Private Shelters
Teaching Architecture
During a Pandemic

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Edited by Natascha Meuser
–
Essay by Hans Wolfgang Hoffmann

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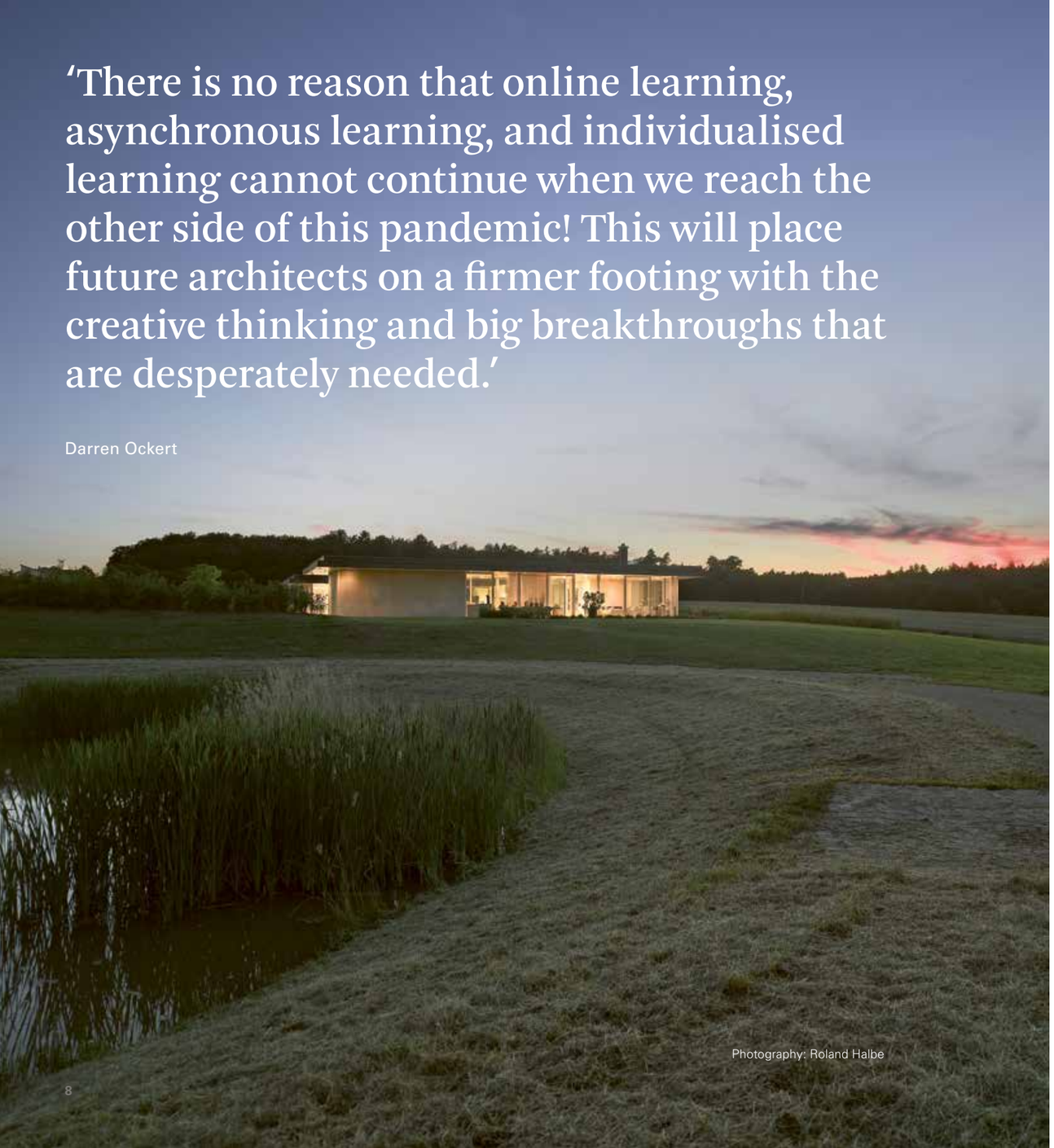
Content

‘Sitting so far away from a different nation and a different culture, this journey was a great deal of fun – including intriguing facts and stories. There was struggle, too, as the finals approached. All in all, you consistently guided each one of us and made the end of the journey reachable.
I used to wait for Wednesdays to come to have a healthy discussion on design. As my family of seven is very close-knit here at home, I used to tell them about the classes we were having. After a certain point in time, they also started to wait for Wednesdays, because they were sure they would hear something very interesting.’

Riddhi Kumar
Sambalpur, India

‘There is no reason that online learning, asynchronous learning, and individualised learning cannot continue when we reach the other side of this pandemic! This will place future architects on a firmer footing with the creative thinking and big breakthroughs that are desperately needed.’

Darren Ockert



Photography: Roland Halbe

Teaching Architecture during a Pandemic
Iconic and Generic Villas on a Hillside

Natascha Meuser

During the COVID-19 pandemic people have been forced to retreat into private shelters which have tested the limits and boundaries of residential typologies. The villa has re-emerged as an object of desire from an ambition to escape the restriction of one’s own four walls. Throughout history the villa as an architectural typology has been rethought and reinvented by a number of great architects who sought to break radically with the tradition of their time. They are still praised within the architectural canon, which is why many seek to emulate their success in the form of their own homes. The villa is both a dream for clients to live in and a vehicle for architects to express themselves. It combines the most primitive function of architecture – to create a liveable shelter – with abundant material resources, and in it, architects can manifest their far-ranging ideologies within the framework of a single building. This book introduces the concepts underlying the identity of the villa and features ten of the most noteworthy examples.

In our stance towards architecture we demonstrate our response to the most fundamental questions of human civilisation. During a time of isolation, the self-evident becomes a daily necessity. In the process, one question is posed time and again from generation to generation: ‘How do we want to live?’. The oldest building typology remains that of the detached house. Hans Wolfgang Hoffmann, a recognised architectural critic was part of the online project. He offers an overview of the 3,000-year history of villas and country houses by drawing upon floor plans and examining how architects have approached this task since ancient times.

For our students the brief was simple - design a villa. Who would have thought that a global pandemic would force the entire world to rethink their daily way of living? How should we as architects and students react to the new challenges facing us in and out of the classroom? It may well have been the subconscious escapism of students forced into isolation and quarantine which provided such a strong incentive for them to take part in this course. This unusual semester project involved not only the theoretical aspects of the typology of the villa but also online interaction with real clients, an existing site and an unprecedented number of challenges. The students were scattered across the five continents of the world and so situated in different time zones.

The typology of the villa therefore shifted from a fundamental of architectural education into a vehicle of discussion around those contemporary issues we face today. This book attempts to present the struggles and rethinking involved in conducting an architectural course – in collaboration with the client – that is not only grounded in reality but overcomes those challenges associated with disruption of time and space together with the repercussions posed by a global pandemic.

Villa in Bavaria, Germany
Architecture: Natascha Meuser
Photographs: Roland Halbe

Among the iconic buildings in the history of architecture, there are spectacular villas such as Villa Tugendhat by Ludwig Mies van der Rohe, Villa Savoye by Le Corbusier, and R128 by Werner Sobek. These and other houses sometimes broke radically with tradition. They are still praised as exemplary in magazines, which is why many seek to emulate them when building their own homes. While the single-family home was still a place for experimentation in the modern age, in which the seeds of innovation were sown through the use of new techniques and materials, today it is associated with the urban sprawl of the suburbs and catalogue houses of inferior construction quality. In the age of the 'Sharing Economy and Community', must such extensive residential buildings on greenfield sites – with their elitist emphasis on the individuality of both residents and the designing architect – be dismissed as outdated?
The project in the summer semester of 2020 gives students the task of designing a private residence. The architecture of the home must respond to theusers and the context, and, above all, convey an idea. The 2,000 square metre hillside property is situated in Würzburg, Germany. The greatest locational advantage of the site is its panoramic view, which must be captured and architecturally defined. The planned single-family house is to be part of a residential area whose heterogeneous development spreads out between high trees along the slope. In addition to traditional houses with gable roofs, there are flat-roofed buildings from the early and late modern era, along with standardised investor and iconic works by individual architects, both from recent decades.
In this seminar, students developed, through guided research, both planning parameters and models for organising space. They then implemented and presented these models and parameters in a design of their own by drawing and formulating quality standards. The contributions should give an impetus to the discussion about contemporary villa construction. Ideally, the boundary between landscape and building will merge.
The concept of architectural space is the product of specific historical factors and has therefore

been subject to constant change. Moreover, contrary to its outward appearance, it is never autonomous but rather is consistently the outcome of subdivision taking place within a larger social physical sphere, whether this be a house, a building, a housing estate or a city. The form taken by this space thus subtly conveys the way in which individuals are differentiated and defined as subjects and may occasionally carry assumptions regarding gender or class.
This seminar will aim to explore how the development of particular habits, traditions and needs forms the basis of our present-day understanding of that which is private within the domestic setting. Certainly, how we view that which is essential, or could be essential, for how we live may seem entirely apparent to us from our own experience of daily life. This stance poses a problem for discussion in an academic context however, since this knowledge itself can be seen as the outcome of historical transitional periods in society which span lengthy phases with differing stages of development.
The objective will therefore be to examine how it is not until the late nineteenth century and thereafter that accommodation becomes the embodiment of privacy within domestic architecture. Analysis illustrates how the emergence of housing as the main place of residence for modern humankind should be considered as merely the provisional final point over any trajectory of history. Taking this broader view we may then consider which outward forms our accommodation may take and what potential for innovation will exist, taking account of possible future processes of change.
The central idea is that the essence of architectural appreciation lies in our perception of the space around us. I believe that the sensations we experience when we move through our surroundings form our first sensory awareness of architecture. That physical movement should serve as the real criterion for our appraisal of architecture. The architect should no longer be regarded merely as a master builder in the classical sense, with command over materials, construction, and proportions, but primarily as a composer of spaces and sequences of movement.

It is currently becoming clear that the focus of aesthetic discourse should shift away from the actual design of buildings and to how people perceive and are affected by those buildings. This new focus invokes the psychology and physiology of the subject. The central concept is that our architectural awareness stems primarily from the sense of movement we feel upon entering a room or surrounding space. It is from our bodies' movement and in our negotiations with things that the bulk of our initial impressions of the spaces around us are awakened. The idea that people perceive architecture through their movement in space has far-reaching consequences for the reception of architecture. It challenges the notion that vision is the primary mode of architectural perception.

Architecture represents a combination of function and aesthetics. As such, people most often fall under its spell not as observers in contemplation but rather as occupants of a building in use. In other words, they are active participants, not passive spectators, by dint of their physical presence and movement within the surrounding space. Architects who wish to consider the role of movement must do more than merely create visual attractions. They must create suitable living and working areas that invite people to linger. I want my students to be able to distinguish between what is ancient, renaissance, and modern so that they can make a contribution to contemporary architecture. There are fundamental values in architecture, beyond fashionable discourses, such as resource conservation, globalization, and digitalization, that students must learn to find answers to current questions about building. Architecture is a discipline in which there is no right or wrong, in which there are only appropriate questions and solutions.

An interdisciplinary framework is required in order to achieve these learning objectives as part of contemporary architectural education. Therefore the overarching question throughout the seminar was: How can we define design parameters that are universally valid, and which might be relevant for future building concepts? Is it possible for human beings to only have a 'limited' perception of physical space? In other words, is it primarily through a boundary tangible to the senses that the space around us takes on a visual form and becomes a space that can be experienced as such? Is it only within architectural spaces, restricted artificially and artistically, that we can encounter ourselves, that we are thrust back onto ourselves, in contrast to the overwhelming might exerted by the infinite possibilities of nature?

Especially in the field of villa construction, perceptive questions and innovative proposals continuously emerge from what were once considered to be niche areas – niche areas that were formerly neglected and ridiculed, as experts and the general public did not find them to be prestigious or worthwhile spheres of activity. Therefore it is even more important to understand the spatial and sociological logic in order to develop strategies for a resource-saving and sustainable architecture. Students must learn to approach problems with a methodology that is open and non-dogmatic. Their individuality, and their personal approaches to solving problems, arrived at independently, must be taken seriously and supported.

Design Project Framework

Upon completion of this online course, students will have developed the following skills:

- Use scientific research to design buildings
- Explain building history of villa architecture
- Determin fundamental architectural principles to meet the needs of the client
- Define planning parameters and quality standards for single-family houses
- Work interdisciplinarily with parties involved in construction and planning
- Define a brief through discussions with the client
- Carry out an thorough site analysis, gaining as much information as possible about the site, surroundings, and context
- Develop ideas that will provide a basis for their concept

Project Design Brief

Following research and discussions, students begin to build an understanding of the spatial requirements of the project so they can carry out particular tasks and assess the spatial requirements in the site and context. The programme checklist (five planning parameters) helps the students to develop the project and identify areas of importance and those that need to be clarified, and to explore the:
Site: location, access, reasons for choosing, health and safety aspects, key elements or features;
Building: size, use, form, scale, hierarchy;
Narrative: coherent design, which corresponds to the user requirements;
Programme: areas, specialist items;
Zoning and Size: dimensional considerations such as boundaries, access, future expansions;
Landscape: natural features of the site such as trees, rocks, topography, ponds;
Circulation: movement and circulation through and around the building and site;
Climate: sun and shadow;
Views: Panorama and perspectives.

Step 1: Research-Based Design

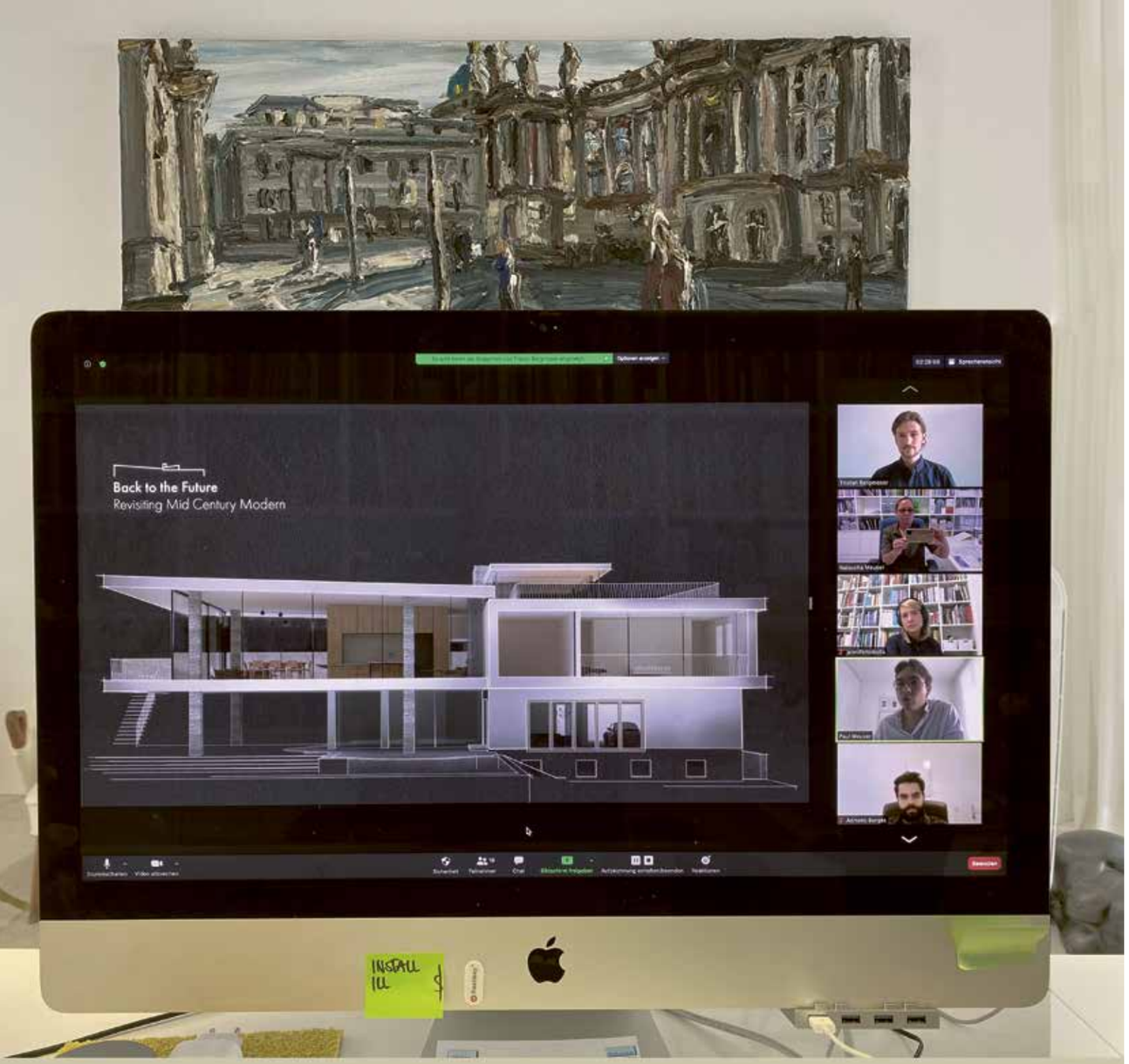
Formulating design parameters is a challenge at first. The parameters serve as a planning aid for the development of a design.

