Chapter 3. The House: Crystallized Architecture Thinking

> We've always liked doing houses because they're just as complex as buildings: they often take as much time and you always work with one single individual, as opposed to a state institution or a business conglomerate.[1]
> *Rem Koolhaas*

Throughout the history of architecture, individual houses have held a privileged position. Alan Colquhoun suggests that this is a sign of the elitist character of architecture, which becomes notably clear in the oeuvres of modernist architects, who succeed in their technological aspirations more in single villas than in the social housing projects they argue are their main objective.[2] Michael Müller supports this provocation with his study of villas as a form of hegemonic architecture.[3] At the same time, Colquhoun does demonstrate that individual houses drive forward the discourse by their exemplary and often experimental designs. Elitist or not, single-family houses and villas have played an important role in the development of architecture. While this may be self-evident in the longer history of architecture, with Renaissance villas such as Palladio's Rotonda or the Villa Borghese remaining noteworthy examples of the architecture of the time, modern architecture would also be inconceivable without a number of key houses, such as Frank Lloyd Wright's Robie House, Mies van der Rohe's Farnsworth House, or Le Corbusier's Villa Savoye. A space for experimentation, especially when the architect was fortunate enough to find a patron willing to fund an often provocative search for the ultimate architectural expression, these iconic houses can themselves provide a palette of dominant themes in architecture for many periods in history.

The houses designed by OMA form a counterpoint to their evident interest in urbanity (or 'metropolitan form' as Koolhaas labels it in the late 1970s). They occupy the other end of the spectrum from the large-scale urban visions, exposing the nature of a clearly circumscribed project. In *SMLXL*, these are the projects that constitute the category 'Small' in terms of actual size. What is specific to these commissions is that they maintain the complexity inherent in a design process, but offer a relative purity in their materialization of an architectural idea. Less constrained by conditions surrounding the project – whether that concerns urban regulations or zoning districts, multiple stakeholders or institutional conventions – they occupy a field of architectural ideas and personal preoccupations of the architect and the single client. While the house may be more idea-driven than a larger commission, this does not necessarily correspond to an explicit theoretical discourse, but may simply be manifest in its physical presence. In fact, Koolhaas has devoted few words to them, yet they are shown extensively in plans, images, models and photographs.[4] The reticence of Koolhaas on the private homes may simply indicate his discretion on behalf of his clients. Yet it also testifies to a primary interest in the architectural object itself, in its material presence. The clients' motivations are left more or less private, the background of these houses remains framed in a purely architectural manner, and the photographs and plans are left to speak for themselves. This is precisely what makes these projects interesting, as the speculative yet tangibly concrete counterpart of the larger ideas we find at the (abstract) scale of the city. Where their ideas on urbanism by necessity take into account the social, the houses are allowed some leeway. It is in this relation between the material form and the abstract phenomena, and more than anything perhaps that which *escapes* direct correlation, that we find the most striking similarities between Koolhaas and Ungers. Both architects have outspoken ideas, and have regularly voiced their thoughts on daily practice in relation to the larger issues of architecture as a discipline. Their work spans the entire range from written manifestoes or reflections to completed buildings, and all the material forms of thinking in between. Discovering a more coherent relation between ideas and their material forms is more conceivable in the private home, if only by scale.

Thus, while one history of twentieth-century architecture is to be written through its major public institutions and its relation with the city, the question of the dwelling encapsulates another history, no less important to the development of architectural ideas. The private home stands model

for individual preferences and collective notions of home. The connection between archetypal cultural notions of dwelling and innovative architectural forms is particularly strong in this type of commission. As such, villas have held a prominent place in the history of architecture, and particularly that of modernist architecture.[5] Numerous versions of this history have been written, emphasizing the centrality of our domestic spaces in our understanding of architectural developments.[6] This domestic space, the space of the dwelling, is seen as a touchstone for the ideas of architecture because of its primal connections – the first human shelter, the first architectural gesture. It comprises origins that traverse so far back in time that they acquire authority merely due to their age.

As a commission, the house is distinct from the larger institutional projects not only by virtue of its scale but also because of the architect-client relationship, which holds a privileged position. The personal relation with the client is more intimate (and thus often more volatile) than with a professional client.[7] The commission itself requires that the client be candid about needs and desires in the most personal space: the home. These small commissions may be part of a semi-public vanguard, but they are also a private retreat, the embodiment of personal ideas of comfort, shelter and identity. Over the course of the twentieth century, as the home became a focal point of architectural design ideas, it superseded the practical necessities of a functional household. Rather than organizing the daily life of the household, it became increasingly tied to who the client is (or would like to be). The most prominent commissions for private homes have often involved outspoken clients. In the description of the commission for the Villa dall'Ava, Koolhaas emphasizes the deep-seated convictions of his clients throughout.[8] Both archetype and prototype, the house may be determined by practical constraints, be they regulations, context or financing. Yet its scale and its limitations allow more emphasis to be placed on ideas than on constraints. These projects show a concrete idealization of the architectural concept.

In potential, the limited scope of the programme combined with a client who will also be the occupant allows for a more coherent and idea-driven design. Houses and villas – as archetypal shelter or prototypical innovation – offer the opportunity for thoroughness in their treatment from idea to materialization. In contrast to large institutional commissions, the programmatic demands are in principle less complicated and less situated in a network of dependencies. Of course, that does not necessarily mean it is easier to design a house, because it simultaneously lends more weight to the

idea that the house affords the ultimate realization of an architectural idea, worked through from programme to detail. It suggests a perfectly coherent concept, self-contained and elaborated down to the last screw.

This idea-driven design does, however, lend credence to the central position of the house – or at least the villa – to the development of new ideas in architecture. The work of Le Corbusier found radical expression in projects such as the Villa Savoye, but even in its less immediately innovative expressions was systematically developed in projects such as the Villa Stein at Garches. It is in terms of the materialized idea that the houses in this chapter are examined. As a temporary relief from the complexity of large-scale urban or institutional plans, a return to something that can be grasped more easily (and thereby offers more depth?) the houses set the stage for an exploration of architectural form and how it can frame or transform the approach to the social. Each of the houses described here features specific qualities related to site, client, events or other contingencies. The architectural concerns of the house are more immediate, being directly informed by a specific client, site and moment.[9] Yet each is systematic in its relation between the architectural fact and the intellectual idea. Each shows how deeply the conceptual work can be embedded in a material object.[10] At the same time, it is important to note an element of historical contingency: the catalogue *Five Architects* shows that the work of the New York Five at the time comprised only relatively small projects. While this might be considered as a sign of the purity of their ideas, it also begs the question of whether there are moments in history that houses take centre stage as the place for architectural experimentation. When public money dries up as it did in the economic situation of the mid-1970s, the smaller commissions of houses may be the obvious medium to continue articulating ideas on architecture. Moreover, when the economic situation turns as it did in the 1970s, and after the financial crisis of 2008, societal and economic conditions also suggest new constraints to address.

The respective oeuvres of Koolhaas and Ungers contain a number of these 'small' projects that exemplify a manner of thinking.[11] Ungers not only designed a number of private homes throughout his career, but also built three houses for himself. He was both architect and client for these houses, two in Cologne (1958 and 1996) and one in the Eifel (1988), which in many ways illustrate and magnify his convictions about architecture at the time of realization. These houses did not, however, include the kind of dialogue with the client that a typical commission would have. In the case of Koolhaas, a few of the villas show specific interests that are magnified, such as the void,

both in the Patio Houses of 1988 and the Dutch House of 1995, and the notion of architectural specificity coupled with programmatic indeterminacy, as in the Villa dall'Ava.

