstraction', and Ungers continued to pursue until the end of his life.³⁸ These early projects are, for the most part, structures with rendered, white surfaces and crisp-edged voids for the openings, as seen in the multifamily building at Hültzstraße (WV2), the clothing factory 'Jobi' (WV3), and the Tanzschule Dresen (WV4), but also in the uncatalogued Haus Camps at Belvederestraße 102 (1951–1953), and the commercial building at Brüderstraße of 1953 (see Figs 6, 8, and 10). The most emblematic solution is found, crucially, in the multifamily housing block bounded by Eckewartstraße, Neue Kempener Straße, and Gernotstraße in Cologne-Nippes from 1959–1961 (WV18).³⁹

An underlying characteristic of some of these designs — specifically the house in Cologne-Dünnwald (WV1), the building at Hültzstraße (WV2), and the (unlisted) Haus Camps — is their exploration in plan of the nine-square grid. This is further explored and transformed in the plan for the 'Nibelungenhaus' student residence (WV9), where the main body has one-third of the square slipped from the other two thirds, creating a diagonal tension within the static nine-square grid (Fig. 12).

Theme 2: interplay of clear volumes

This dynamic relationship evolved into the next trait, which explores the plastic interplay of clear volumes. This is found in various projects from the mid- to late-1950s in Cologne and elsewhere. Some of these projects are for infill buildings, which offer little opportunity to explore how to compose the façade, save for protrusions or indentations. Others are free-standing slabs



Figure 10.
Oswald Mathias Ungers, mixed-use
building, Brüderstraße 19,
Cologne, 1953–1955, © UAA

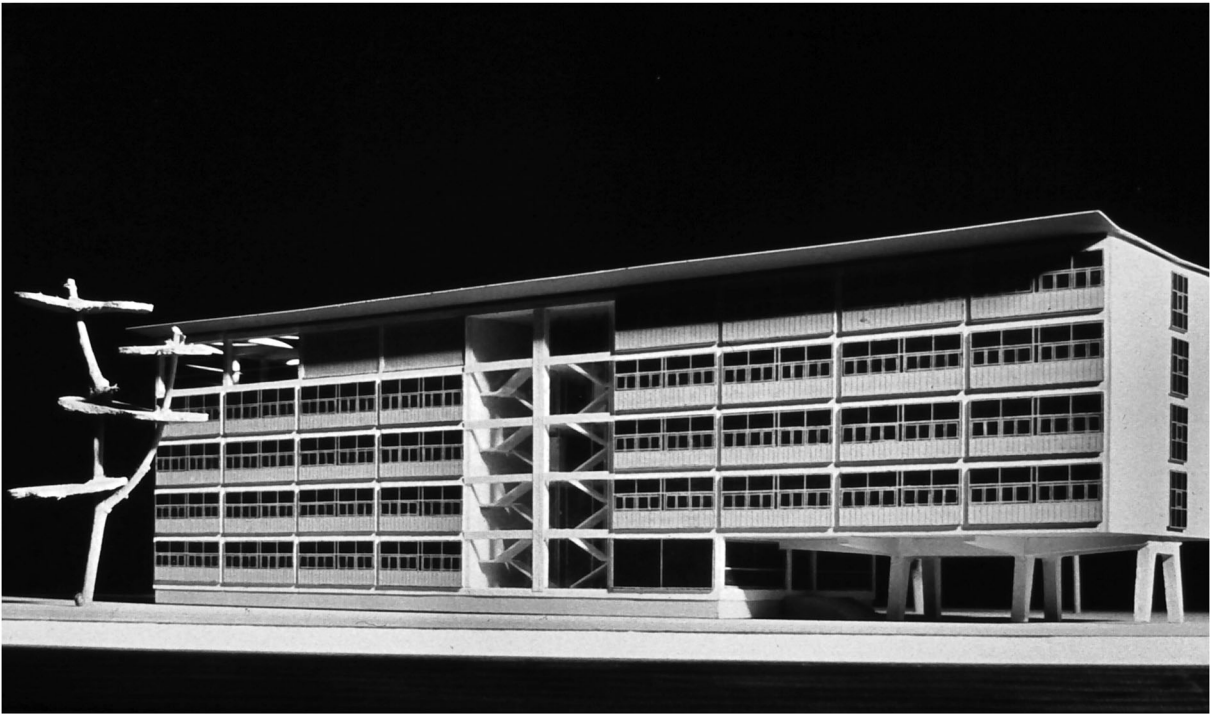


Figure 11.
Oswald Mathias Ungers, model for
Israelische Mission competition
entry, Subbelrather Straße 15,
Cologne-Ehrenfeld, 1954, © UAA

that nonetheless respond in a similar manner. Among these are projects that have led Nikolaus Pevsner and other scholars to identify Ungers's work as a continuation of the Expressionist architecture of the 1920s.⁴⁰ It could be argued that the very first project, the uncatalogued Haus Krome at Abt-Herwegen-Straße (see Fig. 7), with its three parts, instigates this exploration. This investigation is also clearly carried through to the abovementioned series of housing blocks, eventually including the multifamily house in Cologne-Dellbrück of 1955–1957 (WV7), and most elegantly found in Ungers's own first house and studio at Belvederestraße in Cologne-Müngersdorf of 1958–1959 (WV15; see Fig. 1).

Of particular interest here is how Ungers's exploration of solid and void on the façade evolved, whether maintaining the plane or moving elements in and out of it, especially as in his various housing projects for the SZB-programme. Ungers's exploration begins with the two blocks at Balinger Straße (1955) and immediately evolves to the adjacent blocks at Rottweiler Straße (1955–1956), a series of infill blocks at Garthestraße in Cologne-Riehl from 1956–1958 (WV10), Ravensburger Straße in Cologne-Nippes (1957–1958), the complex at Mauenheimer Straße in Cologne-Nippes from 1957–1959 (WV12), and the infill block on the Hansaring in Cologne-Neues-tadt-Nord (WV16), built in 1959. When Ungers further explored these possibilities in the apartment block at Mozartstraße in Wuppertal between 1959