Step 2: Methodical Design Solution

The methodical design process helps students to find a structured way of solving problems by using object-design knowledge.
Exercise 01: *The Aesthetics of Memories.*
A View into the Past
Exercise 02: *The Aesthetics of Harmony.*
Atmosphere as a characteristic feature.
Exercise 03 *The Aesthetics of Iconicity*
Identifying planning parameters
Exercise 04*: The Aesthetics of Texture*
how visual texture activates certain emotions and feelings.

Step 3: Final Presentation

The sketching phase leads to the synthesis phase, where the design comes together. At this stage, the logistics of the building and site, the construction, the form, and materials, etc. become united into one entity. Finally, the presentation phase and public discussion cover all the material used to present and explain the project.



Online Lectures
Virtual Teaching

01
The Reconstruction of Villa Wolf in Gubin, Poland
Architect: Mies van der Rohe (1925/1926)
Florian Mausbach, *chairman of the Association Architekturpreis Berlin and the Association for the Reconstruction of the Villa Wolf, Berlin*

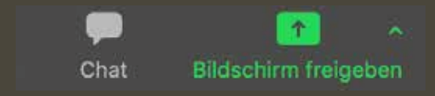
02
Learning from Iconic Architecture
The Aesthetics of Atmosphere
Hans Wolfgang Hoffmann, *architectural critic, architect and author, Berlin*

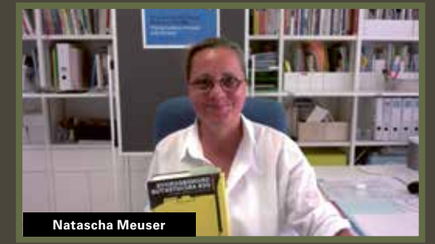
03
Home Stories
100 Years, 20 Visionary Interiors
Jochen Eisenbrand, *architect and curator, Vitra Design Museum, Weil am Rhein*

04
The Foundation of the Design
Ten Parameters for Suburban Villas
Natascha Meuser, *architect, publisher and professor, Berlin and Dessau*

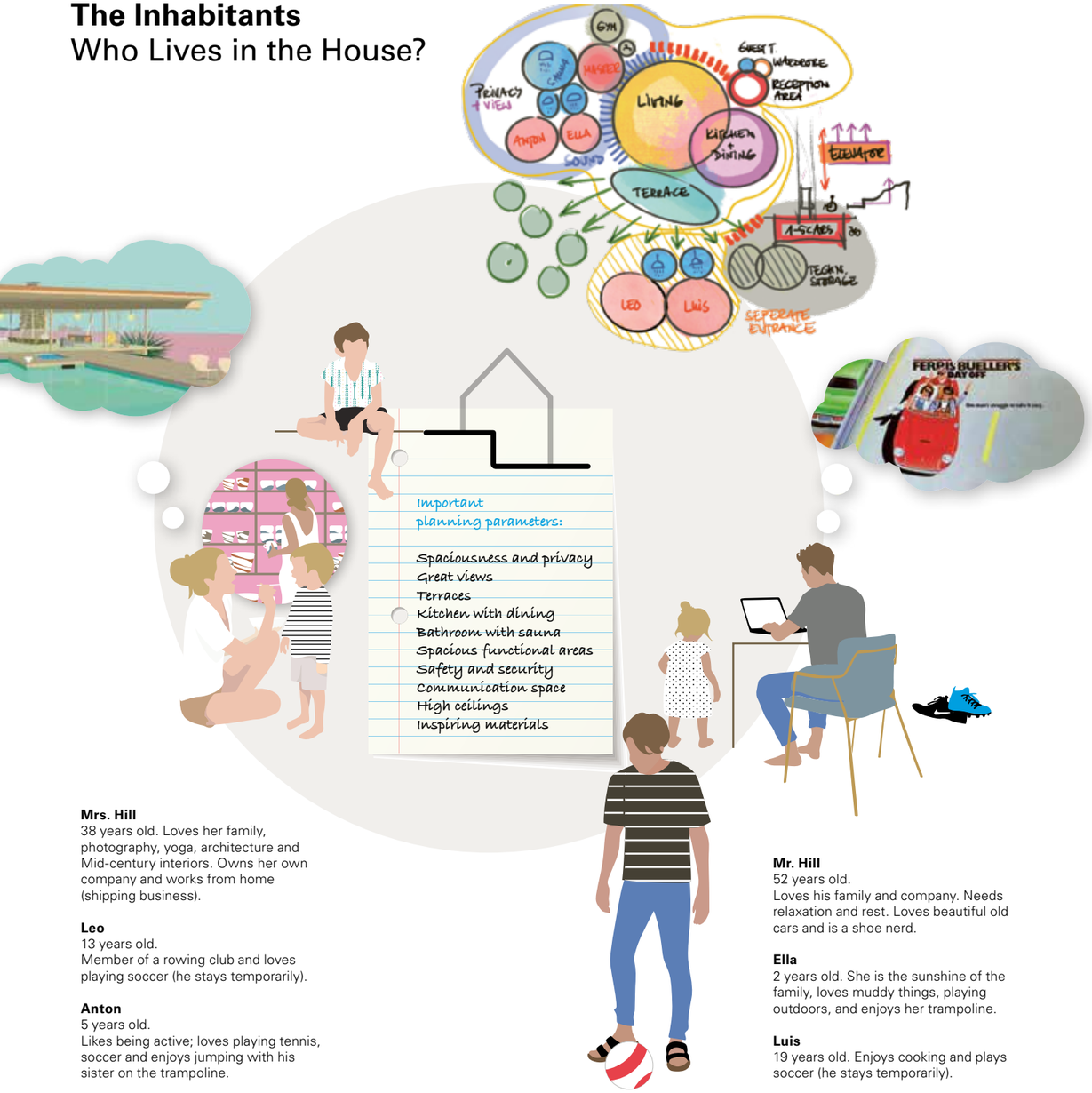
05
Architectural Drawings
Ten Effective Presentation Techniques
Natascha Meuser, *Architect, publisher and professor, Berlin and Dessau*

In 2020, we have all seen that the challenges posed by COVID-19 are rapidly changing lecture and teaching methods. In this seminar, classes were held using Zoom and other online tools. Graduate students were asked to carry out their teaching responsibilities online.





The Inhabitants
Who Lives in the House?



Mrs. Hill
38 years old. Loves her family, photography, yoga, architecture and Mid-century interiors. Owns her own company and works from home (shipping business).

Leo
13 years old.
Member of a rowing club and loves playing soccer (he stays temporarily).

Anton
5 years old.
Likes being active; loves playing tennis, soccer and enjoys jumping with his sister on the trampoline.

Mr. Hill
52 years old.
Loves his family and company. Needs relaxation and rest. Loves beautiful old cars and is a shoe nerd.

Ella
2 years old. She is the sunshine of the family, loves muddy things, playing outdoors, and enjoys her trampoline.

Luis
19 years old. Enjoys cooking and plays soccer (he stays temporarily).

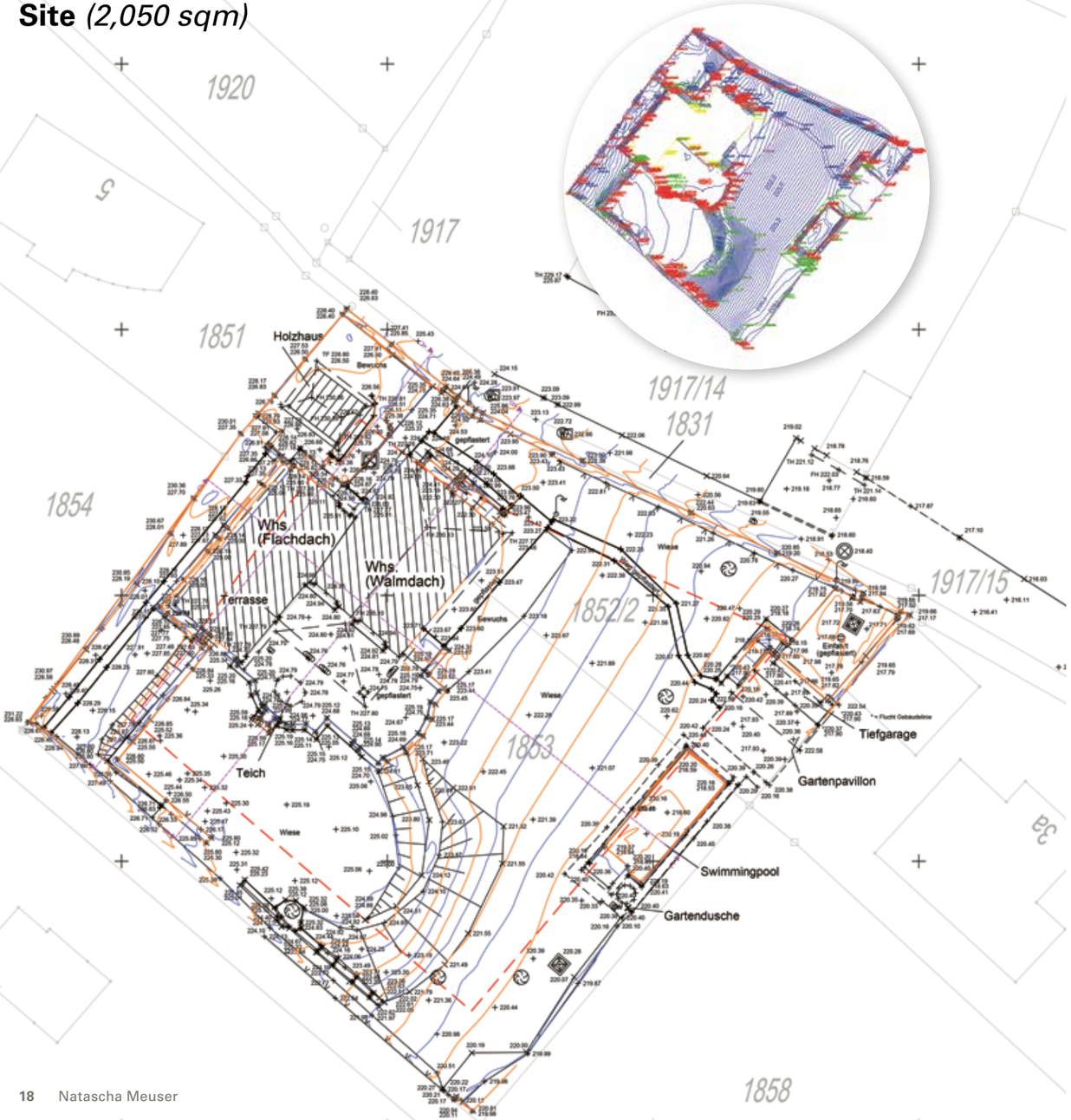
Space Requirements
Project Design Brief

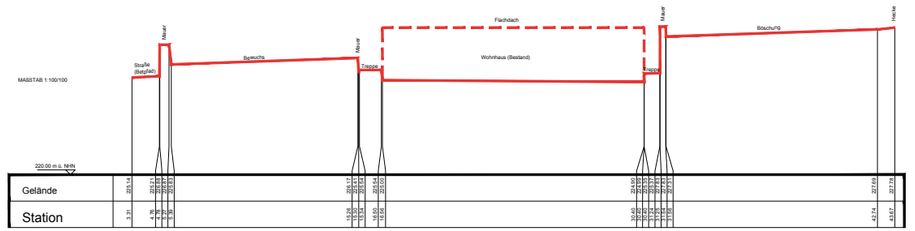
Site area:	2,050 sqm
Total floor space:	450 to 500 sqm (without garage)
Levels:	3 levels (1 – Parking / 2 – Ground floor / 3 – Second floor)
Basement:	not necessary
Parking:	underground car park (4 to 5 cars)
Roof:	flat
Extras:	Outdoor pool with shower and jacuzzi (close to house) Fireplace (Living area) Barrier-free
Ceiling height:	min. 3.50 m

Required space

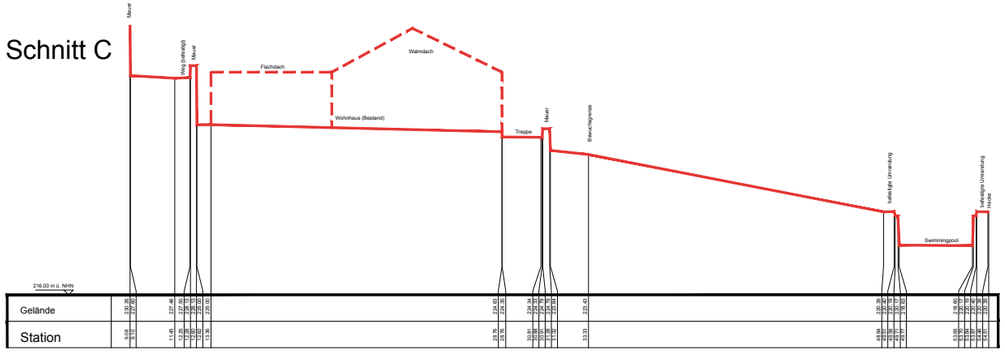
Ground floor	Entrance with guest toilet and wardrobe Office Gym 2 children's rooms with bathroom (+14 years) 1 guest room (could be children's room) Laundry room Technical room Storage room Elevator
First floor	Entrance with guest toilet and wardrobe Living room Kitchen/Dining Housekeeping area Master bedroom Master bath with sauna Dressing room 2 children rooms with bath (+5 years) Terraces

Site *(2,050 sqm)*





Schnitt C



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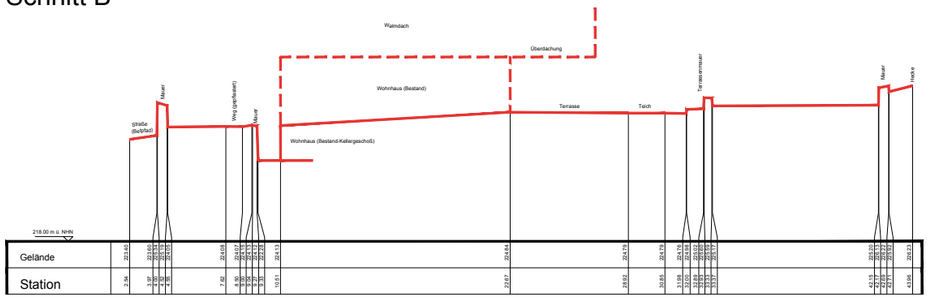