In *SMLXL*, the section on 'small' includes the Patio Houses in Rotterdam (1988), Nexus World Housing in Fukuoka (1991) and the Villa dall'Ava (1991).[12] It also includes the installation for the Milan Triennale (1985), the renovation of Hotel Furka Blick (1991) and the Video Bus Stop in Groningen (1991). These small projects reveal a different dimension in architecture. In the urban proposals, the existing city is scrutinized for the material articulations that testify to unspoken ideas. In the houses, the relation between architect and client negotiates general ideas on architecture and individual needs. Where in the city social conditions reveal formal logic, in the houses, architectural preoccupations and a formal logic define the social habitus. The drawings, the photographs, the detailing serve to show specific architectural considerations, where sometimes the immediacy of the object may transform the idea as well: these projects show that the realization of architecture is not a linear process from idea to material reality. 'The Terrifying Beauty of the Twentieth Century' is included in this section, making note of 'systematic idealization': an overestimation of what exists. This stands as criticism of the theoretical framing of every (even accidental) element. In contrast to the incessant idealization of every last corner of our material environment, Koolhaas here offers the strategy of 'clinical inventory', an architectural counterpart to his approach as a journalist for the *Haagse Post*, which was based on factual description rather than personal interpretation.[13] As Koolhaas writes, approaching the 'objective potential' of each project without presupposition allows the imagination to be triggered by what is found, no matter how trivial or banal it seems. This valuation of the trivial stands in contrast to the approach of Ungers; while both architects appreciate contingency and the unexpected, Ungers sees architecture as having 'the ability to free our environment and existence from the everyday and the banal, from the trivial nature of reality, and to overcome material constraints by artistic means'.[14] Ungers sees architecture as a way of transcending the trivial, whereas Koolhaas sees value in precisely these trivialities.

The private houses of Ungers embody this aim at transcendence through a rigorous spatial order. They form an architectural biography, tracing out a trajectory of his ideas and their development. The Koolhaas houses are a different issue – they are built for clients, not for himself – and show his experimentation with ideas. The house is regarded as a microcosm,

as a particular exploration of architectural interests, such as the patio, indeterminate spaces, or archetypes. While Ungers is typically explanatory in his publications, reiterating and clarifying the ideas found in his architecture, the publications of Koolhaas experiment with different kinds of texts, treating the work as exploration rather than clarification.

The houses by OMA discussed in this chapter comprise four commissions spanning 20 years, beginning with the patio villas. They form two pairs: the Villa dall'Ava and the Maison à Bordeaux (1998) are related in terms of their structure, arrangement and overall articulation. The Dutch House and the patio villas in Rotterdam form an equally complementary pair of subtle explorations of an archetypal form. The houses by Ungers presented here are his own, which together document nearly 40 years of his design experience and architecture thinking. Although he notes in an interview that he has done three times what an architect should never do – build a house for himself – they have proven to be exemplary projects in his oeuvre, showing the development of his work over time as well as specific concerns in each case.[15] All of the houses in this chapter appeal to modern sensibilities yet incorporate timeless archetypes.

Both Koolhaas and Ungers show specific preoccupations in their built work. Those of Ungers are directed more towards specific architectural ideas, some rooted in architecture history, others appealing to the most essential interpretation of architecture. Those of Koolhaas seem more scattered, sometimes responding to contextual issues, other times deriving from historical preferences. They are less rigorously organized around a comprehensive understanding of architecture, but they still play a pivotal role in defining the work as it is realized. These ideas, and their manifest forms, enjoy a mutual relationship that cannot be reduced to a physical illustration of an idea, or to an essence of intuitive design. The continual reworking of ideas, of forms, of architectural approaches, shows a literal manifestation of the preoccupations that engage these two architects. These preoccupations at times are magnified in the houses, because there are no additional requirements to tone them down.

Modern Domesticity in the Patio Dwelling

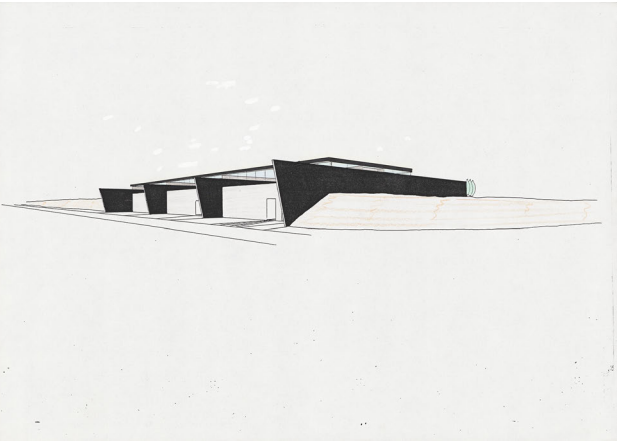
The patio dwelling has become an important urban dwelling type in the past 20 years, with its enclosed exterior space safely tucked away at the heart of

the house. This type of dwelling refers to the Mediterranean house, centred on a courtyard or atrium, but also builds on the late modern patio house, as perhaps first truly explored by the Smithsons. In the famous 1956 London exhibition 'This is Tomorrow' at the Whitechapel Gallery, the Smithsons, together with Eduardo Paolozzi and Nigel Henderson, put together an installation that confronted two housing types with one another: the patio house and the modern pavilion.[16] The patio house offered a view of the sky in high-density situations, and, in the Smithsons' own terms at the time, a 'vertical tube of unbreathed air'. While the tube of unbreathed air has not been an overriding concern, certainly the proliferation of patio dwellings in the 1990s is related to the potential for high-density dwelling with a comfortably enclosed private exterior space.

The patio houses in Rotterdam, completed in 1988, combine references to modernist architecture and the prototypes of American coastal modernism with a reinterpretation of the Dutch dike house. This is emblematic of much of the work of OMA – while the programme may also be seen as a driving force, there is an underlying iconic symbol (the dike house) that provides a base for architectural experimentation. Not unlike the earlier studios of Ungers (in which Koolhaas was deeply involved), the specific local type is used as a *Grundform* or a basic formal premise, from which to depart in an architectural exploration of the quintessential Dutch house.

The Patio Houses were initially conceived in a row of three, combining the typical Dutch serial dwellings with the section of the dike house. The project was 'half-commissioned': one of the houses was for the mayor of Rotterdam, while the others were initially commissioned by the developer Geerlings to be sold upon completion, but only one of these was realized. The houses remained quite similar, but incorporated some small distinctions, such as the paving treatments. Situated along a dike, the section of the house is derived from a typical Dutch dike house, but inverts it. Typically, the dike road forms the access to the house, which makes its top floor (accessible from the road) the public level: an entry, a living room, a kitchen. The lower floor, nestled up against the dike, is the private floor, where the bedrooms are located. In this case, the typology is inverted: the access road is below, while the back garden is above. Rather than the private spaces being nestled downstairs against the protective wall of earth, these houses use the downstairs floor as an entry, with the private space of the home opening out towards the view over the backyard. While the traditional dike house would have a single-storey front

Fig. 3.1: OMA, Patio dwellings Rotterdam, original proposal of three houses in a row.

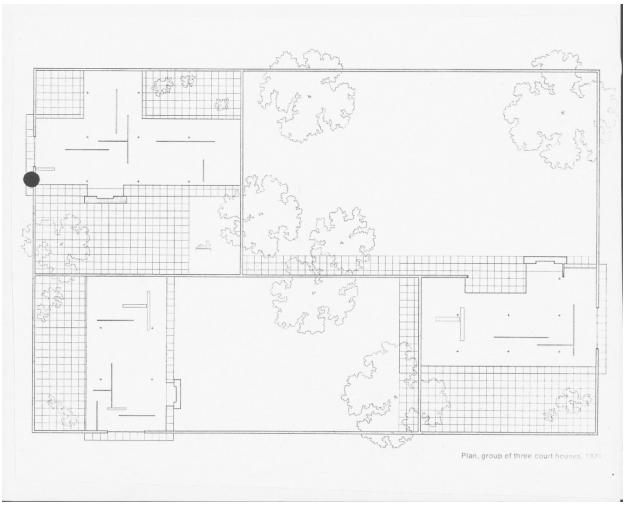


HNI Rotterdam, OMA Archive

façade, the patio villas present two full stories to the access road, with the garage and entry leading up to the living floor.