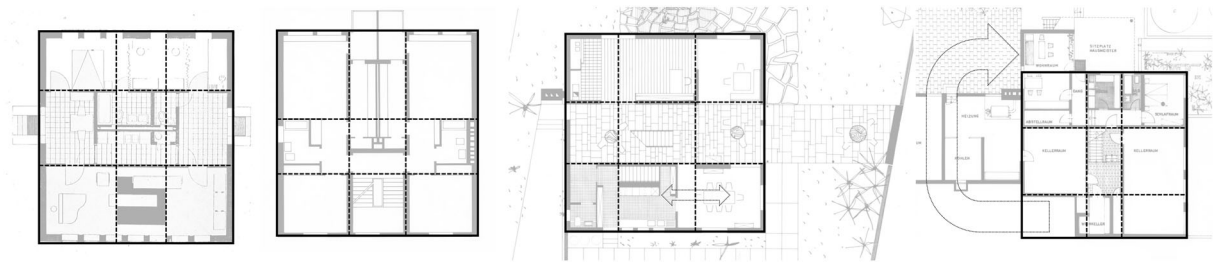


Figure 12.
Comparative analysis of Oswald Mathias Ungers's nine-square plans (from left to right): Haus Z, Cologne-Dünnwald, 1951; Mehrfamilienhaus Z, Hültzstraße, Cologne-Braunsfeld, 1951–1953; Haus Camps, Belvedere Strasse 102, Cologne-Müngersdorf, 1951–1953; and 'Nibelungenhaus', Cologne-Lindenthal, 1956–1957; all images © UAA; overlaid diagrams by Gerardo Brown-Manrique

and 1960 (WV17), his research reached its full potential. In this project, the free-standing structure includes rotation of elements at 45° to the orthogonal grid, creating additional tension between the solid protrusions and void insertions (Fig. 13).

These early investigations attracted international attention to Ungers's work. In 1959, the Italian architects Vittorio Gregotti, Aldo Rossi, and Giorgio Grassi, who also worked for the journal *Casabella* at the time, visited Ungers in Cologne. As Gregotti noted in 1976:

When I first met O.M. Ungers he was the first young German architect in the postwar years who had not wiped out recent history as if it were a crime: he was one of the first to accept the tradition of modern architecture in its contradictoriness as a living material in planning.⁴¹

This visit resulted in the first important international publication of the German architect's work, presenting examples of the various directions that Ungers was then exploring to a wider audience.⁴² The *Casabella* article includes the first phase of the Oberhausen Institute complex from 1951 to 1953 (WV6), the two-family house in Cologne-Lindenthal from 1957–1958 (WV11), the multifamily blocks at Mauenheimer Straße in Cologne-Nippes of 1957–1958 (WV12), a block at Garthestraße in Cologne-Niehl from 1957–1958 (missing from the WV list), the mixed-use building on the Hansaring in Cologne-Neustadt Nord of 1959 (WV16), and Ungers's own house in Cologne-Müngersdorf from 1958–1959 (WV15). Discussing Rossi's introductory text in *Casabella*, Renato Capozzi and Federica Visconti remark that the Italian architect saw Ungers's works as 'trying to link to the reality of a place and its history and are interested in their seriousness and what they have with us in common'.⁴³ Their observation certainly applies to the two unlisted blocks at Balinger Straße, as these are historically tied to precedents by Grod & Riphahn from the interwar period.⁴⁴

Theme 3: solids and voids

In a manner perhaps parallel to Louis I. Kahn's 'servant-served' dichotomy,⁴⁵ Ungers explored the grouping of spaces as solid masses defining (void) spaces between them. Early instances of this design investigation include the two-family Haus M in Cologne-Lindenthal from 1957–1958 (WV11), where cylindrical and cubic solids containing the kitchens, bedroom areas, bathrooms, and special spaces of the two apartments define the living spaces as the voids between the solids,⁴⁶ and the Haus Bauer in Overath from 1960–1961 (WV21),