Topographic inventory (not to scale)
Drawing: A.I.T. Gmbh Ingenieure im Bauwesen

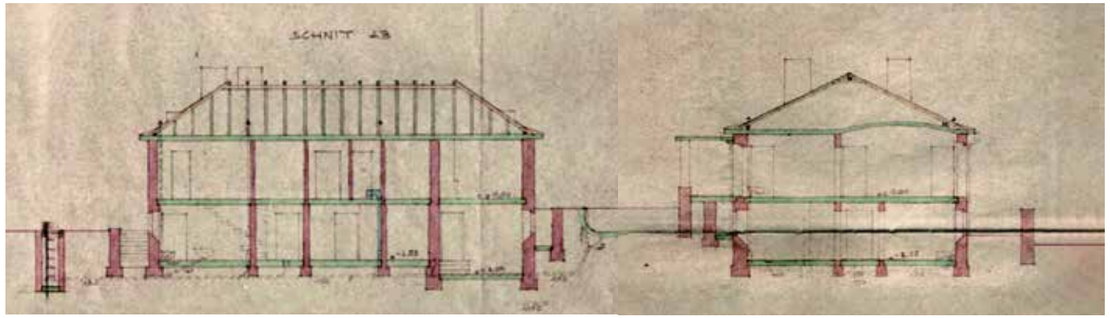
Existing Buildings and Structures

South-west view

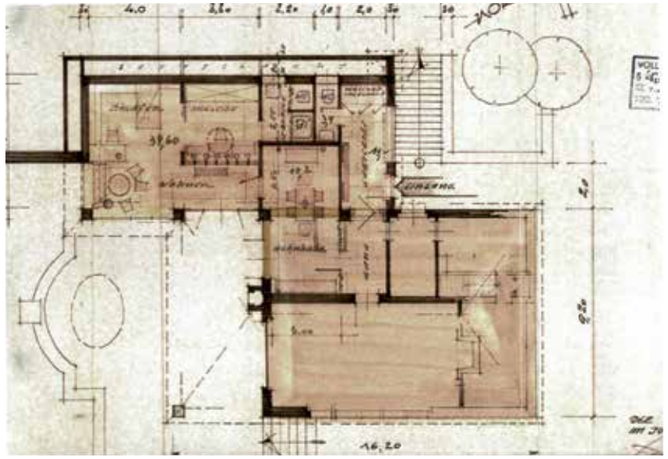
View from pool to house

Garage on Betstraße

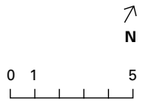
Pool



Sections



Ground floor



Aerial photo by drone
Source: Susanne Schneck

Due to the pandemic, it was not possible to inspect the property. Therefore we asked the owners to take aerial photographs of the site.

Aerial photo by drone
Source: Susanne Schneck

‘We feel a pleasant sensation when we dance according to certain laws; we should be able to arouse a similar sensation in someone whom we lead blindfolded through a well-built house.’

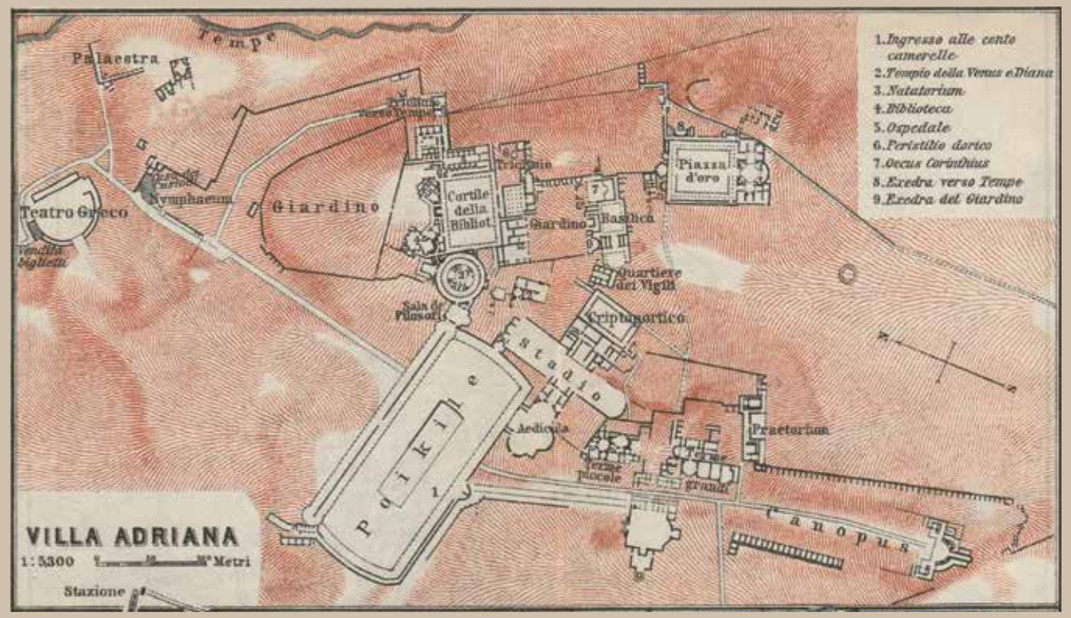
Johann Wolfgang von Goethe

Building History

Villas and Residences as Prototypes of Single-Family Houses

The essay deals with one of the oldest building typologies: the detached house. Since ancient times, architects have completed this task again and again. Hans Wolfgang Hoffmann, an architecture critic based in Berlin, tells the story of the 3,000-year history of villas and country houses by using floor plans.

Villa Adriana near Tivoli, Italy AD 118–134
Above: Lautaro
Bottom: Antiqua Print Gallery



Villas and Residences as Prototypes of Single-Family Houses

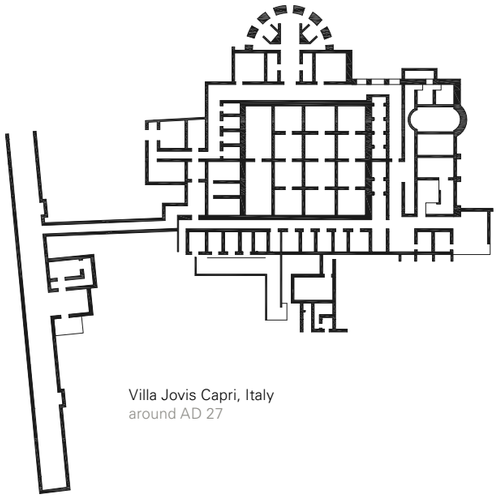
A Virtual Lecture

Hans Wolfgang Hoffmann

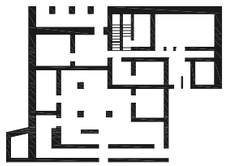
The Ancient, Original Form

A long process of emancipation was required to achieve this freedom. The foundation was laid in ancient Greece and one of the oldest examples is provided by the Minoan culture of Crete. A good 3,600 years ago, foundations were built near Vathypetro or Sklavokampos that remain preserved to this day. Such structures soon become known as 'villas' because the approximately three dozen rooms they comprise are far too insignificant for the palatial cities that dominated during this period while, at the same time, they are far too large to be designated conventional farmhouses. Indeed, the rooms seem to grow next to one another: there is neither a single theme nor a clear external contour. The only striking feature is the structural element, something which is to be seen in almost all ancient villas: a courtyard lined with columns – also known as a peristyle – that forms the heart of the structure. At Vathypetro a grape press emphasises that the Greek villa's first function is agricultural work, indicated in Sklavokampos by a storeroom wing with a separate entrance. In both cases, paved access demonstrates that the Minoan villa was dependent on the goodwill of the polity. Nonetheless, an individual house type removed from city and countryside had been born.

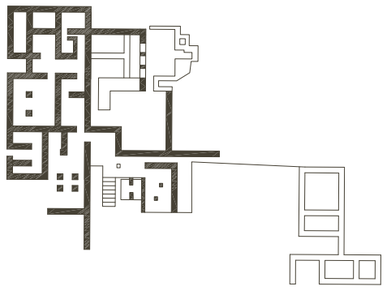
It was the Romans who first began to truly cultivate this new creation. Their culture anticipates the difference between villa and residence, distinguishing as it does between villa urbana and villa rustica. At this period, it is not merely the more or less rural location that separates the two types of building. The villa urbana started life as the second villa of Rome's political leaders. The oldest example, the Villa Jovis on Capri, is built on the orders of the Emperor Tiberius around AD 25 close to – but at a safe distance from – the centre of imperial power. One hundred years later, Tiberius' successor Hadrian had the most extensive example built 30 kilometres northeast of the capital: Villa Adriana has several hundred rooms and covers an area of no less than 120 hectares. A few decades later still, provincial governors and even the lower-ranking civil servants begin to follow his example. Several highly imposing structures – the del Tellaro, del Casale, di Biagio and di Patti villas – were built in Sicily alone. And for the social elite it is no longer unusual to have several country homes, and the villa as a living form is firmly established. In social terms the villa urbana may have matured so far as to achieve serial production, but in terms of style, it is still in its infancy. Despite writing 'The Ten Books on Architecture',



Villa Jovis Capri, Italy
around AD 27



Villa Sklavokampos Crete, Greece
around 1600 BCQuelle

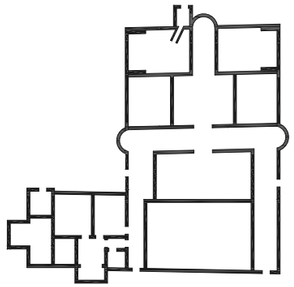


Villa near Vathypetro Crete, Greece
around 1600 BCQuelle

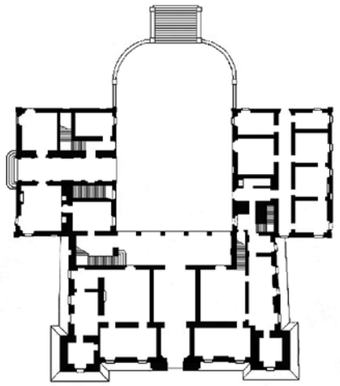
for example, Vitruvius fails to allocate the villa its own chapter; he sees merely it as a palazzo – the location of which, far from the city, should be given special attention. Finally, ancient architectural theory demands only urban construction by other means. Practice elevates uncontrolled growth to a matter of principle: as these grand mansions are only peripherally involved with agriculture, pleasure, representation and administration come to the fore. To these ends, estates are further enhanced: observation towers, theatres and temples are added, hot springs featured – each with typologies that continue to follow their own, individual logic. Conflicting building styles are woven together in the interiors through a multitude of atria and peristyles. Vitruvius differentiates between no fewer than half a dozen different courtyards. However, the single connecting element which extends across all of them is itself an innovation: shaped nature. Thus Villa Jovis towers above the cliffs of Capri with the help of an eight-storey terrace. Villa del Casale's tower, over 100 metres high, dominates its landscape. Villa Adriana's design is so complex and stringent that could be simply copied by Baroque centuries later. In a manner of speaking, the Romans invent garden art as a secondary element. They leave the buildings themselves in the form of a collage, which has an almost post-modern effect.

The approach towards achieving an archetype is far more successful with the villa rustica. The forerunner of the residence is more than the modest sister of the villa urbana. The original object of building activity is to secure territory, and its central purpose remains agricultural. The estates are administered mainly by civil servants and retired military personnel; they are also required to supply civil servants and soldiers. In contrast to the villa urbana their construction is determined less by civil than by military engineers. As a result, these manors are designed in as linear and planned a manner as army camps. Unlike farmhouses, which are situated on the street and thus connected with the local village, these buildings are located somewhere in their grounds and are accessed via their own road. Here too, the heart of the building is an open courtyard, its sides flanked by outbuildings and estate buildings, as well as bathhouses which seldom rise above two storeys. The main wing, in which the master of the house and his immediate family live, becomes the axisymmetric highlight: the corners sport projections, with an open columned hall at the entrance: the portico. In keeping with the military purpose of these buildings, the most striking examples are built along the borders of the Roman Empire. In Germany, Villa Borg in Perl/Saarland and the villa in Mehring near Trier are two examples of such buildings that have recently been imaginatively reconstructed. In Lauffen on the Neckar, Bingen on the Rhine, Haselburg in Odenwald and Lullingstone in Kent, only the foundations survive.

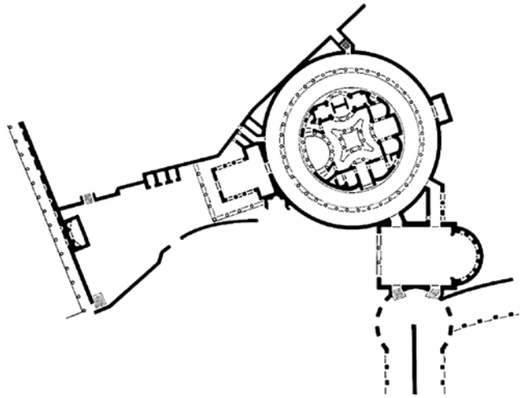
The sparse remains reveal the crux of the villa rustica: It stands not only geographically, but also chronologically, at the end of the Roman Empire. Shortly afterwards the ancient world declines, leaving two half-finished inventions behind: the archetypal residence and the residence landscape. Initially the heirs to the Romans are not interested initially in uniting the two. The Church, which is the Romans' direct legal successor, is interested in God in heaven and life after death – in other words, in less earthbound issues. It takes centuries before religion's primacy fades away and the renaissance of the villa becomes possible. At the end of the first millennium AD, the Church's rule has virtually shrunk to Rome and its environs. The remaining country is dominated by city-states whose town people feel confined by their walls. The communal bastions have become too constricting, in particular for the merchant dynasties that have accumulated considerable wealth following the lifting of the Christian ban on charging interest. Competing for pre-eminence, they create lively demand for villas far outside the city, where they leave off all basic functions, practising agriculture in outbuildings at most. The Medicis alone, Florence's leading family, eventually possesses over two dozen such luxury villas.



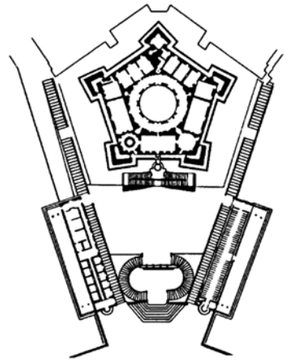
Villa Haselburg near Höchst in the Forest of Odes, Germany
around AD 130



Villa Medici del Vascello Viscardi San Giovanni in Croce, Italy
after 1407



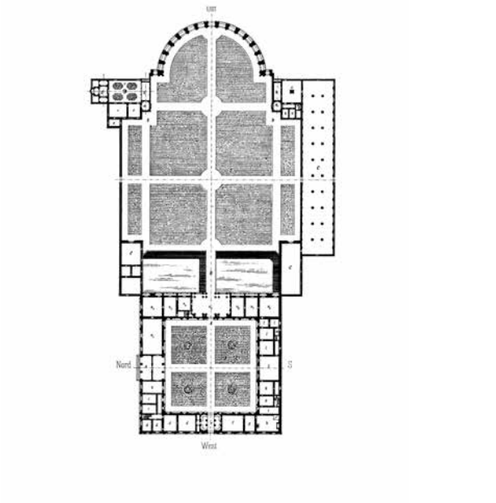
Villa Adriana near Tivoli, Italy
AD 118–134



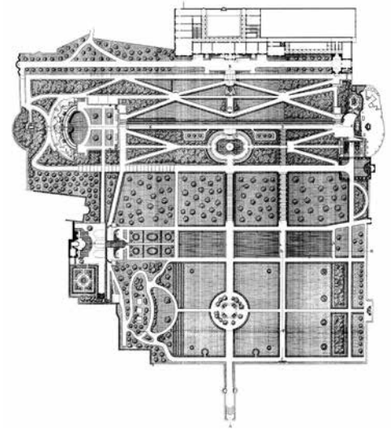
Villa Farnese near Viterbo, Italy
Architect: Giacomo Barozzi da Vignola
1560

Palladio's Perfect Place ...
Now that religion's power has waned, the villa is the ideal Renaissance art product and it is all about rationally designing man's place in the world. Only antiquity remains as a model, since the Gothic is completely lost. It is perfectly summed up by Leonardo da Vinci who in 1492 illustrates Vitruvius' wordy teachings on proportion in the simplest possible way: a naked man, moving between circle and square. Leon Battista Alberti orients himself in a similar fashion: in 1430 he measures the ancient ruins of Rome and 20 years later he presents his 'The Ten Books on Architecture'. Unlike in Vitruvius' work of almost the same name, here the villa gets its own chapter for the first time. Alberti describes the villa as a specific organism of house and landscape. Both parts are uniformly broken down geometrically, and are connected by elements such as the garden, portico, terrace, loggia, pergola or balcony. The pivot of the building is a hall that leads to all of the main rooms. In the best examples, it is round or oval-shaped and, as a general rule, open at the top.