One might argue that these houses are eminently postmodern in their incorporation of both modern and archetypal references, and with their more light-hearted gestures of the façade painting, which are both abstract and figural – referring to the asphalt drive, but abstracting that to planes of colour and grey. Touching upon iconic gestures without overly expressing them, these houses appeal to very basic archetypes of the home. At the same time, the architectural language of the house refers more to the modern tradition. Koolhaas's affinity for the architecture of Mies van der Rohe is visible in the columns, in the walls between the bathroom and the bedroom. Early versions of the plans show a continual reiteration of a series of courtyard houses in various arrangements, including a reference to Mies van der Rohe's House with Three Courts (1938).[17] Inside, an added internal patio provides an interior focus. When lit, the patio calls to mind Bachelard's archetype of the 'house in the woods' with a lantern lighting the way to the safety inside. Although the entire back wall is glazed, opening up towards the woods, it is the gravitational pull of the patio that defines the sense of enclosure, that

Fig. 3.2: OMA, Preliminary studies patio dwellings, Mies van der Rohe's House with Three Courts

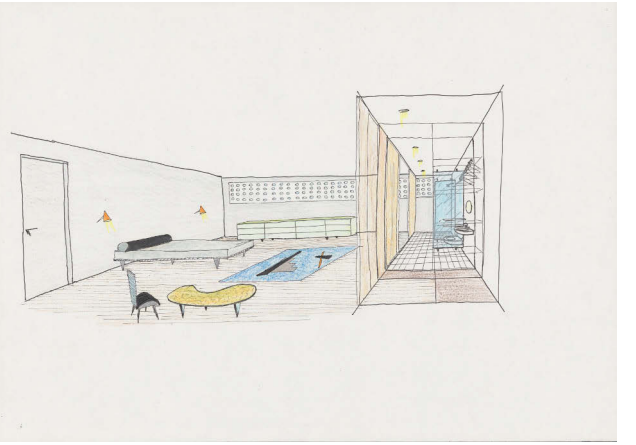


Het Nieuwe Instituut Rotterdam, OMA archive

draws the observer inside. Although the Miesian references in the house are prominent (the chip walls instead of marble, the glazed back wall that calls to mind the openness of the Farnsworth House), the traditional Dutch housing references are no less present.[18] The dike house typology calls to mind the house that is lodged up against the dike, settled against the safety of the wall against the water, while at the same time sitting on the edge of danger – if the dike breaks, these houses are the first to suffer damage.

The use of various types of glass in the patio houses has been discussed extensively, referring specifically to the interplay of reflections, refractions and transparencies. Yet the quintessentially modern nature of glass as a material is also tempered by the tactile qualities of the wire glass and glass bricks. Its various modulations belie the smooth perfection that caused Walter Benjamin to refer to it as the material that leaves no traces.[19] Instead, this articulation of the rear façade calls to mind the notion of 'phenomenal transparency' introduced by Colin Rowe and painter Robert Slutzky when they were still working together in Texas. More significant, however, seems the 'lantern' inside the house: the void of the patio that glows when the gym

Fig. 3.3: OMA, Preliminary studies patio dwellings, interior



Het Nieuwe Instituut Rotterdam, OMA archive

below is in use. A snapshot of the Downtown Athletic Club in miniature, the workout of the body is implicitly present in the patio. Here, the American modern becomes manifest – the architectural language of the sketches that evokes a California or Miami modern (both open, for warm climates and for the display of the well-trained bodies inhabiting them).

In contrast to the eminently modern modes of dwelling in the patio houses in Rotterdam stands the patio interpretation of the Dutch house, where it forms a hermetically sealed light well at the core of the house. Completed in 1995, the Dutch House is an enclosed fortress, with the master bedroom at its centre, cut off by a drawbridge access. As open as the Rotterdam houses are with their references to Mies van der Rohe and the iconography of California modern, so archetypal is the Dutch House in its refusal of the exterior. Yet here, too, the house references an exemplary modernist project: the fireplace in the bedroom allows a view through to the patio, an echo of the fireplace overlooking the sea in the Casa Malaparte.

These houses are distinct in their organization. Both have a patio hidden inside, but the Rotterdam patio is expressive, a focal point, making note of the bodies working out underneath, and glowing at the heart of the otherwise flowing modern domestic space. The patio in the Dutch House offers a little

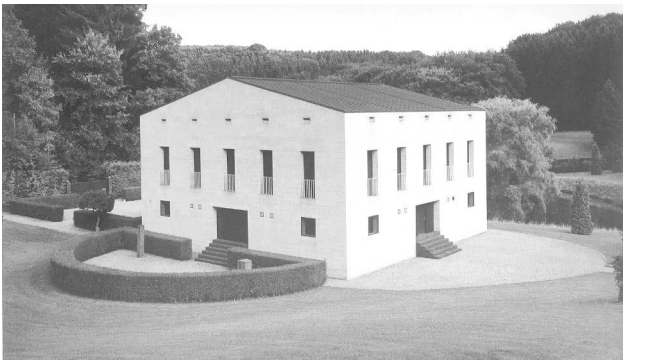
patch of sky to the master bedroom, which seems more akin to a panic room. The successive spaces of enclosure bring everything back to this little 'tube of unbreathed air' in the patio, which is an ironic gesture on this secluded site in the woods. Both projects avail themselves of modernist precedent in their composition and materialization. Indeed, the explicit attention for the material is also evidenced in a project memo that states that the project should mostly be made as cheaply as possible, with specific details well-constructed and by implication, more expensive.[20] Clear priorities are thus given within the budget constraints of the project. Throughout, specific and subtle references are made to the archaic, which are folded into the explicit appellations to modernity.

Iconography and the *Gestalterische Idee*

If the patio dwellings in Rotterdam and the Dutch House represent a modern type of living that incorporates the afterimage of archetypes, Ungers's Glashütte in the Eifel speaks more to a longstanding tradition of architecture. The house was completed in 1988, the same year as OMA's patio dwellings. As a whole, the Glashütte is composed of iconic references to the Renaissance and Classical Antiquity. Its square plan with staircases on all four sides immediately call to mind the Villa Rotonda by Palladio, while the typical photograph also contains undertones of the Parthenon. The design development of the Glashütte shows the referencing of archetypal dwelling structures, with a particular focus on the rural courtyard farm. The transition from this rural courtyard farm to the classical villa it became suggests that the ideas take precedence over contingency. The context suggests a different type, while the resulting building references the history of architecture more than its surroundings. The reductive language of the stone exterior forms a dialogue with modern dwellings. No ornamentation is added to the exterior, the expressive features of the façade are limited to the punctures of windows and doors. The design drawings of the Glashütte recall the Roman villa and the courtyard farm, and each historical reference is transformed and resituated in a modern context.

The basic form of the house oscillates between the perfect square of the floor plan, and the iconographic pitched roof of the classic house. The pitched roof implies a rectangular plan, while the square plan calls to mind the dome of the Villa Rotonda. The pitched roof emphasizes the axis of the site (also

Fig. 3.4: O.M. Ungers, Glashütte, Eifel, 1988

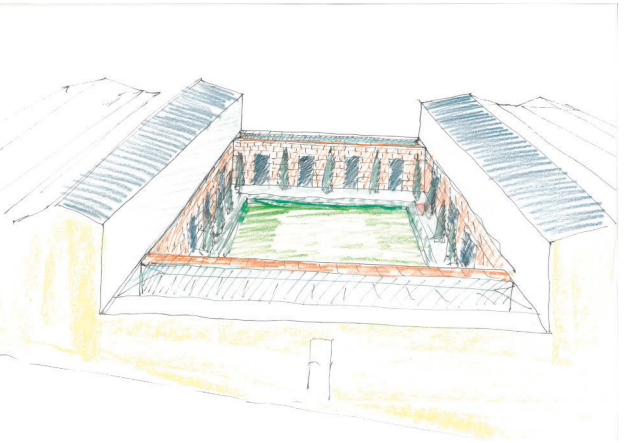


Ungers Archiv für Architekturwissenschaft

present within the house), while the square plan reinforces the centrality of the villa in the landscape. The equality of the two elements brings the oscillation between two equal figures into play that Ungers borrows from Gestalt psychology. The house retains both these figures, the contemporary archetype of the Monopoly house and the historical prototype of the Villa Rotonda. The Glashütte's cleanness of form and clarity of line significantly contrast the sculptural qualities of the Belvederestrasse house. The Glashütte is a stripped-down version of a house, but seeks to find an *essence* in remaining both archetypal and iconographic.