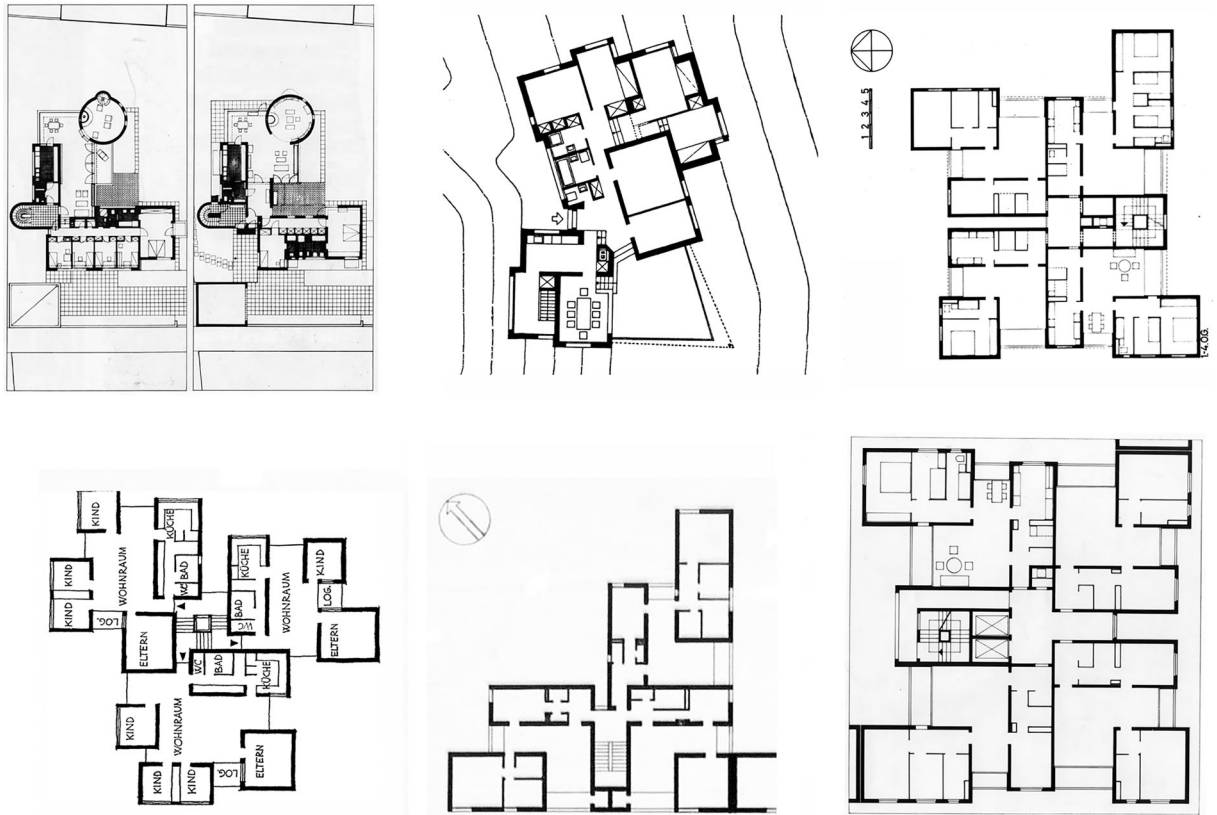


Figure 13.
Comparative analysis of Oswald Mathias Ungers's façade compositions (from top-left to bottom-right): Balinger Straße, Cologne-Nippes, 1955, photographed in 2008; Rottweiler Straße, Cologne-Nippes, 1955–1956, photographed in 2008; Garthestraße, Cologne-Riehl, 1956–1958, photographed in 2008; Ravensburger Straße, Cologne-Nippes, 1957–1958, photographed in 2011; Aachener Straße, Cologne-Braunsfeld, 1958, photographed in 2017; Mauenheimer Straße, Cologne-Nippes, 1957–1959, © UAA; Hansaring, Cologne-Neustadt-Nord, 1959, photographed in 2017; and Mozartstraße, Wuppertal-Elberfeld, 1959–1960, photographed in 1973; unless otherwise noted, photography by Gerardo Brown-Manrique

where Ungers works with the tension created by two masses askew to each other.⁴⁷ The exploration — a variation of the traditional nine-square grid found in his earliest projects — becomes a primary one for the German architect in a series of important projects of this period. It is first seen in the towers segment of his proposal for the Grünzug-Süd area of Cologne from 1962–1965 (WV28),⁴⁸ where corner solids containing the bedrooms and bathrooms, in combination with the central cross-shaped solid containing the kitchens, stairs, and other secondary spaces, create angled (L-shaped) voids of the main living spaces within each of the four dwelling units. The same configuration is found in the competition entry for Köln-Neue-Stadt and the completed building from 1961–1967 (WV27),⁴⁹ and, lastly, in the housing complex at Märkisches Viertel in Berlin-Wittenau from 1962–1967 (WV 29; Fig. 14).⁵⁰

Theme 4: spiral generation

Ungers continued to explore other possible paths. A fourth trait or direction, which he investigated early on but discarded later, explored the spiral as a generative form. While the three themes described previously remain orthogonal, only deviating with the introduction of a 45° rotation in the plan of the apartment block in Wuppertal (WV17) and the tension created in the plan in the Haus Bauer in Overath (WV21), Ungers also explored how to introduce rotation in the plan. This exploration begins with the project in Oberhausen (WV6), where an early study for the commons building organises a series of overlapping volumes displaced in a spiral, and evolves to become the organising principle of Ungers's 1961 competition entries for the Mädchenschule in Andernach, the Rathaus in Bensberg (both missing from the WV list), and the proposal for the Erzbischöfliche Gymnasium in Bonn-Beuel (WV23).⁵¹



The Haus Steimel in Hennef/Sieg, built in 1961–1962 (WV26) was a small project where this approach was realised (Fig. 15).⁵²

Ungers explored other themes in his projects from this period, including some that are missing from the official list. Some of these themes are practically variants of the previously described ones. The absence of some of these projects from the canon may indeed reflect their lack of conceptual clarity. Another plausible reason why some projects, and especially those done during his sojourn at Cornell, were not listed as part of the official canon is that such investigations would academically be defined as ‘research’, rather than ‘professional practice’. Such projects include the multidisciplinary investigation undertaken for the New York State Urban Development Corporation (NYS-UDC) that looked at approaches in the development of new towns, and involved faculty in two departments of the College of Architecture, Art, and Planning.⁵³ Other investigations were done as part of taught courses. Tilman Heyde, who was involved in the NYS-UDC investigation, participated as co-faculty with Ungers in the undergraduate research studio of 1969–1970 that resulted in their proposals for the NYS-UDC new city of Lysander, northeast of Syracuse.⁵⁴ One investigated a prefabricated housing

Figure 14.
Comparative analysis of Oswald Mathias Ungers’s solid/void compositions (from top-left to bottom-right): plan of Zweifamilienhaus M, Cologne-Lindenthal, 1957–1958; plan of Haus Bauer, Overath, 1960–1961; plan of tower unit, Grünzug-Süd, Cologne-Zollstock, 1962–1965; diagram for competition entry (1961–1962) and partial typical plan of the realised project in Köln, Köln-Neue-Stadt, Cologne-Seeberg, 1962–1967; and typical floor plan of Märkisches Viertel, Berlin-Wittenau, 1962–1967; all images © UAA

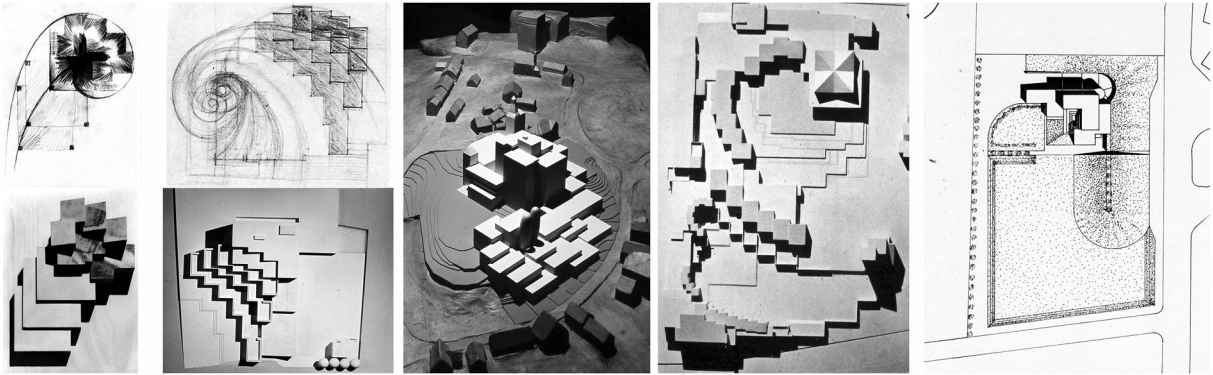


Figure 15.
Comparative analysis of Oswald Mathias Ungers's spiral organisation (from left to right): spiral diagram (undated) and model for Commons Building, Oberhausener Institut (early study, 1953); spiral diagram and model of Mädchenschule, Andernach, 1961; model of Rathaus, Bensberg, 1961; model of Erzbischöfliche Gymnasium in Bonn-Beuel, 1961; and site plan of Haus Steimer, Hennef/Sieg, 1961–1962; all images © UAA

system that responded to the US Department of Housing and Urban Development (HUD) nationwide programme titled 'Operation Breakthrough'.⁵⁵ Ungers investigated a wood-based system utilising available wood products in the USA, building a half-scale prototype in the family home's backyard; the project evolved into the Self-Help Housing Pilot Project, based on the Self-Help Housing System that resulted in a prototype demonstration house as part of a larger investigation involving other Cornell faculty addressing issues of racial discrimination in the building trades.⁵⁶ One commonality of these investigations is that they relied on systems analysis and the use of computers, an approach that found its way to Ungers's Bundesministerien competition proposal and others. So, while they may have technically been academic and not professional, these projects nonetheless influenced various of Ungers's subsequent explorations. As such, they might likely be included in the UAA catalogue.