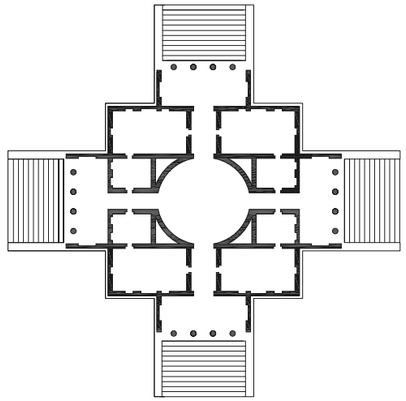
Although Alberti himself never manages to realise this ideal, there are architects and clients in Italy who develop his approaches. Different areas of focus are created from region to region. In keeping with the ancient traditions in and around Rome, the garden remains more important than the house in the extensions of the Papal State. The most impressive example of this is the Villa d'Este, built by Pirro Ligorio and Alberto Galvani sich 1560 for the cardinal and governor of Tivoli, Ippolito II d'Este. Within sight of Villa Adriana they create fountains, the workings of which still appear miraculous. The Villa Borghese in the centre of Rome is no less extensive. The built core, however, is limited to not much more than the Casino completed in 1615 by Giovanni Vasanzio and Flaminio Ponzio. In Tuscany, in contrast, it is the villas themselves that stand out. They illustrate the urban movement from the countryside to the city and back that took place in textbook fashion in the region. The first step is marked by the converted or even newly built Medici villas in Cafaggiolo, Artimino, Seravezza or la Petraia, and the Villa Vascello Viscardi in Lombard San Giovanni, in Croce. Thanks to battlements, keeps, striking projections and small punched window openings, they still resemble noblemen's castles. Later constructions in Poggio a Caiano, Fiesole or Pratolino are urban palaces with gardens, terraces or loggias. Only a few revolutionary designs depart from such local traditions. The most spectacular is created by Michelangelo's student, Giacomo Barozzi da Vignola, halfway between Florence and Rome: Villa Farnese, built in Caprarola from 1550. Vignola builds a geometric succession of rooms in the form of a pentagon, around a circular honour courtyard, which sits on a bastion atop Monte Cimini, dominating the landscape.
However, the façades and open staircases so closely resemble those in a fortress that man and nature do not really come together. A quarter of a century earlier, the Palazzo del Te in Mantua has similarly failed. Here Raphael's student, Giulio Romano, creates a garden square, surrounded on all four sides by arcades. Looking at the rustic outer façade it is, however, impossible to guess at the lush greenery concealed within. The villa experiences its true renaissance only at the hands of another Venetian architect, Andrea Palladio, who follows in Alberti's footsteps a century later. In 1554 he publishes a guide to ancient Rome, and in 1570 his 'Four Books on Architecture' appear. Palladio expands more practically than theoretically on Alberti's ideas, testing out his building instructions on no fewer than 60 villas. Early on – as in the example of Villa Godi which was built around 1540 in Lonedo di Lugo – he furnishes the body of the house with clear contours and gives it internal structure. Later Palladio allows the interior life to flow ever more easily into the landscape. A series of experiments overhauls the Palazzo del Te and brings its arcade-lined garden square outwards. Estates such as Villa Barbaro or Villa Emo which Palladio designed for sites in Maser near Asolo and Fanzolo di Vedelago in 1549 and 1564 respectively create an almost infinitely extendable house backdrop, which would become the model for innumerable ranches and haciendas.



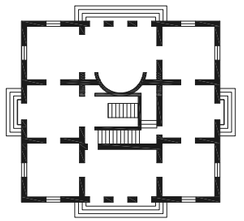
Palazzo del Te in Mantua, Italy
Architect: Giulio Romano
from 1524



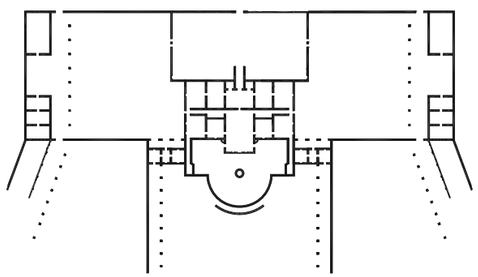
Villa d'Este in Tivoli, Italy
Architects: Pirro Ligorio and Alberto Galvani
1560



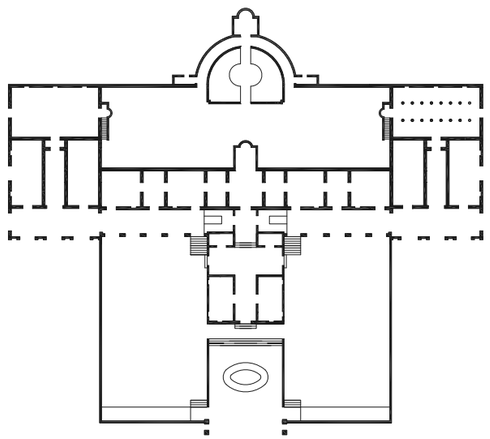
Villa La Rotonda in Vicenza, Italy
Architect: Andrea Palladio
1567–1571



New Pavilion at Charlottenburg Palace in Berlin, Germany
Architect: Karl Friedrich Schinkel
1824/1825



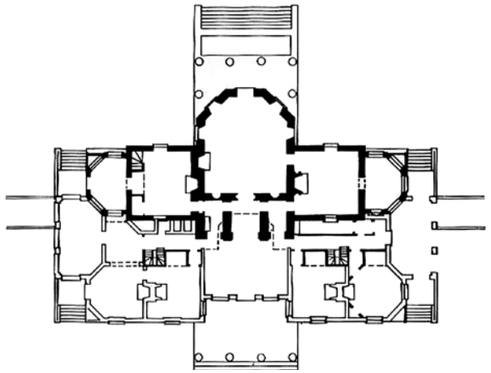
Villa Godi in Lonedo di Lugo, Italy
Architect: Andrea Palladio
1540–1542



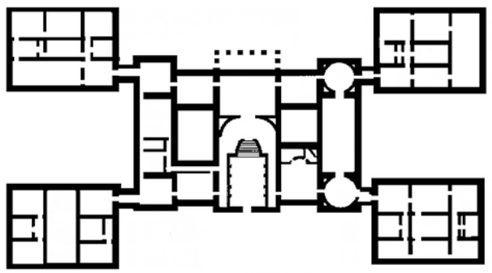
Villa Barbaro in Maser near Asolo, Italy
Architect: Andrea Palladio
1549–1558

With most Palladio designs the villa cube remains compact. Instead, individual elements grow from incidental structure into landscape bridges. Palladio stacks and rows loggias culminating in buildings such as Villa Sarego erected around 1570, where the façades open out completely – a device that has since seen its application in numerous sanatoria. Palladio makes the most out of porticos: at the Villa La Rotonda he creates one for each point of the compass and joins them all seamlessly in the central domed hall. At this villa, the Renaissance dream comes true exactly as foreseen by Michelangelo – man is the centre of the universe.

The villa achieves its ideal form with Palladio and becomes the basis of that synthesis of the Renaissance, Baroque and Classicism which obtains clarity through the rationality of the design. Palladianism remains perennially fashionable, in particular within western cultures – sometimes because of his humanist motif, sometimes because of a kind of vague nostalgia for Italy. His models are frequently copied almost in their entirely. It is rare for an architect to manage to further idealise, not to mention improve upon, Palladio's designs. Thus William Kent builds Chiswick House in London from 1720, and Thomas Jefferson constructs Monticello in Charlottesville essentially as a mini rotunda around 1770. Many architects combine the Palladian formal canon with traditional American construction in wood. In Prussia, Classicists such as David and Friedrich Gilly, Karl Friedrich Schinkel and Ludwig Persius expand the Palladian canon of elements by adding pergolas such as that at the Glienicke Palace or the Roman Baths at Sanssouci Park. At Charlottenburg Palace Schinkel completes the New Pavilion in 1825: it is an ashlar with a simple loggia and a balcony which runs all the way around, thus reducing the classic villa to its essentials.



Monticello in Charlottesville, Virginia, USA
Architect: Thomas Jefferson
1769–1784



Holkham Hall in Norfolk, England
Architect: William Kent
around 1735

England's Wild and Romantic Alternative Design

However perfect the Palladian villa may be, it is precisely this perfection which is its stumbling block: as an ideal, it can barely be developed further. Its strict rationalism also conflicts with the freedom which one would expect from a detached property. Even more does its precisely measured geometry run counter to nature's untamed luxuriance which was, indeed, never part of the initial plan. It is here, ultimately, that the villa diverges from the residence. England is its predestined birthplace. As an island on the edge of the ancient world, Britain has long enjoyed development in isolation. Instead of creeping urbanisation, sudden land seizures are typical. The first decisive invasion, by William the Conqueror, is in 1066. The Normans fill the island with extensive monasteries.

The conquerors bring their own formal ideas with them from northern France. For many centuries, England stands on the threshold between Late Romanesque and Early Gothic. The Norman style does not aspire to an organic whole, but prefers simply to add on. This additive principle is the hallmark of both cathedrals and cottages: in England, half-timbering consists not of straight bars and diagonal connectors, but of mathematical rows of identical stanchions. Buildings are less designed to plan than extended: they mutate from monastery to castle to nobleman's mansion. Ruptures, an aversion to standard measurements, asymmetries and labyrinthine expansion all reflect the feuds of the lords, leading first to the autonomous Anglican Church, and then to England's secularisation. The inner reconciliation takes place only after William of Orange signs the Bill of Rights and founds the world's first constitutional monarchy. As a result, scholars such as William Tempel, Joseph Addison or Shaftesbury turn the traditional confusion which they encountered on their travels into something positive in the simplest possible way: they invent an ideal according to which the irregular is also pleasing – known as the Picturesque. The masterpieces of this philosophy are created by William Kent, William Shenstone and Capability Brown. Their landscaped parks replace the Baroque garden on an international level. Instead of forcing nature to follow straight lines, they create a wilderness with winding paths. That this is just a pleasurable stroll through three-dimensional pictures can also be seen from the architecture. Its internal logic becomes incidental: not infrequently buildings project further at the top than at the bottom, mighty gabled roofs squat on top of slender round gazebos. What counts is the picturesque effect. Here and there, a window may offer some insight, but what is really required are perfectly placed viewing points and emotive backdrops.

Thus much of that which enriches the new English garden in constructional terms around 1760 can hardly be taken seriously. Often, such structures are so-called follies, sometimes taking the form of crooked towers, sometimes exotic pavilions, an eccentric giant pineapple, or specially built ruins. Farm cottages slowly become respectable as well thanks to Queen Charlotte's Cottage in Kew Gardens or the Hameau de la Reine in Versailles. All the same, this celebration of the simple life is initially pure fantasy. At best, it is model farmers who are housed here but usually these residences are entirely uninhabitable. Nonetheless, their visual appeal is indubitably established.

Within a century what began as a fashion trend produces real estates. Almost everywhere in England gigantic, half-timbered farmhouses are built, the interiors of which also aim to provide pleasure. Richard Norman Shaw sums it up particularly well: he designs both residences such as Adcote in Little Ness, Leyswood in Groomsbridge, or Cragside in Rothbury, as well as Marcus Stone's second home in London's Melbury Road. Not only are the functions of the rooms separated but also the routes taken by the owners and their servants. Thus internal labyrinths are created, leading from gloomy main halls via corners, side stairs and side doors to smoking rooms, fireplace rooms or tower rooms. Shaw's work is the manifesto for the 'English house'. Via its colonies, the British Empire exports the concept to half the world. Some years later Hermann Muthesius promulgates it in Germany.

The Modern House for Everybody

The Italian villa and the English residence offer two style templates at a time when detached property receives a major boost in terms of importance. The Industrial Revolution, which got underway with the invention of the steam engine at the end of the seventeenth century, soon delivers far more than technical innovations. It makes agriculture more efficient, speeds up transport, increases production to factory standard, renders the proximity of workplace and home superfluous, raises life expectancy, and stimulates cities into hitherto unparalleled growth.

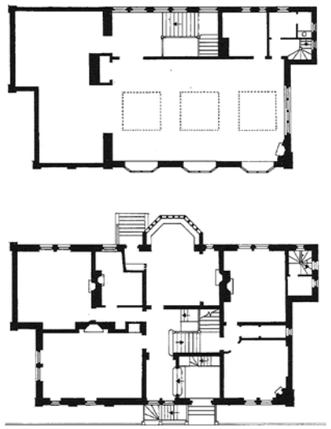
In the metropolises a new social class is created that seeks to escape the evil of industrial life by fleeing to villas and residences. This new class of house builders is disproportionately broader than the aristocracy which went before, given that detached properties are now no longer tied up with extensive land ownership. In part, villas are built directly in the factory grounds; in the main they grow outwards in an uncontrolled manner to form the suburbs.

Such villa colonies are designed to plan for the first time in the mid-nineteenth century: in 1857 the merchant Johann Anton Wilhelm von Carstenn purchases the Hamburg nobleman's estate of Wandsbek. He has the stately home torn down, and parcels up the estate into building plots. The houses constructed here must be detached and may not have more than three storeys. Avenues on which strips of green separate roadway and pedestrian sidewalks compensate for the lack of greenery. The new villa colony fills up so quickly that within four years it becomes an independent municipality, and is officially renamed 'Marienthal'. The success of this dwelling model is so obvious that similar developments spring up like mushrooms everywhere from Wuppertal to Vienna. Carstenn and his colleagues focus so intensely on the area between Berlin and Potsdam that Europe's largest villa landscape is created alongside the River Havel's woodlands.

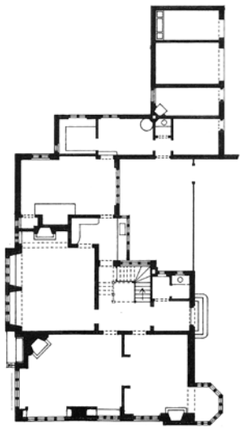
The buildings themselves still cultivate the style of the good old days. That their numbers and settlement structure are innovative is as little apparent as their distance from the workplace or where exactly they will be built. One of the first people to embrace this agenda is Frank Lloyd Wright. Wright is a child of America's Midwest suburbs – a topos which has been virtually ignored in cultural terms up to this point. And this is precisely what he changes. After he starts to build his own home in Oak Park (Wisconsin) in 1889, dozens of so-called prairie houses such as the Ward W. Willits House in Highland Park, or the Frederick C. Robie House on the outskirts of Chicago are initially built. Later, a simplified type of this variant is added in large numbers as well: the Usonian home. Wright combines natural materials and contemporary construction techniques. The traditional residence now displays the then new Art Deco style. Above all, however, indoor and outdoor pleasures are linked together for the first time. Fixed paths and rooms merge internally, while the house continues to grow outwards. Landscape and daily life come together so completely that it is almost impossible to imagine one without the other. This interlocking is most apparent at Fallingwater: Edgar J. Kaufmann's summerhouse is built from 1935 directly above a waterfall. Several terraces rise out of the rubble-paved ground. Wright even builds in deserts and on mountain tops using similar tricks. Ultimately it seems possible to settle individually anywhere – and that is exactly what Wright presages – in the ideal designs for Broadacre City from 1934/1935 or The Living City from 1958 the residence appears as a world model.