The *Gestalterische Idee*, a 'form-giving idea' that appeals to transcendence within the material form it takes, is eminently visible in the houses. While the difference in scale between the architectural and the urban is distinct, the *understanding* of both can be treated as the same. This is how the structural condition of the City as a Work of Art can be seen as no different from a house. In his later work such as the 1989 library addition of the Quadratherstrasse, which is very strictly organized along a grid, and the Glashütte, even with its appeal to the simple structure of Laugier's primitive hut, the importance of proportion and measure are more prominent.[21] As such, the *Gestalterische Idee* appeals to what transcends immediate material reality. It is in the need to define space and to give form to it that architecture distinguishes itself from the other art forms, or so Ungers reminds us in reference to Hermann Sörgel.[22]

Fig. 3.5: O.M. Ungers, preliminary study Glashütte, based on European courtyard farmhouse



Ungers Archiv für Architekturwissenschaft

In retrospect, Ungers identifies the Glashütte as a *Grundform*, as might be expected from its abstraction of a historical type.[23] While it appeals to a rational approach, it is more easily understood through his essay on city metaphors than his earlier work. *City Metaphors* opens with an essay on the cultural significance of architecture and our individual understanding of the world through visual pattern recognition, or systems of order. It sees the need for order as a fundamental human condition, a manner of making sense of a world borne of chaos. This is why the definition and form-giving of space is so crucial; the autonomous language of architecture serves to structure the world around us. Ungers articulates his affinity with timeless architecture in which cultural significance can accrue, given that the forms are strong enough to remain relevant throughout the transformations of life over time. This is, in essence, what Ungers is aiming at with the proportions that can be found throughout time and cultures, which contain a plethora of cultural references yet can be also simply internalized as a formal element.

In the book *Sieben Variationen*, Ungers addresses this question directly.[24] The spaces are interpreted through their formal articulation – so whether we are studying the 'street, hallway, corridor, arcade or gallery', each particular

instance concerns the general *Gestalterische Idee* of a linear space. Each type of space appeals to a specific principle that is legible in, or embodied by, its material presence.

> The seven variations of space are analogies to seven spatial types or seven form-giving principles. The shell directs us to the principle of nested enclosures, the labyrinth to the principle of intertwining, the gallery to the principle of structuring, the octagon to the principle of gathering, the poché to the principle of hollowing out, the object to the principle of elementarization and finally the enfilade to the principle of lining up.[25]

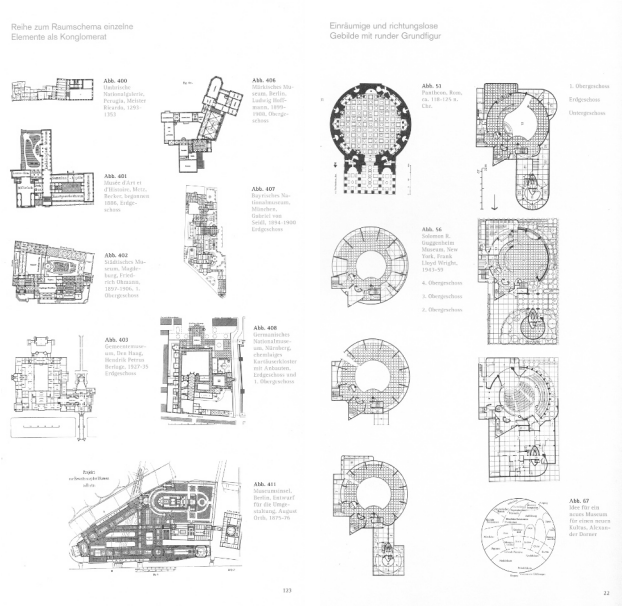
Ungers uses this systematic identification of spatial arrangements and their implications to organize his lectures at the TU Berlin in the winter of 1964-1965. In this lecture series, the spatial paradigms form the main theme, by which historical and contemporary examples are compared and explained. From this systematic study of space, Ungers elicits the essential characteristics, not only as formal arrangement but as underlying conceptual frame.

In this manner, the *Gestalterische Idee* is tangibly present in the forms around us – not unlike Rossi's approach to collective memory as being embedded in our urban environment – yet because it appeals to an idea beyond the immediate response to programmatic need, it affects us in a more profound manner. For architecture, the means to achieve this *Gestalterische Idee* is to be found within the discipline. The tools of architecture are not only a means of solving spatial needs, but they are a physical iteration of 'how we think', as well as a means to express the quintessential character of a specific commission, such as the private space of the home.[26] The private home transcends the merely functional and trivial conditions of everyday life by having this *Gestalterische Idee* incorporated in its material presence.

Purity and Autonomy, Capturing Reality in the Grid

The *Gestalterische Idee* contains a metaphysical reference that is easy to dismiss, as it requires a belief in the referential values of stone and glass beyond their simple, material presence. As such, it requires either an eye trained in historical references or a willingness to engage in idealization. Without requiring an article of faith, however, the rigorous ordering system of Ungers's house on the Kämpchensweg, completed in 1996, speaks immediately to the purity

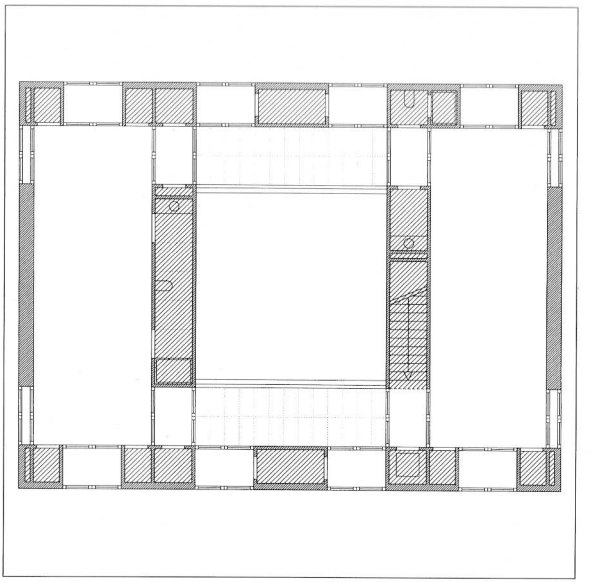
Fig. 3.6: O.M. Ungers, winter lectures TU Berlin, 1964-65. Lecture 2, single-room buildings, and lecture 8, simple and complex systems.



Arch+ 179

of an architectural system, regardless of the life that plays out within. The attention to simplicity and reduction to bring order to things is taken to an extreme. The house's proportional system and mathematical exactitude are immediately evident. This purity requires that we engage with the ideal. Kieren has noted that reality can only disappoint in the face of such rigour, but the house seems to tend more towards the zero-degree presence of precision: it requires more of its occupant. The inhabitant must surrender to the totality of the system – it is a matter of total deliverance. While the Exodus project by Koolhaas provides a (limited) space that is free from the severity of the architectural system, and the material presence of the Berlin wall included some variations throughout, the Haus ohne Eigenschaften forces everything into the grid. While Ungers does ensure that everything fits in accordance with its functional requirements, the house on Kämpchensweg does seem

Fig. 3.7: O.M. Ungers, Kämpchensweg, 1996, plan



Ungers Archiv für Architekturwissenschaft

to preclude the kind of 'vitality within' that Ungers typically hoped that the autonomy of architecture form would give rise to. He may not have gone as far in conceptualizing the grid and its permutations as Eisenman did in projects such as House VI – where the idea of the house sometimes consciously and directly contradicts its functionality – but in this house he did bring the rational order to its most rigorous conclusion.