What it all means

In the end, an archive is nothing more than a depository of information, and the more thorough it catalogues the information that it holds, the higher its value. By having a true catalogue raisonné, a complete catalogue of the work of Ungers, it will be possible to fully appreciate not only the evolving investigations undertaken by this most important theoretician and architect of the second half of the twentieth and beginning of the twenty-first centuries, but also to understand the complexity of his intellectual journey, the evolution of his ideas about architecture and its role in the cultural continuum through the creation of urban places. With the complete inventory of the materials held by the UAA catalogued to reflect the breadth and depth of Ungers's intellectual production, nuances and deviations will come to light. These will in turn permit a more complete analysis of the significance of the German architect's work.

The inclusion of a particular set of unlisted projects, in particular, seems necessary. Ungers's early reputation was established specifically because of the executed residential work, both single-family residences and multifamily

structures. All these projects enabled him to explore one or more of the themes described earlier. As previously explained, without the earliest explorations of multifamily solutions at Balinger Straße and Rottweiler Straße in 1955, the investigation of the interplay of volumes, solids and voids, and spiral generation of volumes would be incomplete. As a result, the richness of his overall development would not be fully appreciated. The significance of Ungers in the development of architectural theory and aesthetics in the late twentieth and early twenty-first century is clear, and the examination of his oeuvre in its entirety only helps to reinforce this.

Appendix: extra praedictum canonem — Ungers's works before 1975 not in the canon

The following is a list of those architectural and planning projects — proposed or non-winning, but also realised, competition entries — done before Ungers's return to Cologne in 1975 that do not appear in the 'Werkverzeichnis' (WV) maintained by the UAA. They are identified by their number in my catalogue, using an asterisk followed by a sequential number. The ones missing in the sequence are those with an official WV number. I have included the projects I discussed earlier in my article.

- 1950–1951 Haus Krome, Cologne-Lindenthal [*1]⁵⁷
- 1951–1953 Haus Camps, Cologne-Müngersdorf [*3]⁵⁸
- 1953–1955 Geschäftshaus Kaiser-Wilhelm-Ring, Cologne-Neustadt Nord [*6]⁵⁹
- 1953–1955 Geschäftshaus Brüderstraße, Cologne [*7]⁶⁰
- 1953 Wettbewerb Israelische Mission, Cologne-Ehrenfeld [*8]⁶¹
- 1955 Mehrfamilienhaus Balinger Straße, Cologne-Nippes [*12]⁶²
- 1955–1956 Mehrfamilienhaus Rottweiler Straße, Cologne-Nippes [*13]⁶³
- 1955 Wettbewerb Katholische Volksschule Euskirchen [*14]⁶⁴
- 1955–1957 Mehrfamilienhaus Alsdorfer Straße, Cologne-Braunsfeld [*17]⁶⁵
- 1956 Prozessionsschiff (Sakramentesschiff), Cologne [*18]⁶⁶
- 1956–1957 Haus Scheidt, Rodenkirchen-bei-Köln [*19]⁶⁷
- 1957 Wettbewerb Friedrich-Wilhelm-Gymnasium, Cologne [*22]⁶⁸
- 1957 (c.) Filealkirche, Velbert [*23]⁶⁹
- 1957 Wettbewerb BEWAG, Berlin-Tiergarten [*24]⁷⁰
- 1957–1958 Mehrfamilienhaus Frankenthaler Straße, Cologne-Mauenheim [*25]⁷¹
- 1957–1958 Mehrfamilienhaus Graditzer Straße, Cologne-Niehl [*26]⁷²
- 1957–1958 Mehrfamilienhaus Ravensburger Straße, Cologne-Nippes [*27]⁷³
- 1958 Pfarrkirche Heilige Familie, Cologne-Höhenhaus [*31]⁷⁴
- 1959–1960 Einfamilienhaus Wittschier, Bensberg [*36]⁷⁵
- 1960 Wettbewerb Gymnasium Opladen, Leverkusen-Opladen [*38]⁷⁶
- 1960–1963 Mehrfamilienhaus Schiefersburger Weg, Cologne-Nippes [*43]⁷⁷

- 1961 Wettbewerb Mädchenschule, Andernach [*44]⁷⁸
- 1961–1962 Wettbewerb Neue Rathaus, Bensberg [*50]⁷⁹
- 1963–1965 Deutschordenshaus Kommende [*53]⁸⁰
- 1965 Wettbewerb Landesfinanzschule, Nordkirchen [*60]⁸¹
- 1965 Wettbewerb Stadttheater, Winterthur, CH [*61]⁸²
- 1971–1973 Self-Help Housing System, Ithaca, NY [*63]⁸³
- 1971–1972 Wettbewerb Bundesministerien, Bonn [*65]⁸⁴