While Wright is translating the residence into the Modern style, Le Corbusier is revolutionising the villa. His maxim is the machine, his principle serial production. In 1914 Le Corbusier transfers these industrial benchmarks to architecture and develops a two-storey basic module. Maison Domino incorporates the 'Five Points of a New Architecture': the load-bearing and room structures are completely separate. The only fixed points are supports, so-called pilotis, which lift the floor slabs apart from each other and off the building site. The floor plans can be designed completely as desired. A roof garden acts as the fifth façade. The other external walls can be completely opened up with ribbon windows. The module can reproduce itself to form an apartment block – the so-called Immeuble Villa or stand alone. From the 1920s Le Corbusier builds numerous examples of both, his masterpiece being the Villa Savoye. A white block on a square floor plan is created above a clearing in Poissy-sur-Seine in 1931. Almost as if meant to be car-friendly, a central ramp connects the ground floor, which is open all round, with the living floor and the roof garden. Screens act as room dividers on all levels. Thus the modern villa is defined.

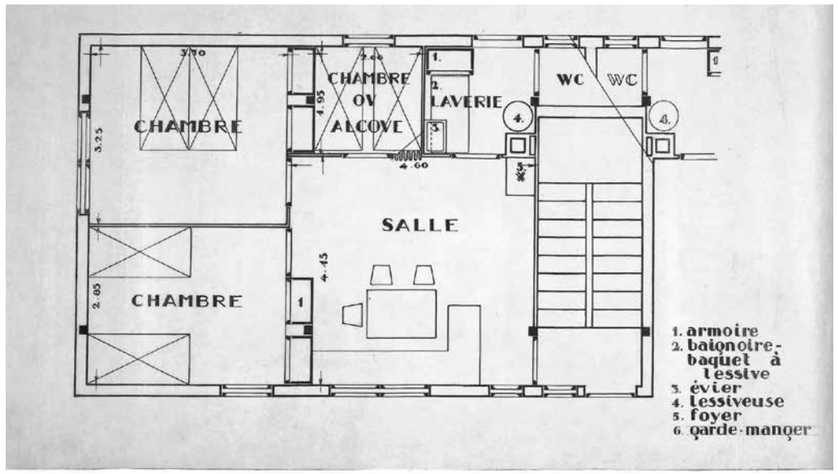
Hardly is the prototype born, than it is optimised. Using new tricks all the time, the Modernists shape the formal canon that still applies today. In the mid 1940s, serial production is achieved: Richard Buckminster Fuller develops the UFO-like Dymaxion House, which is completely prefabricated and can be fully dismantled, although this does not progress beyond the experimental stage. In the meantime, Charles and Ray Eames actually do move into a simple living box in Pacific Palisades, Los Angeles, which they have constructed solely from elements provided by the construction industry. At the end of the decade, competition for the simplest form is driven to its height in New Canaan (Connecticut): Ludwig Mies van der Rohe builds the Farnsworth House, while Philip Johnson and Richard Foster create the Glass House. Both boxes, providing around 150 square metres of living space and fully glazed on all sides, are built around the installation unit core. While Mies is still struggling with concrete sleepers to achieve the transition from inside to outside, Johnson and Foster even leave out all curtains. The villa is limited to the basic rectangular room, can be reproduced as often as desired, and is more universal than ever before.



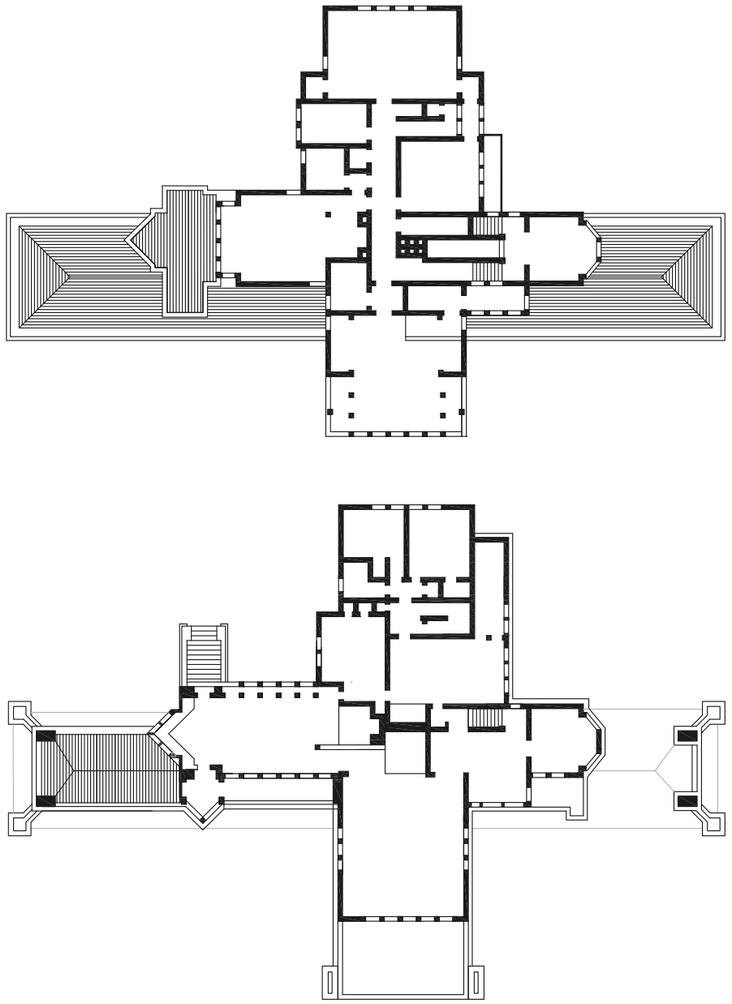
Home in Melbury Road in London, England
Architect: Richard Norman Shaw
around 1875



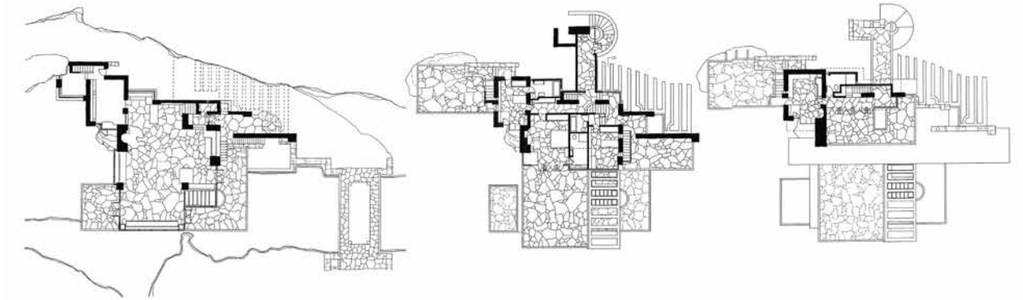
The Corner House in Beckenham, England
Architect: Richard Norman Shaw
1869



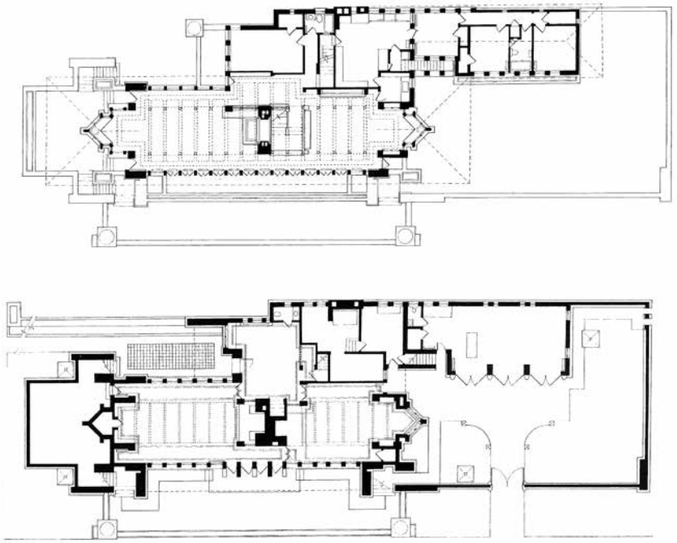
Study for Maison Domino
Architect: Le Corbusier
1914



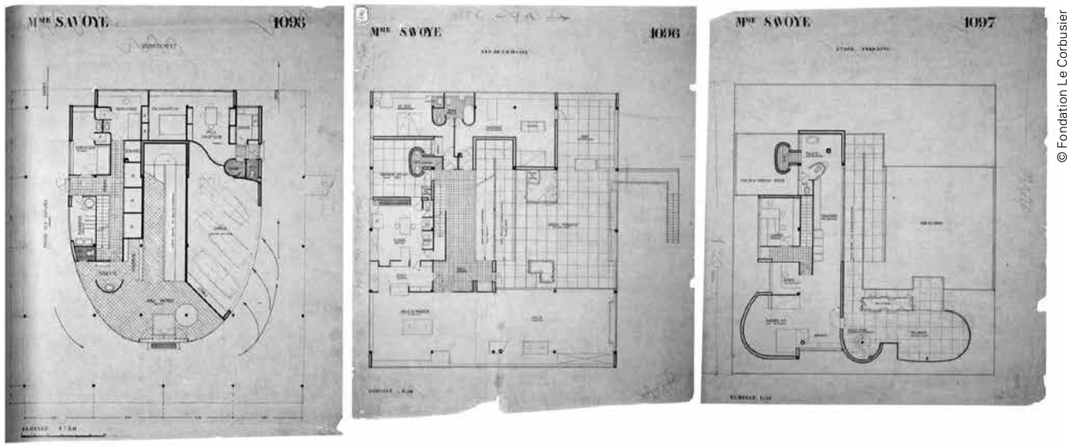
Ward W. Willits House at Highland Park, Illinois, USA
Architect: Frank Lloyd Wright
around 1900



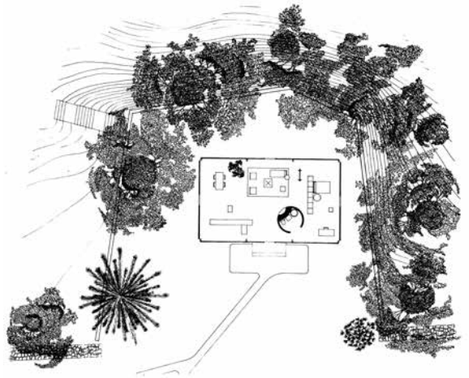
Fallingwater in Bear Run Nature Reserve, Pennsylvania, USA
Architect: Frank Lloyd Wright
1935



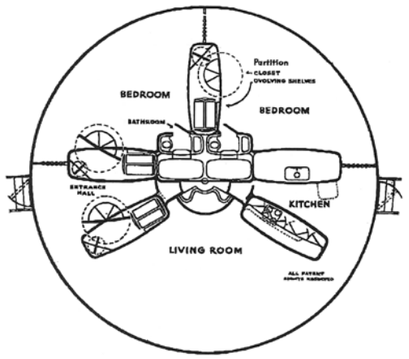
Frederick C. Robie House in Chicago, Illinois, USA
Architect: Frank Lloyd Wright
1910



Villa Savoye in Poissy-sur-Seine, France
Architect: Le Corbusier
1931



Glass House in New Canaan, Connecticut, USA
Architects: Philip Johnson and Richard Foster
1949



Dymaxion House
Architect: Richard Buckminster Fuller
1927

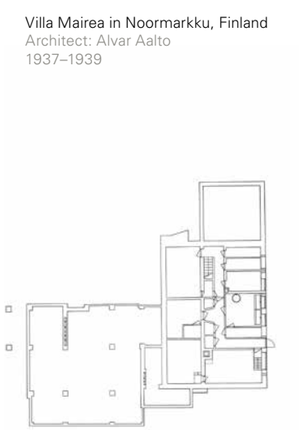
After the Second World War, the world model is set for a quantum leap. What was already indicated in the US now becomes reality in Western Europe: the detached house develops into the most-built living typology. Both in Europe and the USA the industrial society has flattened out to such an extent that home ownership is now possible for large sections of the workforce. At the same time, individual wealth is generally insufficient for true villas or residences. Instead, their variant – more modest in every respect – is built: the detached, single-family home. All that remains of the villa is the living space, around which one can walk, together with a place to park the car. Just like the car, the single-family house is produced on the conveyor belt. The unchanging model eats its way unimpeded into the landscape, occupies entire ridges, and grows into housing developments that are always bigger than the town on which they remain dependent. The suburbs soon become home to almost one in two people in all of the western industrialised nations. Regions such as Randstad in the Netherlands, or Germany's Ruhr see themselves as pure suburbia.

Post-Modern Considerations

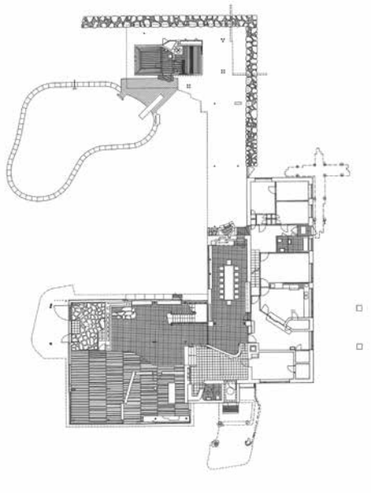
Suburbanisation is growing at such a pace that all questions of design become secondary. The monotony of the suburbs not only discredits the Modern movement – from now on progress of any kind will face critical scrutiny. The first people to offer serious opposition to this development are environmentalists, who condemn the waste of resources, it is a fact that detached housing consumes at least one-third more energy than denser residential patterns. Space consumption is even fifteen times higher for detached houses. Naturally, construction and operating energy as well as landscape space could be saved – indeed, it has already been attempted countless times. However, minimising everything at the same time is like trying to square the circle. There have been only isolated successful examples to date. What these all have in common is that they do not preach abstinence, but rather make use of further tricks. The American architect Mike Reynolds stands for low-tech. Since the 1970s he has been developing so-called 'Earthships' for serial production. These structures are buried in the earth and are largely built of raw, natural materials. They produce heat directly from the sun and collect water from rainfall. Daily waste is also disposed of on site. The German builder Werner Sobek, on the other hand, is an advocate of high-tech: in 2000 he sited his house on a slope in Stuttgart which is actually entirely unsuitable for building purposes. The four-storey, fully glazed tower is completely self-sufficient with regard to energy. It is no coincidence that these ecological houses are not simply detached homes, but single-family houses in the tradition of villas and residences: they have the necessary scope for the ecological conversion of the industrial society. The consumer product prefabricated house on the other hand, is proving to be too tight a straitjacket.