Ungers suggests that 'perfect realization characterizes both the best architecture and the best painting'. It is no secret that he admires the most uncompromising examples of systematic architecture and thinking. In the Kämpchensweg house, the spaces are organized in a systematic grid. Here, the very premise of the house is situated in its ordering system. The organization of the plans and the punctured windows in the façade, each individual element of the home is subjugated to the grid. In this case, the

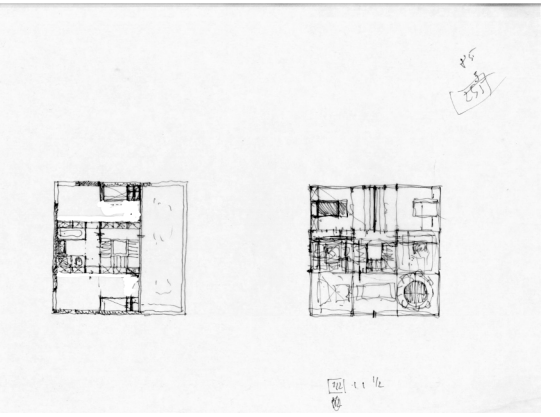
Fig. 3.8: O.M. Ungers, Kämpchensweg, 1996

Ungers Archiv für Architekturwissenschaft

grid operates not so much as a harbinger of the freedom to move within, but rather as a constant presence throughout the house from plan to detail.

While the Kämpchensweg house embodies the purity of its ordering system both as essence and as symbol, Ungers's desire for the systematic at times struggles with the realities it faces. His academic explorations of order, proportion and symmetry may help clarify why certain dimensions elicit a more favourable response, but the sketches demonstrate the confrontations that arise between the rules he has constrained himself to and the reality they are meant to accommodate. In the design for the library expansion on the Quadratherstrasse, the initial premise of building a cube based on a clear grid is worked through in an extensive series of drawings, in which the nine-square division of the library guides and constrains each design supposition. In a real-life version of Hejduk's nine-square exercise, Ungers here goes through endless iterations of spatial ordering. Early on in the design process,

Fig. 3.9: O.M. Ungers, library expansion Quadratherstrasse, 1989, design studies

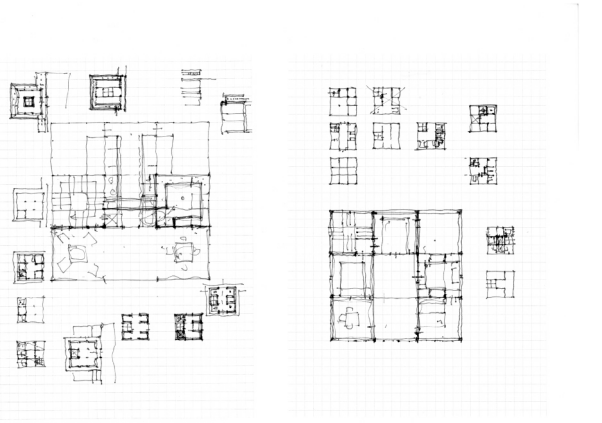


Ungers Archiv für Architekturwissenschaft

the cube seems to have been envisioned as including a living space as well: there are drawings with a living room on the top floor, lined with windows. This stage of the design includes a roof terrace and reiterates the Marburg design studies in how it tries to squeeze the living spaces into the purity of the cube. The design sketches show many attempts to fit the banalities of day-to-day living into his geometrical schemes. There are drawings of toilets squeezed into corners of the grid, stairs that are extended or compressed to fit the gridlines. The stair is in fact cause for endless studies, some situated within the squares of the grid, others positioned in line or perpendicular to it. Many of these phases speak directly to 'the failure of the idea in face of reality', showing the limits of pure ideas when confronted with imperfect material conditions.[27]

As a design figure, the square is present throughout the work of Ungers. In the 1980s, he publishes a collection of square houses that run in parallel to a text and series of images on the square by Bruno Munari.[28] In this book, Munari gathers the most diverse instances of the square, from Chinese characters to the computer boards of the time (still called the 'electronic brain'), from game boards to architectural examples, and even esoteric ideas such as the physiognomically 'square' type of person (who 'indicates an

Fig. 3.10: O.M. Ungers, library expansion Quadratherstrasse, 1989, design studies



Ungers Archiv für Architekturwissenschaft

energetic blunt nature, a firmness of character to the point of inflexibility, that may easily degenerate into stubbornness').[29] The book forms a visual archive, exploring the square in all of its manifestations (including pinwheels, various compositions, and the proportions that derive from the square), but not solely as form. Its cultural significance is not explored in a systematic chronological inquiry, but rather arranged alphabetically. This gives rise to various unexpected juxtapositions, offering a spectrum of significant (and less so) examples of the use of squares (logos, area of the square, Nicaea, musical notes).[30] Munari's exercise is graphically beautiful and shows the rich variety that can arise from a simple formal premise such as seeking out squares. At the same time, transforming these purely visual analogies is not necessarily an easy translational shift. The spatial implications bring other factors into play, which Hejduk's square and diamond houses address, for example. Nevertheless, these different iterations of basic form and its possible variations do bring it back into the centre of an architectural vocabulary after the endless proliferation of networks and diffusion of the 1960s.

The square is intended to function as might the Manhattan grid, as a frame within which differences can be cultivated, connecting the social

and the formal. Departing from the shape of the square, the Marburg (Ritterstrasse) project of 1976 becomes an exemplary project, showing 'the full potential of the system developed by Ungers, combining a *morphological range* of models with ideas on *variety within unity* and the *city in miniature*'.[31] This approach incorporated individual distinctions that nevertheless contribute to a coherent overall design. In the Marburg design, 13 variants were developed that each had a similar envelope, a five-storey house that was a 6,5-m square in plan. The three middle floors contained the basic living functions (kitchen and dining on the first floor, bedrooms on the third and living spaces in between), while the ground and top floors varied in their use. The images include variations on the clustering, and variations within the houses to accommodate different needs, depending on the future inhabitants and the conditions of the site.

The Quadratherstrasse project, the 1989-1990 library addition to the Belvederestrasse house, is equally based on a mathematical system yet is tempered by its relation to the existing house. The combination forms a more careful balance between an organizing system and its contextual embedding. The expressive nature of the house – which is simultaneously turned inwards, as a fortress, and expressive in its many elements – is brought into balance by the library extension. The new addition is an exercise in restraint, forming a contrast to the house with its very dark exterior, almost as a shadow sitting next to it. The attention for geometry and composition is immediately evident, producing a quietude that derives from mathematical precision. When Ungers designed his library, he did so as a place of retreat. Cepl recalls his reference to the library in Hadrian's villa as the 'most central place, filled with the knowledge of Classical Antiquity'.[32] Ungers treats the expansion of the library as antithesis to the earlier expressive form of the house itself.[33] Yet he comments on the unity of the two pieces of the house: 'Darin liegt eben der humanistische oder auch enzyklopädische Ansatz, der keine Ausschliesslichkeit, keine Exklusivität anstrebt. Die Gegensätze bedingen sich vielmehr gegenseitig. In der ganzen Spanne liegt erst das Eigentliche. Das will ich zeigen.'[34] His idea on the *Coincidentia Oppositorum* derived from Nicholas of Cusa, in which multiplicity is gathered into a whole that transcends its parts, shines through in this comment, also recalling his early manifesto with Reinhard Gieselmann on the spiritual content of architecture.

Koolhaas seems to depart more fundamentally from the premise of difference. Taking the system too far squeezes the life out of it – in a fully

unintentional demonstration of the limits of conceptualizing architecture, the house on Kämpchensweg cannot tolerate the life that does not adhere to its rules. While Ungers characterizes the house as one in which he has managed to leave out all that he knew about architecture (in contrast to the Belvederestrasse house), it is perhaps more accurate to say that he let the system overtake the architectural dimension here. Koolhaas arguably claims a different space for the autonomy of architecture. Rather than reducing his articulations to their bare minimum, he turns to the notion of 'architectural specificity', through which the houses acquire an agency, as it were. Here, the specific articulations of materials, details, columniation, all serve to contribute to an overall distinctive language. The spaces are less programmatically defined than as architecturally distinct elements, not unlike the *gestalterische* spaces that Ungers describes and applies in his work. At the same time, in the projects such as Villa dall'Ava and Maison à Bordeaux, the different areas have a distinct spatial sense (flowing, ensconced, horizontal, vertical, connected or isolated) more than as functions of living ('living room', 'bedroom', 'hallway') or as classic compositional elements.