Notes and references

1. Werner Goehner, 'Ungers' Lost Project', in *Sichtweisen: Betrachtungen zum Werk von O.M. Ungers*, ed. by Anja Sieber-Albers and Martin Kieren (Braunschweig/Wiesbaden: Vieweg, 1999), pp. 56–63. Goehner's contribution is in volume 3 (the *Festschrift* itself) of the collection, Oswald Mathias Ungers, *Was ich schon immer sagen wollte über die Stadt, wie man sich seine eigenen Häuser baut, und was andere über mich denken* (Braunschweig/Wiesbaden: Vieweg, 1999). The other two volumes of the collection are: Oswald Mathias Ungers and Stefan Vieths, *Die dialektische Stadt* (vol. 1) and Oswald Mathias Ungers, *Aphorismen zum Häuserbauen* (vol. 2).
2. The three criteria as quoted by Goehner are: '1. If among several books attributed to an author one is inferior to the others, it must be withdrawn ... 2. The same should be done if certain texts contradict the doctrine expounded in the author's other works ... 3. One must also exclude works, that are written in a different style ...'. See Michel Foucault, 'Qu'est-ce qu'un auteur? (What is an Author?)', lecture at the Collège de France on 22 February 1969, repr. in *Language, Counter-Memory, Practice: Selected Essays and Interviews by Michel Foucault*, ed. by Donald F. Bouchard (Ithaca, NY: Cornell University Press, 1980), pp. 113–38 (p. 113).
3. Goehner apparently incorrectly assumes that the accepted list of works is tied to the monograph by Martin Kieren, *Oswald Mathias Ungers* (London/Zürich: Artemis, 1994). The Bonn Ministries project had been excluded from the preceding monographs: *O.M. Ungers, 1951–1984: Bauten und Projekten*, ed. by Heinrich Klotz (Braunschweig/Wiesbaden: Vieweg & Sohn, 1985/1986); and Oswald Mathias Ungers, *Oswald Mathias Ungers: Architetture 1951–1990* (Milan: Electa, 1991). A subsequent monograph was published in 1998, Oswald Mathias Ungers and Marco de Michelis, *Oswald Mathias Ungers: Opera Completa 1991–1998* (Milan: Electa, 2002).
4. The 1966 Flughafen Tegel competition project was included in the first monograph on Ungers's work published by Vieweg. See *O.M. Ungers, 1951–1984*, ed. by Klotz, pp. 96–97. It was also listed in the catalogues found in both monographs published by Electa in 1991 and 1998. In addition, it was published in *Bauwelt*, 57.22 (30 May 1966), 650–58, where the competition results were announced, and in *Lotus*, 6 (1969), 220–29. The Bonn competition results were published in *Baumeister*. See W. Müller-Rombach, 'Bauten des Bundes und ihre Integration in die Stadt Bonn', *Baumeister*, 69.7 (July 1972), 755–71.
5. The list of projects as maintained by the UAA begins with the 1951 single-family house in Cologne-Dünnwald (Werkverzeichnis-Nummer 1 — WV1), undertaken while in partnership with Goldschmidt, discussed below. For a published description of the partnership, see Wolfram Hagspiel, 'Helmut Goldschmidt', in *Köln und seine jüdischen Architekten* (Cologne: Bachem, 2010), pp. 247–50. The UAA assigns each project a works number ('Werkverzeichnis-Nummer' — WV) in chronological order. Each project (with a few exceptions) is documented in its own loose-leaf binder with a red dot and the WV-number on its

spine ('Rotpunktordner'), and these are regarded as the accepted catalogue. The Flughafen Tegel project is assigned WV36 in the UAA list of projects. The Bonn ministries project does not appear in the UAA WV list, although it is #65 in the order of projects undertaken by Ungers, as I have catalogued them. The UAA inventory list ends with WV310, but it also documents three more projects with provisionally assigned WV-numbers.

6. The published bibliographies are: *The Architecture of Oswald Mathias Ungers: A Bibliography (Exchange Bibliography, 1423)* (Monticello, IL: Council of Planning Librarians, 1977); *The Architecture of Oswald Mathias Ungers: A Chronological Bibliography. A Revised Edition: Architecture Series, A-315* (Monticello, IL: Vance Bibliographies, 1980); *Oswald Mathias Ungers: 1980–86, An Updated Bibliography. Architecture Series A-1850* (Monticello, IL: Vance Bibliographies, 1987); and *O.M. Ungers: A Comprehensive Bibliography 1953 to 1995* (Oxford, OH: Interallia/Design Books, 1996).
7. A result was the first English language publication of a project by Ungers following his permanent return to Germany. See 'Schloss Morsbroich — Ungers' Museum Project in Leverkusen', *Architectural Design*, 50.1–2 (January/February 1980), 8–15. Other publications include: 'Morphologies, Transformations and Other Stories: Recent Work by O.M. Ungers', in *O.M. Ungers: Works in Progress 1976–1980*, ed. by Kenneth Frampton (New York, NY: Rizzoli, 1981), pp. 6–19; and 'Konstantinplatz in Trier: Between Memory and Place', *Places*, 3.1 (January 1986), 31–42.
8. Goehner, 'Ungers' Lost Project', p. 63.
9. Projects done after Ungers's 1975 return to Germany not included in the UAA catalogue are beyond the scope of this study. My aim here is to document the diversity of directions explored by him in the course of establishing his reputation as one of the critical theorists and practitioners in the last part of the twentieth century.
10. Reinhard Gieselmann and Oswald Mathias Ungers, 'Zu einer neuen Architektur', *Der Monat* 15.174 (March 1963), 96. Its translation into English is included in *Programs and Manifestoes on 20th-Century Architecture*, ed. by Ulrich Conrads (Cambridge, MA: MIT Press, 1970), pp. 165–66. Ungers's essay 'Designing and Thinking in Images, Metaphors and Analogies' was published in the catalogue of the inaugural exhibition at the Smithsonian Institution's National Museum of Design, Cooper-Hewitt Museum, which included the installation 'City Metaphors' by Ungers. See *MAN transFORMS*, ed. by Hans Hollein (New York, NY: Cooper-Hewitt Museum, 1976), pp. 98–104. It is also included in: Oswald Mathias Ungers, *Morphologie: City Metaphors* (Köln: Walther König, 1982); Oswald Mathias Ungers, 'Architecture of the Collective Memory (The Infinite Catalogue of Urban Forms)', *Lotus*, 24 (1979), 5–11; Oswald Mathias Ungers, *Architettura come Tema* (Milan: Electa, 1982).
11. The exhibitions presenting Ungers's work together with objects from his art collection and key holdings from his personal library include the 1999 exhibition 'O. M. Ungers: Zeiträume — Architektur — Kontext' at the Josef-Haubrich-Kunsthalle in Cologne, and the 2006 exhibition 'O.M. Ungers: Kosmos der Architektur' at the Neue Nationalgalerie in Berlin. See *O.M. Ungers: 10 Kapitel über Architektur; ein visueller Traktat*, ed. by Anja Sieber-Albers (Köln: DuMont, 1999) and *O.M. Ungers: Kosmos der Architektur*, ed. by Andreas Lepik and Jasper Cepl (Ostfildern; Berlin: Hatje Cantz; Nationalgalerie Staatliche Museen zu Berlin, 2006).
12. Helmut Goldschmidt (1918–2005) had been unable to study architecture in the mid-1930s because of the racial laws of Nazi Germany. But he did attend some classes at the TH Charlottenburg (today TU Berlin) under an assumed name (that of his non-Jewish grandfather), and then apprenticed with Jewish architects until they were no longer allowed to practise. Arrested in 1942 and interned in Auschwitz and then Buchenwald, he was liberated by the US Army in April 1945. He set up his practice first in Cologne in 1946, working for the re-