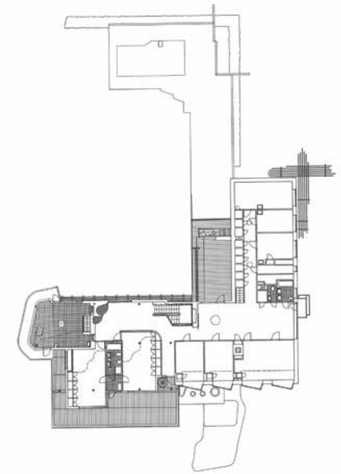
The post-modern may well start with ecological appeals, but it is the changes to the world of work which will ring the death knell of the 'assembly line homes'. The middle class in particular, which has provided the majority of house builders to date, is being decimated by automation. Sources of income for wage-dependent employees are being eroded. Above and beyond that, globalisation is causing the migration of commercial locations: those who are dependent on factories see themselves forced to move. When economic migrants demand their own homes, these are the mobile homes foreseen by Marcel Breuer with his Plas-2-Point model. Building a home, in contrast, seems cumbersome. The uniform single-family home is degenerating into an obsolete form.

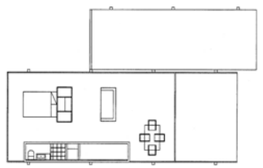
At the same time, single-family houses in the tradition of villas and residences are once again in demand. The post-industrial revolution is also creating something new: decentralised (usually freelance) computer work. It can be performed anywhere and everywhere, and requires practically nothing more than technical connections and a desk. Building offices for this kind of work would be suboptimal; it is better suited to the place where people spend most of their time anyway – the home. Thus the workplace is once again within one's own four walls. At the same time, leaving the house is becoming increasingly unnecessary.



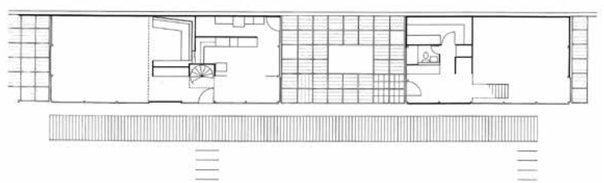
Villa Mairea in Noormarkku, Finland
Architect: Alvar Aalto
1937–1939







Farnsworth House in Plano, Illinois, USA
Architect: Ludwig Mies van der Rohe
1950/1951



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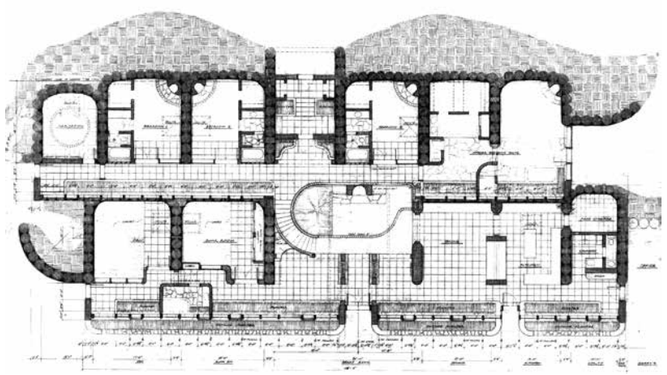
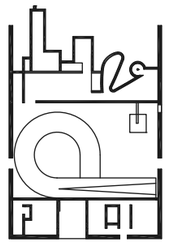
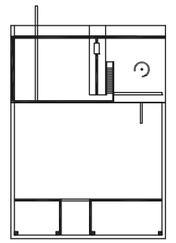
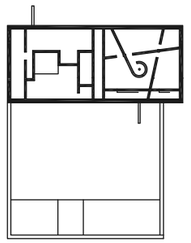


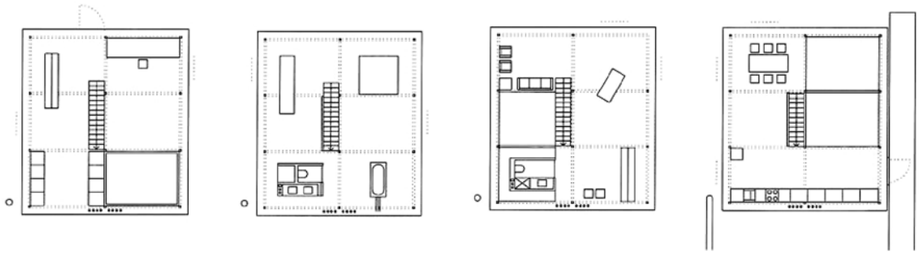
Earthship
Architect: Mike Reynolds
around 1990







House in Floirac in Floirac near Bordeaux, France
Architect: Rem Koolhaas
1998

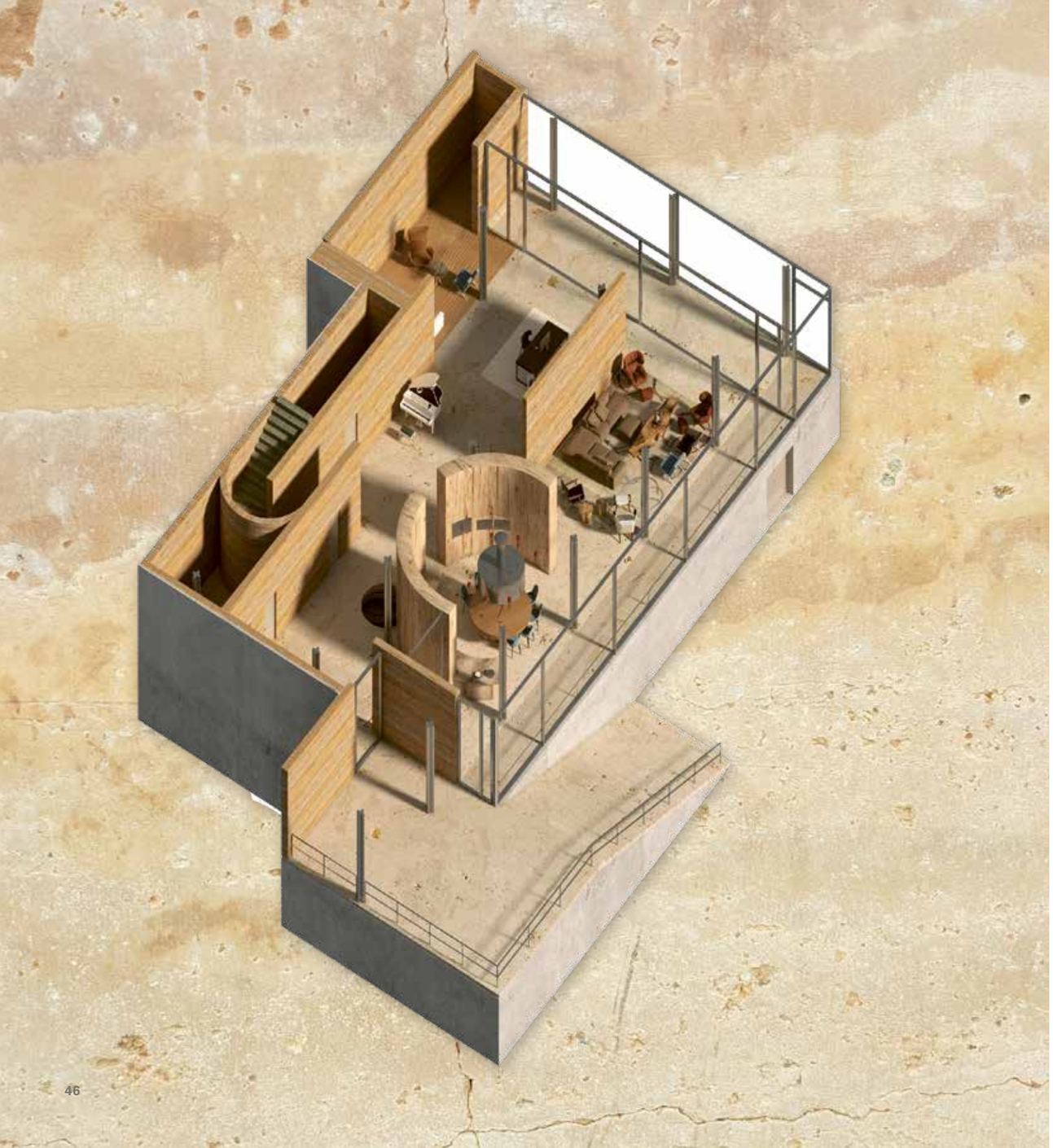


House R 128 in Stuttgart, Germany
Architect: Werner Sobek
1999–2000

Thanks to innovative delivery services, almost all one's needs can be met by traditional post or electronic means. As such, settlement is even more independent of the town than ever before. It can take place for the first time independent of context, and there is hardly any call to take any functional, internal needs into account. Where the question of settling becomes a conscious decision, one has an entirely free choice with regard to the where and how. That choice is determined by the living model with the most positive image – and this is what villas and residences have been able to develop for longer and more consistently than any other alternative. Thus the Post-Modern not only fosters more detached housing but, in particular, the kind of housing that cultivates known role models: the avant garde elevator landscape that Rem Koolhaas created near Bordeaux for a wheelchair-bound house owner in 1998 writes another chapter in the Modern tradition. Whatever the differences between these two buildings, ultimately they embody the same principles: first, the post-modern agenda of harmonising formal and ecological considerations – an aim that has yet to be fulfilled by most existing single-family houses; and second, the freedom to stay.

‘It is like the Parthenon without question the best looking house in the world. He has one room, very low ceilinged, one hundred feet long, toward the south all of glass from the ceiling to the very floor. Great sheets of plate glass that go into the floor electrically. The side of the room is at least thirty feet and is glass to the east. This room is divided into dining room, library and living room by partial walls, which do not in the least destroy its size, but rather magnify it.
It has cost already a million marks which in Europe is a frightful sum.’

J.J.P. Oud

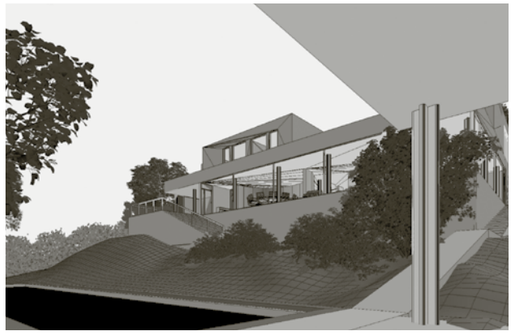


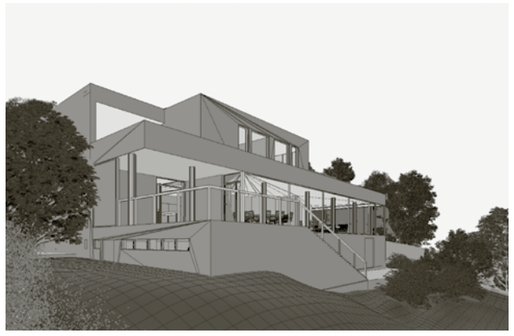
Learning from Iconic Buildings
Could We Live in the Villa Tugendhat Today?
A Virtual Workshop

Natascha Meuser

The course aims to teach students how to look at architecture as a mode of both cultural expression and technical achievement. Vigorous analysis of specially selected buildings and hands-on exercises in drawing and modelling will bring students closer to the work of architects and historians. The quality of this seminar will be gauged by close examination of set examples. Students will discuss and determine whether and to what extent each example may actually offer a typology for the construction of villas. Even if this succeeds in simply initiating informed discussion, an important objective in the education of the students will be met.
The following selection of ten private villas drawn from the past one hundred years helps to raise the profile of this architectural category. Each student will give a presentation on one iconic villa, whilst identifying three planning parameters and demonstrating results in written form with the use of diagrams and images. Students should demonstrate that generally speaking iconicity is never absolute, the degree to which it can be measured being determined by temporal and social aspects. These in turn can confirm or revoke a building's status as an architectural icon.

In 1931 the German magazine *Die Form* asked the question, 'Can one stay at the Tugendhat Villa?' The modernist building, designed by Mies van der Rohe and located in Brno, Czech Republic, became a focal point for critics who debated the merits of the new and unconventional structure. Today we ask ourselves, 'What are the qualities that persevered the ages and still serve as benchmarks for the contemporary modern villa?' Villa Tugendhat has long been considered an essential icon in the history of modern architecture.
To understand how the architecture holds up as a functioning family home in today's world, the students conducted an experiment: the contemporary wishes of a family are transferred to the Villa Tugendhat. It was investigated how this particular prototype, which may indeed have been difficult to live in at the time, found so many countless successors. Why do these elements of luxury, large panes of glass, open floor plans persist to this day, when they are simply objects of excess challenging to reconcile with the sustainable architectural focus we so desperately need now.
Architectural style and constructional findings may have changed over the course of a hundred years, but interestingly, the spatial requirements of a family of five have hardly changed at all. Already in the twenties of the last century, the modern attitude to life corresponded to that of today. It is noticeable that even in the digital age, the demands on living space have not changed. Admittedly, living in representative rooms is not comparable to social housing. Still, the Villa Tugendhat shows that it is not the quantitative requirements of size and area that are decisive, but the qualitative requirements of the architectural space. The analysis of the Villa Tugendhat revealed amongst others that the servants' wing represents a self-sufficient functional unit. Most of these functional rooms are no longer needed.

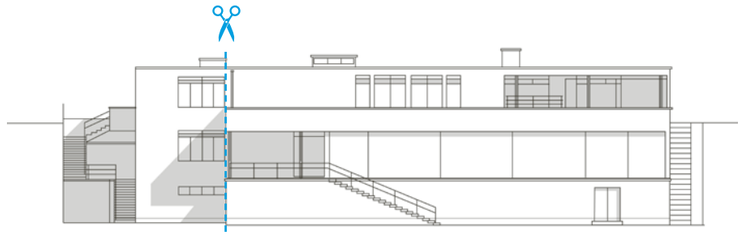




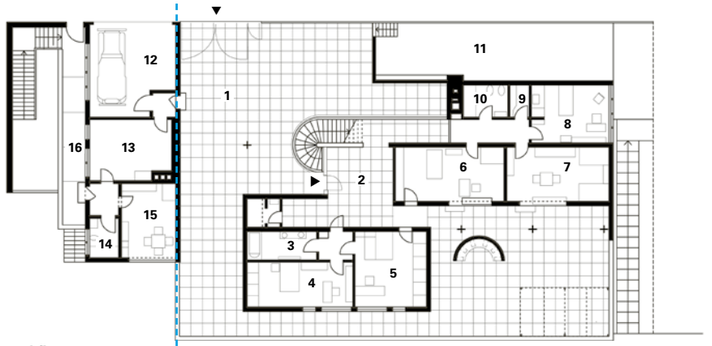
Above left: Agustín Ferrer Casas illustrates key moments in Mies van der Rohe's life, alongside some of his most famous buildings. It is a fictional biography.
Source: Agustín Ferrer Casas, *Mies*, Hamburg, 2019

Left: City map from 1914 with the site of the Tugendhat villa in one of the first villa colonies in Brno.
Source: Archive City of Brno

Above: Design studies. The reconstruction of the building was reduced in size by the western service wing in order to comply with the construction line.