Is it when the tools or instruments (such as a grid) call attention to themselves that they fail as system? The intent of the nine-square exercises presented by Hejduk or the systematic grids used by Ungers, is to allow for spatial definition. The quintessentially centred nature of the square facilitates the surrounding space. Almost as if they are not visible themselves, but only as a shadow, present in the formation of the spaces. Autonomy, as it became manifest in the 1970s, occasionally transcended the rigour of the system. Yet sometimes it only remained within itself. Purity as such is a modern wish – the denial of contamination, of the imperfections of the everyday. It is only when purity allows for the imperfections to be accepted that it seems to work. This goes to the influence of the habitus. When the system is eminently manifest as system, it can no longer influence the habitus as it elicits resistance – the object in itself that counters the subject. When it is more subtly present, it can influence the life within yet not dominate it.

Formal Gestures, Social *Habitus*: Constructing the Idea of Home

> The house is a space for living, a workplace, a way of conceiving the world, and at the same time an opportunity for experimentation.[35]
> *Oswald Mathias Ungers*

The relation between ideas and their material presence is precisely what marks these various houses. They sit along a spectrum of architectural innovation and idealization, combined with the necessity of facilitating daily domestic activities. These houses can be approached from the perspective of the idea that is manifest in the material, or from the formal experiment that transforms the idea. They show the mutual influence between aspects such as the material, the social and the formal. The houses discussed here show different approaches, with those designed by Koolhaas tending more towards provocation of preconceived notions, and those by Ungers tending more towards an excavation of deep-seated archetypes. Nevertheless, each house shows its own negotiation between the formal gesture and the social habitus.

The most extreme example of an idealization that impacts every aspect of realization is perhaps the Kämpchensweg house, otherwise known as the Haus ohne Eigenschaften. It idealizes the ordering system and proportion to an extreme, incorporating symmetry and a rigorous grid, while trying to reduce all non-essential elements to a bare minimum. Each view of the house is marked by cleanliness and order, and even the photographs virtually recall the original grid-lined drawings composing the spaces. The system underlies every space, seeking to elevate daily existence. At times one might consider whether this does not demand too much of an occupant, whether the overbearing rigour might not be at odds with the life within, rather than facilitating it. Is the Kämpchensweg house meant to reside more on the plane of Platonic ideas than be situated in reality? Can it age well, or does each crack in the stucco, each stain on the floor, detract from the overall?

In the end, it is in the formal innovations that one sees triggers to a new habitus. This is explicitly activated in the Villa dall'Ava, where the architectural specificity of the spaces is seen as a counterbalance to a purely functional engagement with the residential programme. The composition of the house allows for architectural daring – with the heavy, enclosed box

sitting lightly on top of the glazed ground-floor space. The Maison à Bordeaux includes a similar gesture, but its overall composition is more complex, which leaves the glass-and-concrete arrangement less central. Moreover, its elevator core – a moving platform of 2 m^2 – eclipses the more refined elements while also anchoring the surrounding spaces. The overall composition of the Villa dall'Ava is a negotiation between its site and its internal programme. Its materialization consists of a compilation of various industrial materials, going against the grain of the typical dwelling. Ungers's Glashütte is an explicit recall of a country house archetype, its ideal of a country home accentuated by its centrality in the landscape and its nods to the existing sightlines. OMA's design for the Maison à Bordeaux equally incorporates two archetypes, one more public, another more discipline-related: the glass box holds every reference to the classic modern home, which dissolves into the environment, each threshold dissipated, as little resistance as possible between interior and exterior. Yet the cave appeals to the other extreme, the safety of the enclosed space, the solidity of rock to retreat into.

These houses offer a palette of negotiations between the ideal and its material presence, and their relations with the everyday. They are not only formed by architectural ideals, but also influence the habitus of those within. In his writings, Ungers often makes note of transcendent ideals, but they are always *embodied in form*. He may disavow the political and social ramifications of architecture, but he maintains a firm belief in the metaphysical appeals of architectural form, in the 'spirit' of architecture. Its agency lies within this, not in its ability to function as moral or sociopolitical guide. It is an ability to awaken a deeper consciousness, which is what he shares with Rossi, particularly as the rationalist and scientific approach remains part of this aim. Yet it also appears that what the consequences may be of this awakening is left to the recipient, is not to be determined by the architect. At the same time, this does not mean that the habitus or the social implications are irrelevant or merely illustrative, simply that architecture is formative in a different manner.

In terms of the social habitus, a striking feature of the houses by OMA shown here is the self-sufficiency of the individual elements of the home. In these villas, parents and children typically occupy autonomous sections of the house. In the Villa dall'Ava, the daughter has her own 'box', while in the Maison à Bordeaux, the children have their own 'cave'. In the Dutch House, the lower level is the children's domain. In these houses, the children's bedrooms are not arranged as a series of spaces dependent on those of the parents, but rather show a sensitivity to the autonomous life of children, encouraging

a social habitus that fosters their independence and privacy.[36] In the house the tangible, physical, material presence becomes important not only as the embodiment of an idea, but also as a daily interaction with the habits of the client.[37] In the Maison à Bordeaux, the idea centred on the client in a wheelchair being placed at the heart of the house: not as a handicap, but rather with the wheelchair becoming a departure point for making the elevator platform the dominant element in the house. After the death of the owner, there came the need to reconfigure the habitus of the house – the elevator platform needed to be rethought in order to not create a pure absence at the heart of the home. Here, the architectural specificity of the gesture arguably helps to provoke renewal: the platform becomes a space that needs a new infill, rather than fading into the background.[38]

In the houses, there are two primary relations at work: between idea and form, and between form and habitus. The first is a matter more situated within the discipline, a more conceptual or intellectual relation between what is intended and what is constructed. The second is a matter of architecture's agency in the world, its (necessary) contamination by everyday interaction. These designs are interesting precisely because of the friction or slippage between the ideal and its reality. In the original designs for the Quadratherstrasse extension, the system seems to have preceded the infill. Sketches show many failed attempts to fit functional elements such as toilets and staircases into the idealized system of the cube. Reducing the programme to library and study allowed the grid and the space to avoid contamination by mechanical systems or everyday necessities. Conversely, in the Maison à Bordeaux, the envisioned use of the home generated an idea of the mechanical heart – the condition of the wheelchair, a contingency, reconceives the idea of this home.

The House as Microcosm of Social Complexity

> Each of the three houses is a place, each a microcosm, a mini-universe. Belvederestrasse: a small, living, spirited city, always changing. Kämpchensweg: abstraction to pure form, number and geometry, architecture reduced to its barest terms. Glashütte: constructed memory, a sum of experiences. Three places, three concepts, three attempts to get a grip on the phenomenon of architecture and find a solution.[39]
> *Oswald Mathias Ungers*

While the purity of the system is an appeal to underlying universal characteristics of architecture, some of the houses walk a fine line between the opposing demands of their ordering system and facilitating the life within. The first house that Ungers built for himself, on the Belvederestrasse in Cologne in 1958, has been compared to the Soane House, suggesting that the 'cosmos' Ungers created with his architecture, his models and his references to art and architecture is only comparable to the self-enclosed world at the heart of the Soane House; that the variety and depth of its architectural gestures also compare only to this.[40] Lepik calls it a 'physical manifesto/tractatus', making the house the core of the person's position in the world.[41] In this case, the ordering system is a highly idiosyncratic one, congruent with the person at the centre of it, which results in odd categorizations. In some ways, this compares to OMA's Maison à Bordeaux, which was equally centred on its owner and created a world around him. At the same time, the 'world-building' in the case of the Maison à Bordeaux was proposed as a necessity: since the physical world of the owner had been limited by his disability, it was crucial that his intellectual and perceptual world was expanded. In the case of the Soane House and Ungers's houses, it was more of an intellectual and disciplinary exercise in constructing an expansive world that was facilitated by architects building their own homes. In the history of architecture, this approach is not unusual for the design of a house: it may be a relatively small commission but it encompasses the

collective desires of the dwelling, the archetype of the home and, particularly in the twentieth century, the desire for expressing individual identity.