- established Jewish community among others, then in Mayen in 1947. Ungers interned in Goldschmidt's office in Mayen for six months in 1947 before embarking on his studies at the TH Karlsruhe. He joined Goldschmidt in Cologne, where the older architect had returned in 1948 after his time in Mayen. In practice, the partners worked individually on specific projects. As such, it is only the UAA that holds documentation of projects that Ungers designed at that time. For a description of Ungers's partnership with Goldschmidt, see Wolfram Hagspiel, *Köln und seine jüdischen Architekten*, pp. 247–50.
13. SBZ is the abbreviation for *Sowjetische Besatzungszone*, the Soviet Occupation Zone. The programme was labelled SBZ-Flüchtlinge, as it was intended for refugees fleeing from the Soviet Occupation Zone, the Deutsche Demokratische Republik — the German Democratic Republic (GDR), commonly known as East Germany.
 14. The Haus Ungers 1 was first published, featuring on the cover of *Bauwelt*, in 'Ein Werkstattbericht; Bauten und Projekten von O.M. Ungers', *Bauwelt*, 51.8 (22 February 1960), 204–17. It has been included or mentioned in over 130 publications since then. Its first publication in English is: 'Architect's Own House, Cologne-Müngersdorf; O. Mathias Ungers', *Architectural Design*, 30.11 (November 1960), 455–57.
 15. 'German Architect to Head Cornell Department', *The New York Times*, 23 June 1968, p. 46.
 16. Kenneth Frampton, 'Between the Project and the Built: Three Moments in the Work of Oswald Mathias Ungers', draft typescript (1999), collection of the UAA.
 17. Christian Brensing, 'Oswald Mathias Ungers 1926–2007', *The Architectural Review*, 222.1330 (December 2007), 30.
 18. Oriol Bohigas, 'Ungers, or Discreet Abstraction', *Quaderns d'arquitectura i urbanisme*, 256 (Winter 2007), 20–23 (p. 22).
 19. *O.M. Ungers, 1951–1984*, ed. by Klotz, p. 37. Wolfram Hagspiel notes 1952–53 as the dates of construction, indicating that the house was later demolished. The listing does not identify the client. See Hagspiel, *Köln und seine jüdischen Architekten*, p. 270.
 20. The 'Moulin Rouge' is credited to the partnership Goldschmidt Steffens Ungers Architekten. See Hagspiel, *Köln und seine jüdischen Architekten*, p. 265. The client was Louis Goldschmidt.
 21. See Martin Kieren, 'Berühmte Lehrer — berühmte Schüler: Egon Eiermann und Oswald Mathias Ungers', *Bauwelt*, 85.38 (7 October 1994), 2132–35; Hagspiel, *Köln und seine jüdischen Architekten*, p. 268. The Haus Krome is located at Abt-Herwegen-Straße 17 in Cologne-Lindenthal. A note on the back of one of the photographs of this house at the UAA indicates that this is the first project realised by Ungers; its location is misidentified.
 22. The Haus Camps, located at Belvederestraße 102 in Cologne-Müngersdorf, was published twice in 1954, twice in 1956, and once in 1957. Its earliest publications are 'Haus in Köln', *Baukunst und Werkform*, 7.7–8 (July/August 1954), 415–21, and 'Quelques Exemples d'Équipement le Séjour', *L'architecture d'aujourd'hui*, 25.5–6 (September/October 1954), 38–39, 53, 81. Its documentation is held at the UAA.
 23. The Kaiser-Wilhelm-Rind building is included in various later publications documenting landmarked structures in Cologne, including Wolfram Hagspiel, Hiltrud Krier and Ulrich Krings, *Stadtspuren: Denkmäler in Köln; Bd. 6: Köln: Architektur der 50er Jahre* (Köln: Bachem, 1986) and Alexander Kierdorf, *Köln; Ein Architekturführer* (Berlin: Reimer, 1999). Curiously, Helmut Goldschmidt's professional office was still based in this building sometime after the dissolution of the partnership. Documentation at the UAA includes photographs as well as reductions of the construction drawings.
 24. Hagspiel, *Köln und seine jüdischen Architekten*, p. 267. The published photograph is also found at the UAA. The book includes an additional view, showing the rear of the build-

ing. Sometime after its completion, a fourth storey was added. During my visit in summer 2018, I noted that the structure retains its original street front condition, with the additional floor.