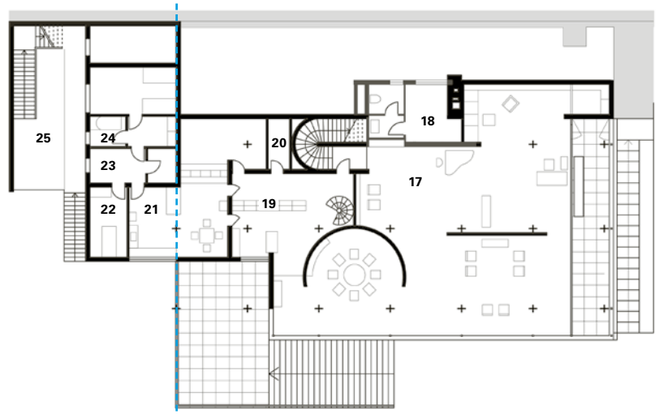
East elevation



Upper ground floor

Legend

1 Entrance area
2 Entrance hall
3 Bathroom
4 Bedroom male
5 Bedroom female
6 Kid's room 1
7 Kid's room 2
8 Guest
9 Storage
10 Kid's bathroom
11 Technical room
12 Garage
13 Driver`s room
14 Bathroom
15 Kitchen
16 Back entrance

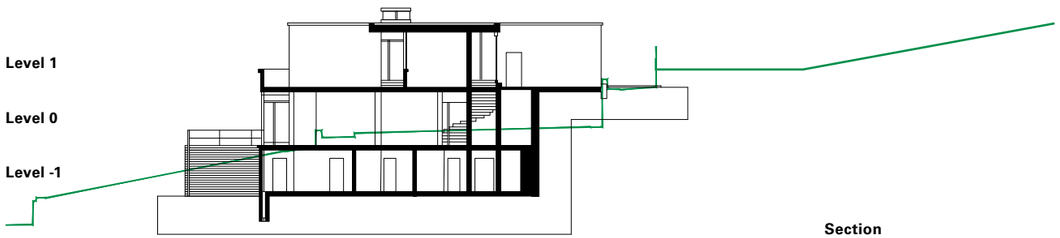


Lower ground floor

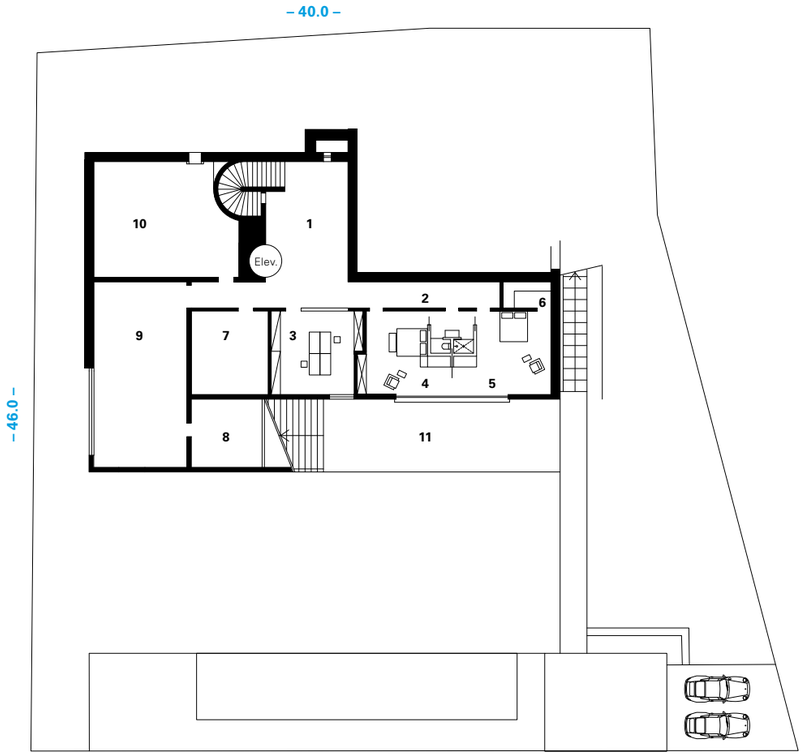
17 Main living room
18 Projector room
19 Food lift
20 Storage
21 Kitchen
22 Staff
23 Service entrance
24 Bathroom
25 Staff
26 Sanitary
27 Terrace staff
28 Terrace
29 Winter garden

N

0 5 10

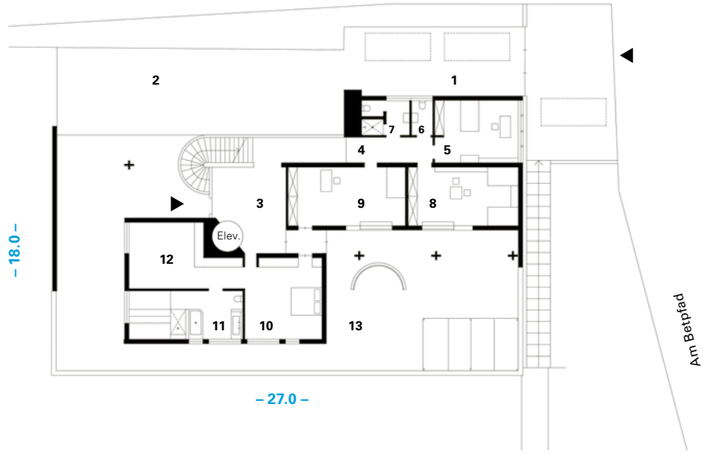


Section



Basement (307 sqm)

1	Hobby	40.0
2	Corridor	10.0
3	Office	31.0
4	Room kid 1	27.0
5	Room kid 2	28.5
6	Wardrobe	6.0
7	Storage	27.0
8	Storage Gym	20.0
9	Gym	73.0
10	Technical room	65.0
11	Terrace	60.0



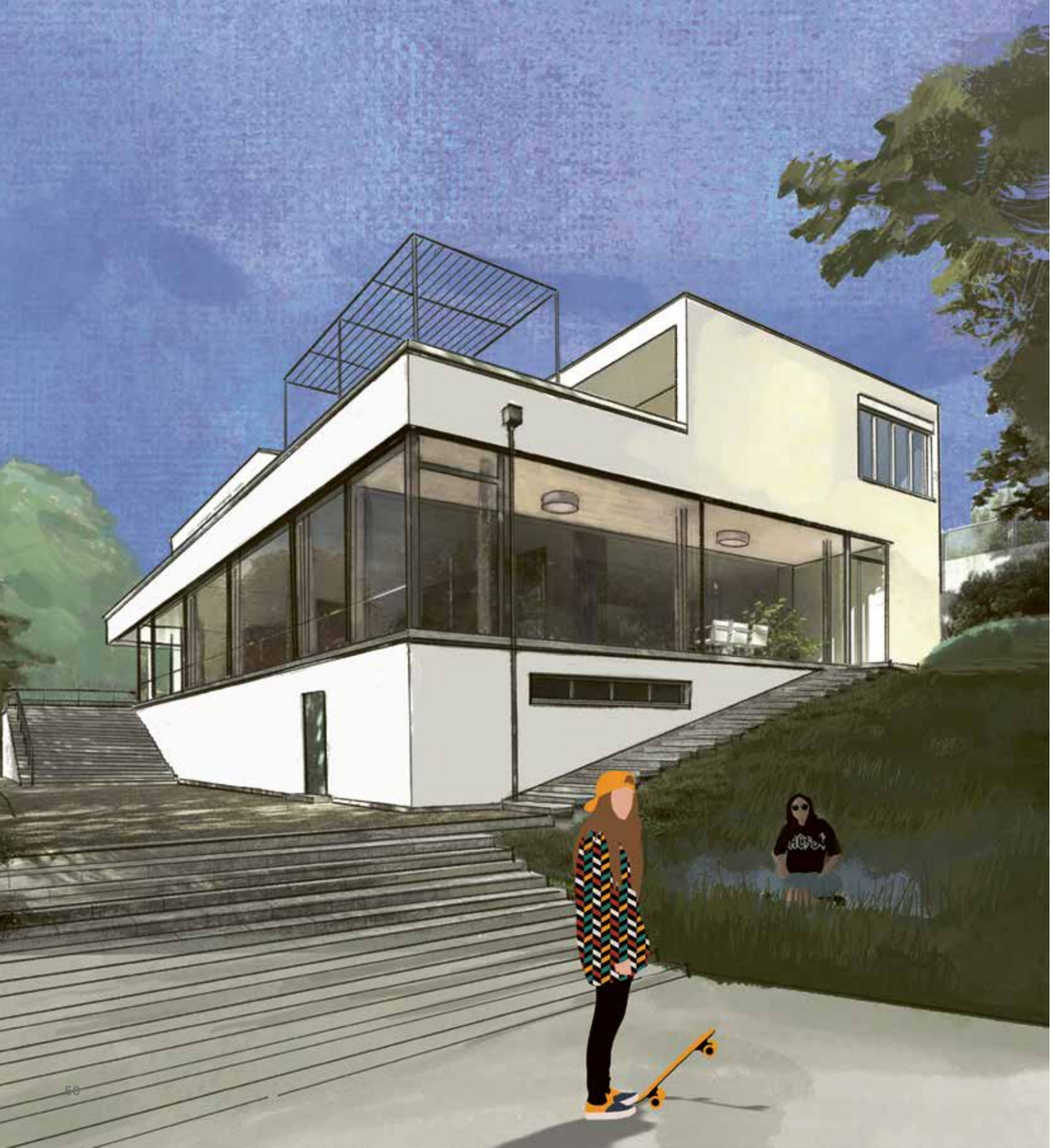
First floor (190 sqm)

1	Car parking	66.0
2	Front yard	160.0
3	Entrance/Foyer	17.5
4	Corridor	15.0
5	Office/Nanny/Guest	20.5
6	Guest toilet	3.0
7	Bathroom	7.0
8	Room kid 1	26.0
9	Room kid 2	26.0
10	Master bedroom	25.0
11	Master bathroom	22.0
12	Relax/Wardrobe	28.0
13	Terrace	82.0

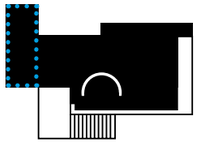
Ground floor (307 sqm)

1	Reception	40.0
2	Office	42.0
3	Refugium/Safety	33.0
4	Living	80.0
5	Kitchen/dining	52.0
6	Back of the House	44.0
7	Technical	7.0
8	Laundry	9.0
9	Terrace	60.0

The analysis of the Villa Tugendhat revealed, among other things, that the servants' wing is a self-sufficient functional unit.
In this experiment, the servants' wing is abandoned. A second experiment was a change in materials: to rammed earth, which immerses the building in a warm natural tone.



Villa Tugendhat
Brno, Czech Republic
Mies van der Rohe (1929–1930)



Kübra Koçhan

Planning Parameters

Free-Flowing Space
For the first time in the history of modern architecture, Mies realized the monumental idea of 'new living'; based on the new theory of free floating space in the house and its relationship to its surroundings. This idea, which had previously only been touched upon by Adolf Loos and Frank Lloyd Wright; and which had been applied to a lesser degree in small family homes or in apartment blocks, resulted in the occupants using the living space to its greatest extent.

Steel Support Structure
The structure allows numerous innovative ways of handling the interiors and its façade.

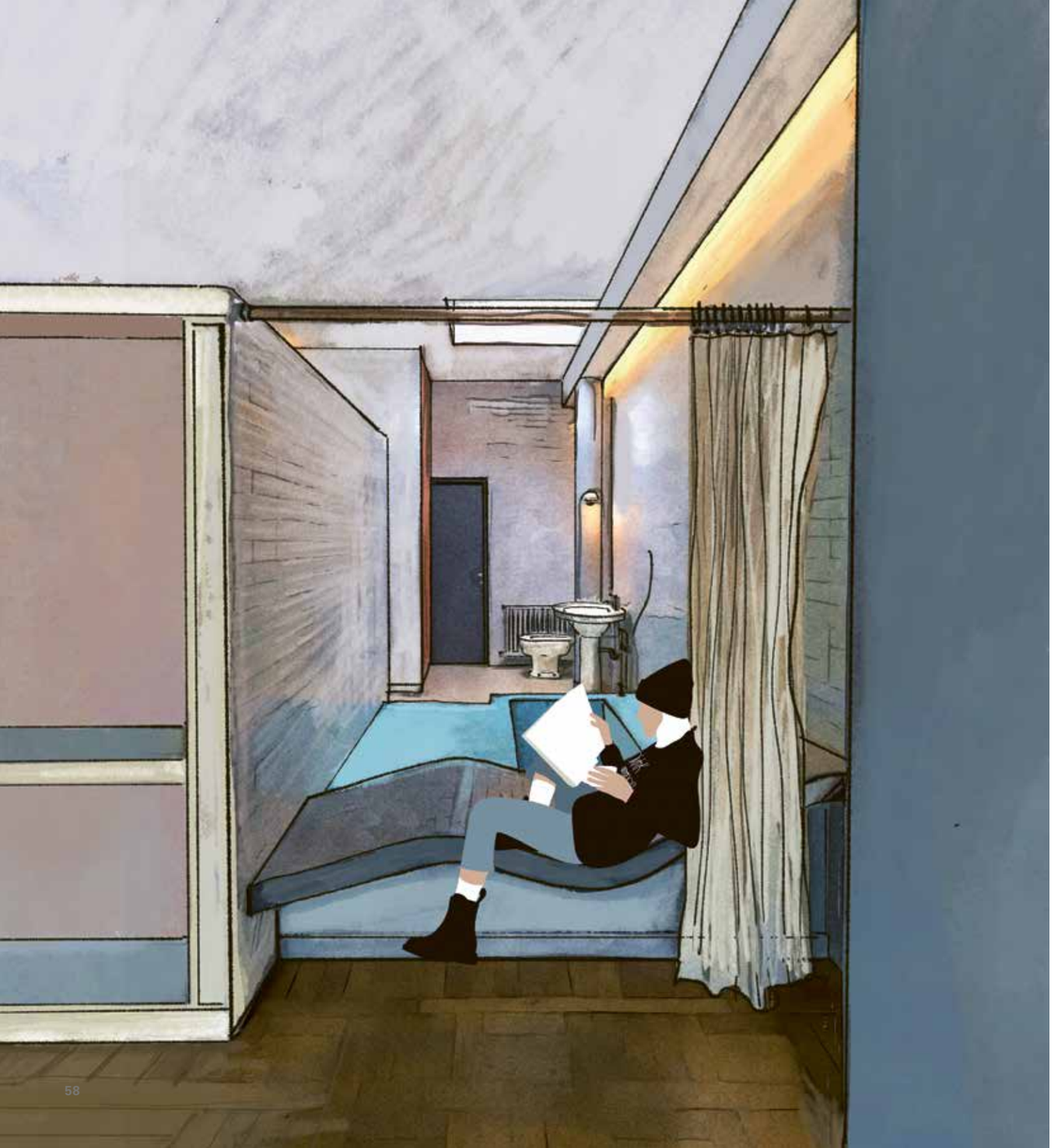
Technical Equipment
The building provides an example of a higher standard of living. The highlight of the entire residential space involves its technical equipment, primarily the ingenious air-conditioning system.

Location: Černopolní 237/45, Brno, Czech Republic
Client: Grete und Fritz Tugendhat

Architecture: Ludwig Mies van der Rohe,
Lilly Reich, Hermann John and Sergio Ruegenberg (Furniture),
Markéta Roderová-Müllerová (Garden)

Type: Residential house, villa
Site area: 6,152 sqm
Total floor area: 1,211 sqm
Structure: Steel
Number of storeys: 3

Completion: 1929–1930
The villa was declared an object of national cultural heritage
and was also inscribed on the UNESCO World Heritage List in 2001



Villa Savoye
Poissy-sur-Seine, France
Le Corbusier (Charles-Édouard Jeanneret) with Pierre Jeanneret (1928–1931)

Ashfak Bin Arif

Planning Parameters

Composition
The villa is a composition of sequential spatial effects: Arriving by automobile and circling around to the main entrance. From the entrance hall and ascending the spiral stairs or the ramp to the main-level living area. It continues from the central terrace to the upper-level sun deck.

Form 'The House is a Box in the Air'
The rectilinear volume is on a flat landscape like a modernist sculpture, elegantly melding form and function. The design incorporates Le Corbusier's '5 Points of Architecture': pilotis, free plan, façade, windows and a roof.