The house on the Belvederestrasse is a material document on composition and materialization with a complex programme. Its composition was envisioned as a 'small city', organizing the different and autonomous elements within, and its expressive, carefully articulated brick façades attracted the attention of Reyner Banham, who put it forward as an example of the New Brutalism.[42] Ungers's determination to 'show that architecture can elevate any situation artistically, ennobling it and rendering it sublime – however trivial it may be' figures throughout the house.[43] Nevertheless, the spaces themselves offer a quiet dignity, in accordance with the intellectual ambitions of the work.[44]

Originally built as a three-family home, the house has a complex floor plan with two independent dwellings enclosed within it. Built to accommodate more than one family, the programme indeed constitutes a 'small city', with office space for Ungers, the family home, and two apartments to be rented out in order to cover the costs of the house.[45] The Belvederestrasse house originally did not have a separate library. When Ungers moved back to Cologne from Ithaca, this 'small city' was reconfigured into a single-family home. The apartments were cleared out to accommodate a library in the two rooms of the upstairs apartment, and the downstairs rooms became a studio.[46] In the street façade, the house is remarkably unassuming, while inside it unfolds. It initially appears more of a fortress, with little external information, and a sober entry. Inside, its complicated combination of office space, the family home, and an apartment gives rise to a sense of an urban composition, emphasized by its materialization, with stone flooring between the major sections of the house.

The complexity of OMA's Villa dall'Ava is less immediately apparent. It begins to construct the narrative of programmatic indeterminacy and architectural specificity. It is in the distinct delineation of spaces that an appeal to architectural qualities becomes manifest. The concrete box resting on the glass box, aside from being a marvel of construction technology, recalls the Miesian glass house but maintains a level of privacy for the bedrooms. The cheapness of the construction materials and the unusual organization of the house speak to the house as an experiment. The composition of the boxes and the expansion of dwelling space on what is essentially a small plot of land also intimate a complexity of organization.

The presentation of the Villa dall'Ava in *SMLXL* comprises a brief story about the client, and pages upon pages of (amended) drawings, plans and photographs.[47] Overall, the house revolves around structural complexity that is presented as a formal simplicity – a closed box on a transparent base – and its programmatic fluidity. The Maison à Bordeaux explicitly positions the house as a microcosm, playing off of the physical limitations of its owner in order to appeal to a much broader sense of the world through the architecture. The commission for the Maison à Bordeaux had been explored as early as 1988 when the Lemoine family was considering moving out of their home in the centre of Bordeaux. Plans were delayed for a number of reasons, until Mr Lemoine was in an accident that confined him to a wheelchair. The home they were living in was unsuitable for a wheelchair, making the need for a new home more pressing. In this new situation, Lemoine was searching for an architect who would not deny his handicap, or estheticize it.[48] In fact, Lemoine stated that he was in need of a complex house, as that would become his world.[49]

In essence, the complexity of these houses is therefore not about the complexity of the programme, nor about the intricate dependencies one finds in bigger commissions. Instead, it is about triggering the spatial imagination, about world-building, and about providing the occupant with a sense of grounding in the world at large. The sense of depth resides in the presence of ideas in the material – in the inevitable slippage between idea and form and the space that leaves for interpretation and speculation. These are not ideas that remain rigid, as unassailable ideologies, but rather ideas that remain an accompaniment to everyday life, free to be ignored, but nevertheless influential, and at their best, influenced by the conceptual generosity of the spaces within.

Small Projects, Big Ideas

> If utility were the principal aim of those who build houses, then Farnsworth House, Falling Water, Villa Rocca Pisana, and Maison Savoye would never have been built. The house is a copy of our idea of the world, life, and existence. It is a passage from our existence.[50]
> *Oswald Mathias Ungers*

Constructing the ideal home relates to everyday experience, but seeks to elevate it beyond the mundane. In some cases, these houses have sought our archetypal expressions of 'home', in others they present alternative modes of domesticity. The Dutch House is rendered throughout with notions of 'safety' – the fortress, the privacy of the master bedroom – combining the modern need for privacy and retreat with archetypal notions of safety. The house on Belvederestrasse picks up an intellectual proposition of the house as a small city, and combines the various programmatic elements with explicit material references to city squares and streets.

By positioning the house as a 'passage from our existence', and as an embodiment of our 'ideas of the world, life, and existence', Ungers anchors far-reaching implications of the *Gestalterische Idee* in the house itself. Because the commission for a house is small, it enables the architect to be precise, to approach it in-depth. It does not reach the level of abstraction that the urban environment does. Instead, we are familiar with every step in the house, and its peculiarities become embodied in our own trajectories. This is its most far-reaching influence, a tacit one, difficult to identify but embodied in our very movements. There have been moments in the twentieth century when houses formed a solid core of architects' work. The modernist repertoire of architectural design is inconceivable without the Weissenhof Siedlung, or the various villas by Le Corbusier, Mies van der Rohe, Gropius and others.[51] Some of the prime examples of postmodernism are relatively small but precisely designed houses, such as the Vanna Venturi house or Botta's home in Ticino. The work of John Hejduk explored the simplest forms of inhabitation, with the most evocative narratives of inhabitation. 'Houseness' becomes an exemplar of the (metaphysical) sense of shelter from outside, of warmth and safety.

The houses are ideas, yet they are given tangible material form. They are a personal world, which encompasses an intimate microcosm.

This essentialism runs throughout the publication *Quadratische Häuser*, where Ungers's fascination with the square as a form that taps into transcendence is combined with the texts of Bruno Munari on 'the discovery of the square', and a constellation of projects by Ungers and various contemporary and historical architects, all somehow premised on the square.[52] The texts convey a universalist theme that indicates a foundation within architecture. Many qualities are contextual, or so it seems to suggest, but some resonate throughout different cultural and historical contexts. The fascination with the multi-symmetrical shapes of the circle and the square is one of these stable undercurrents in architecture. Ungers has a clear preference for the historical continuities in architecture such as proportion and geometry, for architectural instruments that he considers intimately connected to the metaphysical spirit of architecture. 'Denn im Menschenleib fanden sie die beiden Hauptfiguren, ohne welche kein Kunstwerk gelingen kann, nämlich den vollkommenen Kreis und das Quadrat.'[53] The introduction notes that the *homo circularis* and *homo quadratus* came from antiquity and remained throughout the Middle Ages as an abbreviation of the Christian universe. These forms were seen as significant and became directly connected to architecture. The Christian metaphysics were not given up, but rather were given a stronger neo-platonic orientation. The image of man inscribed in a circle and a square could re-establish or repair a connection between God and the physical, visible world. To Ungers, this simply proves the universal importance of these figures.

His recurrent iteration of platonic forms presents a continual awareness of the ideas that guide everyday life by organizing spaces around classical proportions and measurements, a theme explored further in *City Metaphors* as a human need to bring order. At the same time, the overall composition and formal references of houses like the Belvederestrasse house and the Glashütte accommodate an underlying sensitivity to patterns, images and metaphors that help to structure the everyday environment.

The Marburg project offers a spectrum of typological variations primarily in the overall composition. The series could be imagined as a larger series, as the simplicity of the frame makes it easy to imagine its extension. While larger building programmes might offer more complex challenges, these small projects, when given sufficient attention, can bring us back to the essential ideas of the architects designing them. Their logic embodies an analogy

that draws its lines from the immediate and material to the conceptual and transcendent.[54] Their questions are brought back to a few central issues, instead of being confronted with layer upon layer of requirements and regulations. As such, the houses go to the heart of these architects' interests.