25. The competition was conducted in 1954. Goldschmidt + Ungers prepared the proposal in conjunction with the Israeli architects Munio Weinraub and Alfred Mansfeld. Weinraub had studied at the Bauhaus in 1930 with Ludwig Mies van der Rohe, and immigrated to Palestine in 1934. The 1955–56 Israeli Mission designed by Hanns Koerfer, who received the commission, was located at Subbelrather Straße 15 in Cologne-Ehrenfeld, but has since been demolished. See Hagspiel, *Köln und seine jüdischen Architekten*, p. 277. The UAA documentation consists of two model photographs.
26. An unrealised first project for the Oberhausener Institut was proposed in 1951; it was apparently a joint effort of Goldschmidt and Ungers. Oswald Mathias Ungers continued with a revised proposal that constitutes the first built phase of the project, from 1953 to 1958. The project was widely published; among others, see 'Entwurf für den Neubau des "Oberhausener Instituts"', *Baukunst und Werkform*, 8.3 (March 1955), 142, 153–61, and 'Internat des Staatlichen Instituts zur Erlangung der Hochschulreife, Oberhausen', *Bauwelt*, 50.51/52 (21 December 1959), 1488, 1506–09. A second built phase was designed between 1967 and 1969, and completed in 1973 when Ungers was respectively at the TU Berlin, and Cornell.
27. This free-standing structure was first published in the aforementioned article 'Ein Werkstattbericht', p. 210. It also appeared elsewhere.
28. The address is given as Brambach Straße instead of Schilfweg, which I corrected when I first documented the structure in 1979. Nonetheless, the misidentification of the location is repeated even in Jasper Cepl's very significant *Oswald Mathias Ungers: Eine intellektuelle Biographie* (Köln: Walther König, 2007), p. 66.
29. 'O.M. Ungers: Sozialer Wohnungsbau 1953–1966', *Baumeister*, 64.5 (May 1967), 556–72 (p. 557). The two blocks are documented at the UAA, including historic photographs. But there were drawings for the Balingen Straße blocks in the Ungers files in 1979 when I photographed them; these seem to have been misplaced.
30. The building was not included in the survey of Ungers's social housing projects published in the May 1967 issue of *Baumeister*. The related photographs and drawings are held at the UAA.
31. The block at Greditzer Straße was included in 'O.M. Ungers; Sozialer Wohnungsbau 1953–1966', p. 557. It was previously included in 'Werkstattbericht', p. 211.
32. According to my conversation with Frau Liselotte Ungers in autumn 2008, this was a very significant commission; it had great potential, owing to its connections within the greater community. Photographs were published in *Zentralkomitee der deutschen Katholiken*, 77. *Deutscher Katholikentag 1956 in Köln* (Köln: Katolischen-Nachrichten-Agentur, 1957), pp. 288–89, 304–05. Drawings are held at the UAA.
33. The Haus Scheidt appeared in 'Kleines Wohnhaus in Rodenkirchen bei Köln', *Baukunst und Werkform*, 9.5 (May 1956), 260–62. It was also included in Rainer Wolff, *Das kleine Haus* (München: Callwey, 1959), pp. 54–55.
34. This project was extensively published. Among others, see 'Studentenheim in Köln-Lindenthal', *Bauwelt*, 50.51/52 (21 December 1959), 1516–18, and 'Ein Werkstattbericht', p. 207.
35. The Deutschordenshaus Kommende was the Frankfurt seat of the Medieval Teutonic or German Order of Knights. The current church and cloister date from the eighteenth century, and were heavily damaged during aerial bombardments in 1943. Ungers was commissioned to restore the cloister. Years later, in 1988, he renovated the cloister again, converting parts into the present Ikonenmuseum (WV149). For the original restor-

- ation, see Rolf Hanstein, *Der Deutsche Order nach dem Zweiten Weltkrieg* (Bad Godesberg: Wissenschaftliches Archiv GmbH, 1967). For the later renovation, see 'Ikonenmuseum / Stereometrie ohne Aura', in *Museums Architektur in Frankfurt 1980–1990*, ed. by Vittorio Magnano Lampugnani (München: Prestel, 1990), pp. 97–105. The drawings for the Deutschordenshaus and for the Ikonenmuseum are held at the UAA.
36. The Haus W in Bensberg appeared in Luigi Bisogle, 'Germania di oggi: O.M. Ungers', *Casabella*, 305 (May 1966), 36–59 (p. 40). Although the project remains uncatalogued, its documentation is held at the UAA.
 37. While the WV list and its companion 'Rotpunktordner' binders follow the chronological order, the other materials are numbered based on the dates that they were stored. As such, the original drawings of a particular project rolled inside cardboard tubes (regardless of the number of containers required for each specific work) are numbered in the order that they were stored, irrespective of the project date or WV number. I cross-listed all the various inventoried materials in 2018 in a database that is available at the UAA.
 38. In his discussions with Charles Jencks, Ungers suggested the term 'The New Abstraction' to identify his own architecture. Jencks expanded its meaning by adding that 'the New Abstraction is positive in its relation to history and local culture, although its solutions are still mediated by a geometrical discipline that keeps them general [...] archetypal, not culturally coded'. See Charles Jencks, 'The Perennial Architectural Debate', *Architectural Design*, 53.7–8 (July–August 1983), 4–22 (p. 13).
 39. The block was initially published in 'The Works of O.M. Ungers', *The Kentiku* (March 1962), 27–42.
 40. See Nikolaus Pevsner, 'Moderne Architektur und der Historischer oder die Wiederkehr Historizismus', *Deutsche Bauzeitung*, 66.10 (October 1961), 757–64; Reyner Banham, *The New Brutalism: Ethic or Aesthetic?* (London; New York, NY: Architectural Press; Reinhold, 1966), pp. 125–26, 144–45.
 41. Vittorio Gregotti, 'Oswald Mathias Ungers', *Lotus*, 11 (January 1976), 12.
 42. See Aldo Rossi, 'Un giovane architetto Tedesco: Oswald Mathias Ungers', *Casabella-Continuità*, 244 (October 1960), 22–35. This text was partially reprinted in *Casabella*, 654 (March 1998), 18–19.
 43. Renato Capozzi and Federica Visconti place the *Casabella* article by Rossi as the beginning of the intellectual kinship between Ungers and Rossi, and between Ungers and Italian architects since then. See Renato Capozzi and Federica Visconti, 'Oswald Mathias Ungers e l'Italia. L'inizio di un rapporto: la XV Triennale di Milano del 1973', *esempi di Architettura*, 24 July 2009 <<http://hdl.handle.net/11588/389968>> [accessed 5 July 2021]. For a more recent discussion of the relationship between Ungers and Italy, see Francesco Sorrentino, *Oswald Mathias Ungers: l'Uno e il Molteplice* (Naples: CLEAN, 2017).
 44. More specifically, the reference is to the relationship between the corner windows of the living spaces and their adjacent balcony area in the GAG-Siedlung 'Weiße Stadt' in Cologne–Kalkerfeld (formerly Cologne–Buchforst) by Caspar Maria Grod and Wilhelm Riphahn (1926–1932). See Heinrich de Fries, 'Ein neue Kölner Siedlung', *Forum: Zeitschrift für gestaltende Arbeit*, 5.14 (15 July 1930), 369–76, and *Neuzeitliche Miethäuser und Siedlungen*, ed. by Leo Adler (Berlin-Charlottenburg: Pollak, 1931), pp. 256–57.
 45. Here one thinks specifically of Louis I. Kahn's Richards Medical Research Laboratories at the University of Pennsylvania (1957–1960), but also the earlier Trenton Bath House in Ewing Township, NJ (1955). See, for instance, Romaldo Giurgola and Jaimini Mehta, *Louis I. Kahn* (Boulder, CO: Westview Press, 1975).
 46. The two-family house was widely published, starting from 'Ein Werkstattbericht', pp. 208–09.