The irony of seeking a 'primitive hut' on the eve of the twenty-first century is not lost on Koolhaas and Ungers. To Ungers, it is a human condition – as we understand our world not only through functions but also through symbols and ideas, the house represents our position within that. The primary quality of the primitive hut is not its nostalgic implication of a return to a simpler life, but rather its embodiment of the *Gestalterische Idee*, something that remains valid throughout the societal transformations we have undergone. His three houses represent a life's trajectory of positions, as a person and as an architect. The exploration of these ideas not only becomes evident in the presence of the houses, and the understanding of their background, but also through their differences in having been given form. The main distinction between the work of these two architects is perhaps the kind of ideas being injected – where Ungers typically appeals to ideals as a manner of framing or bringing order to messy reality, Koolhaas typically adds new, personal narratives, offering 'possible stories' rather than seeking out essential, underlying truths. Ungers offers a systematic exploration of these systems, and the tools of the architect such as the square, the grid and symmetry, while Koolhaas builds on the contingencies he encounters, the patio housing as a dike-house or the Villa dall'Ava's requirement of a small footprint. Koolhaas tends to bring together more fragments, in materials, precedents and sensibilities, while Ungers gathers the contingencies into a system.

The notion of the house as cosmos and as a passage from our everyday existence naturally begs the question of how to understand apartment dwellings, which since the rise of modernism have provided simple types, the *machines à habiter*, cookie-cutter homes that supply adequate space but offer little more. Ungers seeks out an interim scale between the house and the apartment: the Urban Villa, which provides some of the benefits of a private home, in its scale, its more or less direct connection to outside and a situation in open greenery. Yet it also introduces the comfort of a small community.

In the commission for a private house, two moments of individuality become prominent. The first is the simple intimacy that arises from designing the private home for a client. The programme typically derives from a deeply personal sense of how one wants to live, as on the one hand an

experiment in architectural expression, and on the other a moral appeal to 'good living', both of which are present throughout the history of modern architecture. The private home has been central to many transformations in twentieth-century architecture. Some of the homes that were central to the development of new architectural forms are easily identifiable: the Farnsworth House, Fallingwater, the Villa Savoye, the Eames House, House X, the Maison à Bordeaux. But even the homes that figure less prominently in architecture history are often a fond reminder of the ambitions and hopes that can be enclosed in the smaller commission, such as Peter Blake's Pinwheel House, or John Lautner's Chemosphere.[55] In these commissions, the home truly becomes the cosmos. This comprises the other moment of individuality: the home becomes a jewellery box that represents the individual cosmos – it becomes the beginning and end of the architect's work. As a small commission, it receives an attention that must seem relatively lavish compared with larger commissions. There may be fewer regulations, the building may be smaller, but often the private homes hint at the vast design work that goes into them.

Bachelard writes that our understanding of space and our sense of the home is deeply formed by the archetype of the house with its cellar, main floors and attic.[56] The houses of OMA and Ungers show how the specific dimensions of dwelling – whether that is the rigorous mathematical purity of Ungers's house on the Kämpchensweg or the unexpected inversion of a classic Dutch dwelling type in OMA's Patio Houses – can shape ideas as well. They are built on precedent, on classical language, yet they refer to (and reconfigure) an ideal. These positions refer less to constantly shifting societal conditions than they do to archetypal concerns such as grounding, home, shelter or meaning. In the end it is the balance between idea and material reality that shows this work to be more than a simple addressing of the programme – the houses are not a fulfilment of the clients' desires, but an intellectual exercise, played out between the idea of the house – from Adam's house in paradise to Bachelard's hut in the woods – and the everyday reality of a space for living in.

While the houses by Ungers shown here were all designed for his own family – and they can very well be organized along the autobiographical lines he himself suggests, from his youthful *hubris* ('everything I knew, I put into the house') to the calm sobriety of the Glashütte and the mathematical precision of the library addition – they also contain, on a smaller scale, various ideas that remained with him throughout his career. Their infill may transform over time, but not their formal coherence or underlying principles. These,

by and large, have remained the same. The great transformation is in how Ungers feels his ideas are best made manifest in the architectural form of the house. The houses show the continuity of his concerns, emphasizing the idealized aspects of his work, manifest in the basic tools of architecture such as geometry and mathematical rigour. The concerns of Koolhaas as such seem more fluid and responsive to context, though their continuity is to be seen in the constant provocations of accepted truths.

Although they represent different scales of inhabitation and design, the themes embodied in the house and the city are not necessarily opposed. As Michel Jacques notes, 'the theme of the house participates in OMA's meditation on the contemporary city. Houses may even work as a small-scale laboratory, a site for experimenting with the most intimate aspects of living space.'[57] In contrast with the mathematical precision and symmetrical organization of the houses of Ungers, the houses of OMA may be seen as 'games in dissymmetry', making them dynamic rather than inert.[58] If we are to treat these houses as constructing a cosmos, those of Ungers appeal to a sense of coming home, the stable centre from which to enter the world, while those of OMA appeal to a reaching out, always keeping their occupants slightly off balance while constructing a kaleidoscopic environment around them, full of new surprises.

The distinction between the material form and the intellectual presuppositions has been noted by François Chaslin in a somewhat counterintuitive fashion, when he says that critics in particular have a difficult time seeing the lighter side of Koolhaas.

> [Critics] don't understand the connection that exists between Koolhaas's intellectual stance, his lucidity, his refusal of idealism, nostalgia or sentimentalism, his rejection of the taboos and classical values of architecture (usually more or less dependent on other theories and even moral codes), and the undeniable elegance, lightness and virtuosity of his buildings. They are suspicious *a priori*, because they live in perpetual fear of being seduced.[59]

Here, the elegance and virtuosity of his buildings is seen as connected but not causally linked to his intellectual principles. More than anything, what Chaslin puts his finger on here is the inadequacy of architecture criticism that tries to find logical relations between intellectual principles and material form, or the intelligent engagement of classical values and the resulting architecture. The essay is generally insightful, referring to Koolhaas's search for the sublime

and his refusal of 'intellectual comfort' as well as his celebration of 'terrifying beauty'. Chaslin suggests that the fragments of modern architecture's legacy that are present in the work of OMA (such as Le Corbusier, Mies and Leonidov) have been stripped and destabilized, reinvested with other associations and meanings.[60] He positions these references as less naive than the original icons, with an incorporation of disquietude, and constant bringing together of contradictions by seeking a permanent dynamic imbalance between a harshness and bruteness in the spaces that is complemented by sensuousness and common materials.[61]

Poolside Stories

There is a small epilogue to this story of the house, which relates to the pool. The personal preoccupation with swimming runs as a red line through the work of Koolhaas, from his story of the pool in the appendix of *Delirious New York*, to the various private pools accompanying the houses he designed. The floating pool of the Villa dall'Ava is perhaps the most direct articulation of the story of the pool, with its orientation towards the Eiffel Tower (an inversion of the Soviet swimmers, continually swimming away from the Statue of Liberty – another one of Eiffel's constructions).[62] Yet each pool shows a particular instance of this idea and its material articulation, again constructing a personal narrative based more in a possible (retroactive even?) fiction.

At the Villa dall'Ava it is part of the recklessness and exuberance of the villa – the heaviness of the pool on the roof, balanced ever so tenuously over the glass volume. It shows the exhilaration of swimming towards the Eiffel Tower, the dramatic end of the swimming pool which also ends the house (not quite as luxuriously decadent as the infinity pool alongside John Lautner's 1969 Elrod House, which figured in the film *Diamonds are Forever*). In the Maison à Bordeaux, the pool is a later addition, part of the reconfiguration of the house after its central occupant passed away. The heart of the house, the elevator platform, was given a new function, and the remaining occupant, Hélène Lemoine, now has a swimming pool quietly set in the hillside, surrounded by trees. A self-cleaning natural pool ensconced in greenery, with a view to swim towards as yet another reiteration of the story of the swimming pool. In the Maison à Bordeaux, the proportions recall the original elongated pool in *Delirious New York*, meant for swimming laps.

As a counterpoint to the pool as a sense of escape then, is Ungers's pool at the Kämpchensweg house, which is trapped in the grid. The pool sits at the core of the house, where the sheer luxury of swimming within one's own premises recalls the long-gone days of the central hearth. But here the fluidity of water is contained in the house, constrained within the rigorous order of the grid, demonstrating the power of architecture to maintain order.