47. This project is found in numerous publications, including Ulrich Conrads, 'Focus VI: Oswald Mathias Ungers', *Zodiac*, 9 (1962), 172–81 (p. 181).
48. While the overall investigation focused on developing contextual responses along a long spine, a series of towers connected the various sections along the east side of the proposal.
49. See Bisogle, 'Germania di oggi', pp. 44–45, and 'O.M. Ungers: Sozialer Wohnungsbau 1953–1966', pp. 566–67.
50. 'O.M. Ungers: Sozialer Wohnungsbau 1953–1966', pp. 562–63.
51. This is discussed in Cepl, *Oswald Mathias Ungers: Eine intellektuelle Biographie*, pp. 97–101.
52. Among others, see Bisogle, 'Germania di oggi', p. 42. The Haus Steimel was demolished in September 2017 on purpose, to prevent it from becoming a listed historic property. See Klaus Heutschötter, 'Nach Abriss: Ungers-Villa in Hennef ist endgültig verloren', *Kölner Stadt-Anzeiger*, 20 September 2017 <<https://www.ksta.de/region/rhein-sieg-bonn/hennef-archiv/nach-abriss-ungers-villa-in-hennef-ist-endgueltig-verloren-28440408>> [accessed 5 July 2021].
53. Conducted in 1970–1972 under the umbrella of Cornell University's Center for Urban Development Research for the New York State Urban Development Corporation, this research project studied alternative transport, urbanisation, and industrial development patterns in New York State. It involved faculty in the departments of architecture and regional planning, including Thomas Vietoritz and William Goldsmith (planning), and Oswald Mathias Ungers and Tilman Heyde (architecture). See Thomas Vietoritz, *The Design and Evaluation of Alternative Patterns of New Town Development for the State of New York. Final Report (NYS-UDC Contract No. D=49492)* (Ithaca, NY: Center for Urban Development Research, 1972).
54. Oswald Mathias Ungers and Tilman Heyde, *Lysander New City: A Project of Fourth and Fifth Year Students* (Ithaca, NY: Cornell University Department of Architecture, 1970).
55. *Operation Breakthrough: Questions and Answers*, U.S. Department of Housing and Urban Development (Washington, DC: US Government Printing Office, 1971).
56. The project is discussed in André Bideau, 'Housing as Discursive Void: Oswald Mathias Ungers in the 1960s and 1970s', *Candide*, 7 (October 2013), 61–88, which includes illustrations of the S-HHS full-scale module but an incorrect illustration of its application. Bideau argues that the Ithaca project was in line with Ungers's shift in thinking about housing as a result of his experience in Berlin with his participation in the Märkisches Viertel high-density, high-rise development in Berlin-Wittenau. At the TU Berlin, Ungers's seminar publications, the *Veröffentlichungen zur Architektur* [Publications on Architecture] had numbers on large-panel prefabrication (*Wohnungssysteme in Großtafeln*, Veröffentlichungen zur Architektur, 22 (December 1968)), and housing systems in modular components (*Wohnungssysteme in Raumzellen*, Veröffentlichungen zur Architektur, 24 (Winter 1968–69)), for example. The final proposal of the housing system developed at Cornell was published as Oswald Mathias Ungers (architect) and Gerardo Brown-Manrique (project designer), *S-HHS: Self-Help Housing System* (Ithaca, NY: Cornell University Department of Architecture, 1972).
57. Kieren, 'Berühmte Lehrer — berühmte Schuler', p. 2135; Hagspiel, *Köln und seine jüdische Architekten*, p. 268.
58. 'Haus in Köln', *Baukunst und Werkform*, 7.7/8 (July–August 1954), 415–21; 'Quelques Exemples d'Équipement le Séjour', pp. 38–39, 53, 81; 'Kombinationsregal aus genormten Elementen', *Baukunst und Werkform*, 9.11 (November 1956), 615–16; Hagspiel, *Köln und seine jüdische Architekten*, p. 274.
59. Kieren, 'Berühmte Lehrer — berühmte Schuler', p. 2134; Hagspiel, *Köln und seine jüdische Architekten*, p. 275.

60. Hagspiel, *Köln und seine jüdische Architekten*, p. 267.
61. Ibid., p. 277 (without illustration).
62. 'O.M. Ungers; Sozialer Wohnungsbau 1953–1966', p. 557.
63. Ibid.
64. Unpublished competition project, documented at the UAA files.
65. A photograph of the building is held at the UAA files, although the project was not published.
66. Zentralkomitee der deutschen Katholiken, 77. *Deutscher Katholikentag 1956 in Köln*, pp. 288–89, 304–05.
67. 'Kleines Wohnhaus in Rodenkirchen bei Köln', *Baukunst und Werkform*, 9.5 (May 1956), 260–62; 'Haus W., Rodenkirchen', in Wolff, *Das kleine Haus*, pp. 54–55.
68. Model photographs are held at the UAA files.
69. Model photographs are held at the UAA files.
70. Model photographs are held at the UAA files.
71. 'O.M. Ungers; Sozialer Wohnungsbau 1953–1966', p. 557.
72. Ibid.
73. Ibid.
74. The only documentation is held at the UAA files.
75. Bisogle, 'Germania di oggi', p. 40.
76. Competition project; see 'Ein Werkstattbericht', pp. 216–17.
77. Conrads, 'Focus VI: Oswald Mathias Ungers', p. 179. Although this was originally envisioned as a repetitive series of attached housing blocks forming an irregular crescent with a freestanding element, the realised project, of much reduced size, is a freestanding structure with commercial space at ground level, a parking ramp, and apartments above. It was completed in 1973 by Ungers's long-time associate K.L. Dietzsch.
78. 'Krafte und Gegenkraft', *Bauwelt*, 53.28/29 (16 July 1962), 803–05.
79. Model photographs are held at the UAA files.
80. The drawings for the Deutschordenshaus project, as well as those for its later conversion into the Ikonenmuseum (WV181), are held at the UAA files.
81. Photographs of the site and reproductions of the drawings are held at the UAA files.
82. Model photograph and drawings are held at the UAA files.
83. The Self-Help Housing System (S-HHS) was the result of a research project initiated by Ungers to explore the design of a prefabricated housing system. See Ungers and Brown-Manrique, *S-HHS: Self-Help Housing System*; Bideau, 'Housing as Discursive Void'.
84. Müller-Rombach, 'Bauten des Bundes und ihre Integration in die Stadt Bonn', p. 756; Goehner, 'Ungers' Lost Project', pp. 56–63.