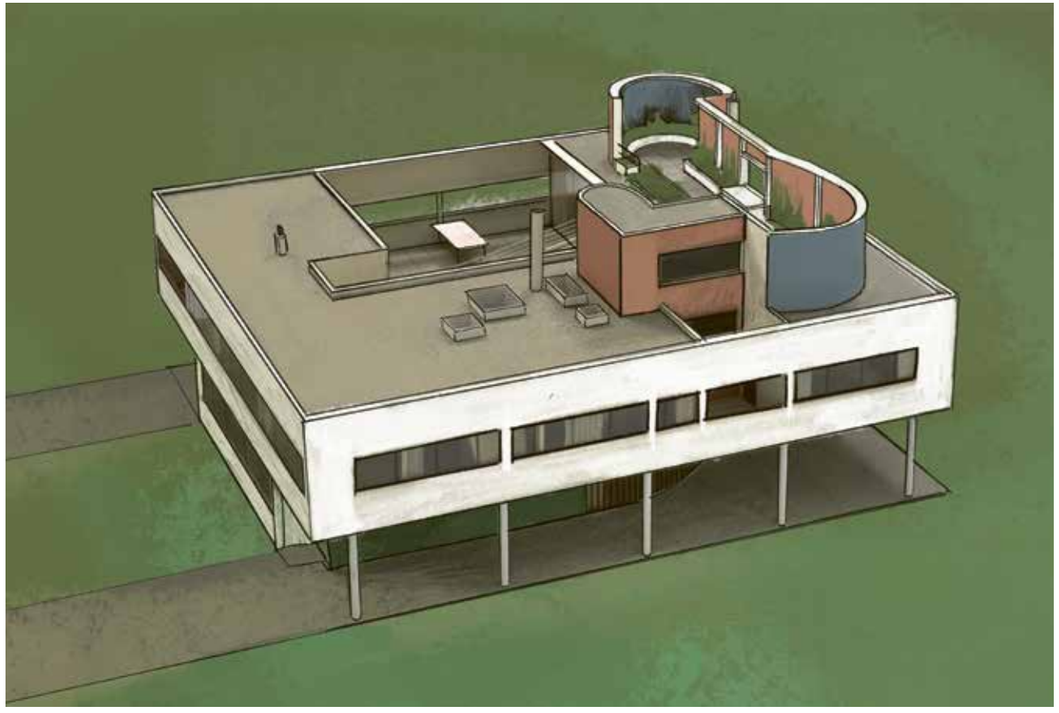
Colours
The purity of white is a strong contrast to the landscape. The walls on the ground floor are recessed and painted green so that the house looks like a box floating on delicate pilotis. A light colour palette is applied internally to portray earthly tones.

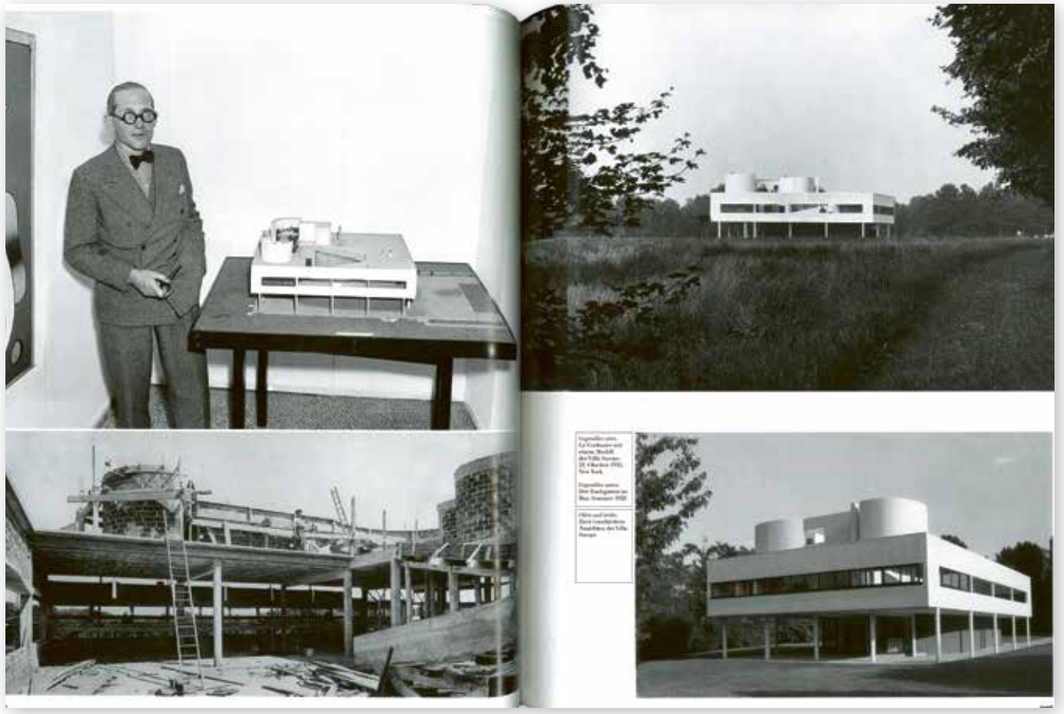
Project: Villa Savoye
Location: 82 Rue Villiers, 78300 Poissy, France

Architecture: Le Corbusier (Charles-Édouard Jeanneret) with Pierre Jeanneret

Type: Vacation house
Total floor area: 480 sqm
Dimensions: 21.5 × 19.0 m
Structure: Reinforced concrete
Number of storeys: 2

Completion: 1928–1931
Renovated: 1963, 1985–1997
Listed as a historic monument: 1964





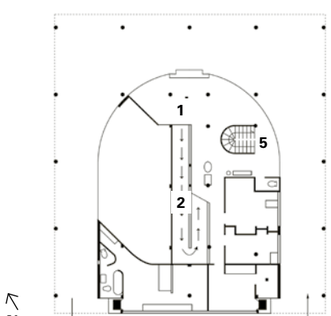
Jean-Louis Cohen and Tim Benton (eds),
Le Corbusier: Le Grand, Berlin, 2008, pp. 206–207

The House Is a Machine for Living

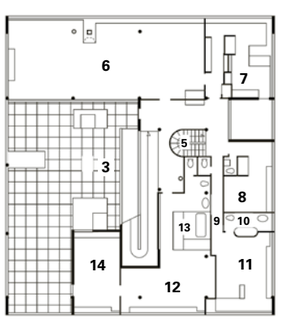
Its essential geometric volumes manifest Le Corbusier's concept of the type form. Its careful consideration of procession and proportion connect the building to Classical ideals. The house single handedly transformed Le Corbusier's career as well as the principles of the International Style; becoming one of the most important architectural precedents of all time. Villa Savoye's detachment from its physical context allows its design to be contextually integrated into the mechanistic/industrial context of the early twentieth century, conceptually defining the house as a mechanized entity.

Legend

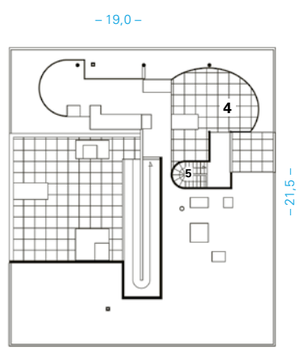
1 Entrance hall
2 Ramp
3 Hanging garden
4 Solarium
5 Spiral staircase
6 Living room
7 Kitchen
8 Guest room
9 Corridor
10 Bathroom
11 Child's room
12 Master bedroom
13 Bathroom
14 Boudoir
15 Laundry
16 Servants room



Ground floor



First floor



Roof

0 5 10

Casa Malaparte
Punta Massullo, Isle of Capri, Italy
Adalberto Libera (1938–1942)

Hazal Sari

Planning Parameters

Contextual Materials
Malaparte wanted the house to match its environment not just through its architectural design, but also its building materials. He rejected the ‘concrete characteristic’ of other modern buildings of that period and utilized local stone extracted from the site.

Landscape Architecture
The house has a harmonious relationship with nature and does not disrupt its environment. It seamlessly emerges from the landscape while the stairs seem to protrude beyond the cliff.

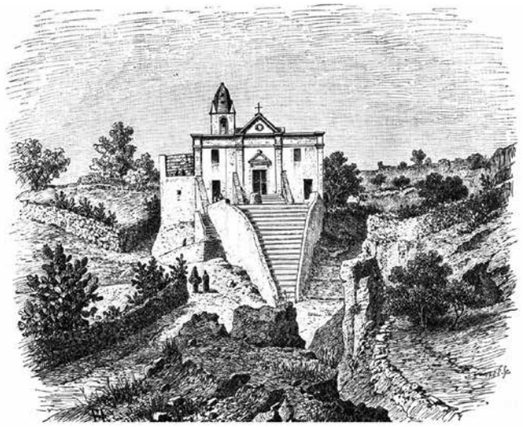
Seclusion
The house creates a sense of independence and privacy. It is completely isolated from civilization and only accessible by foot or boat. The barred windows reflect the Regina Coeli Prison in Rome, where he stayed at least twice during his life time. ‘The house must have a hard character, like a prison, almost, like a fortress.’

Location: Punta Massullo, Isle of Capri, Italy
Client: Curzio Malaparte

Architecture: Adalberto Libera, Curzio Malaparte
Type: Villa

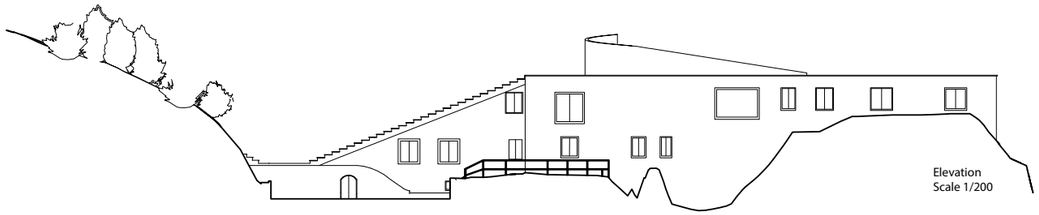
Site area: 32 m above sea level, overlooking the Gulf of Salerno
Structure: red brick, local masonry
Number of storeys: 3

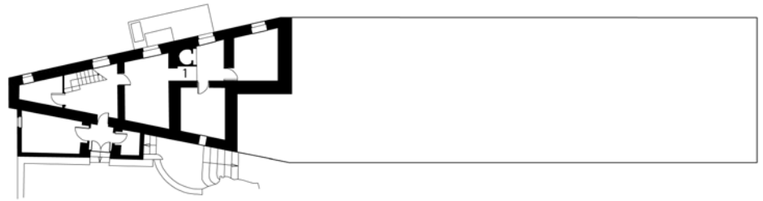
Completion: 1938–1942



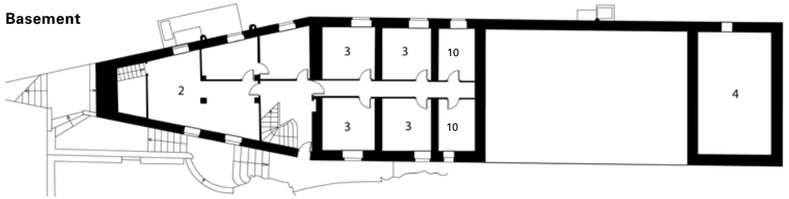
The staircase leading to the roof terrace is a literal alliteration of the steps in front of the church of Annunziata on Lipari, the island on which Malaparte was imprisoned in 1934.
Illustration: La Chiesa dell`Annunziata, Lipari, Italy (800)
Source: State Archives of Naples, Italy

Windows of the Regina Coeli Jail in Rome, Italy
Source: Pinterest

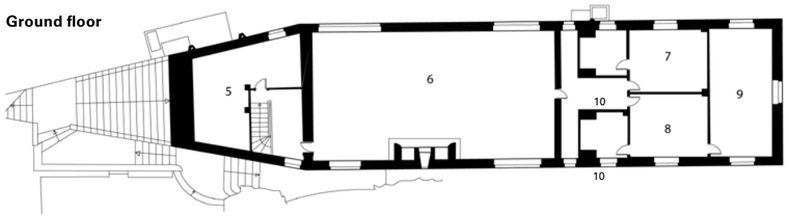




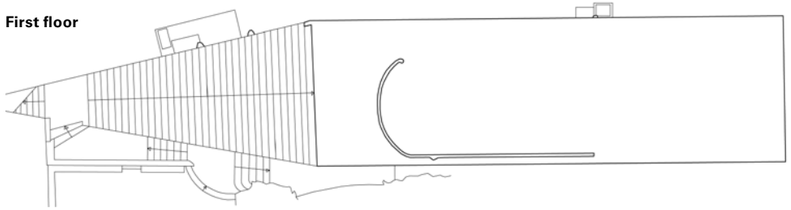
Basement



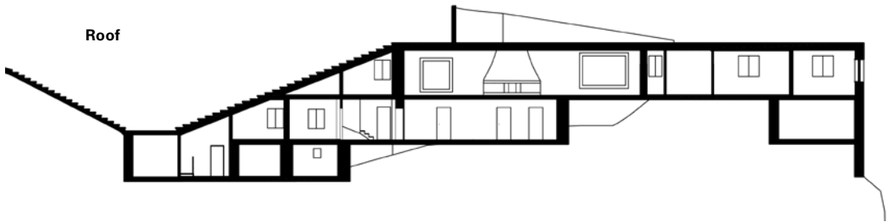
Ground floor



First floor



Roof



Legend

1 Laundry
2 Kitchen
3 Common
4 Tank/Reservoir
5 Attic
6 Living room
7 Favourite room
8 Malaparte's room
9 Studio
10 Sanitary

N

0 5 10

Casa Veritti
Udine, Italy
Carlo Scarpa (1955–1961)

Riddhi Kumar

Planning Parameters

Cylindrical Walls
Scarpa made use of cylindrical walls instead of the conventional straight walls usually seen in modern architecture.

Union of Architecture and its Interiors
Each path or fenestration was designed by Scarpa to maximize the visual interface of the garden. The placement of the plants were studied intricately to establish a connection between the internal and the external space.

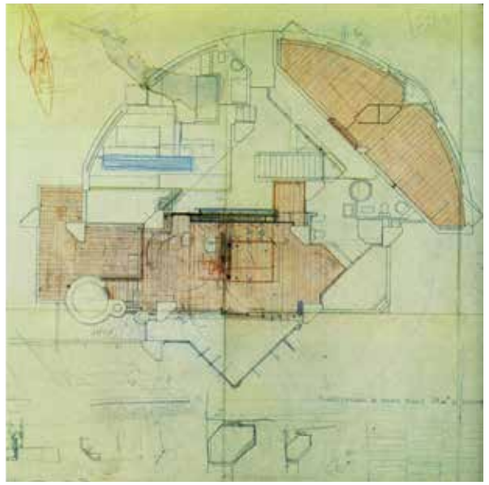
Flowing Space
The house consists of two floors connected by a wooden staircase. In order to create a smooth flowing space between the floors, sliding doors are utilized between the hall and living space. The idea of spatial continuity comes from Wright.

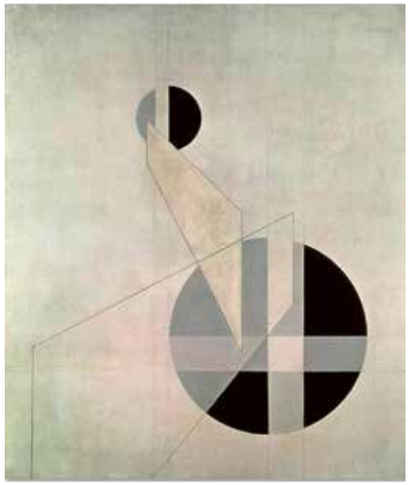
Location: Viale Duodo 48, Udine, Italy
Client: Veritti family

Architecture: Carlo Scarpa

Type: Vacation house

Completion: 1955–1961





Above: Scarpa's design plays masterfully with the composition of 3D geometrical forms.
Source: Pinterest

Above right: Intersecting geometric shapes by László Moholy-Nagy. He explored the 2D formal characteristics of colour, line, and structure across various medias.
Source: Centre Pompidou

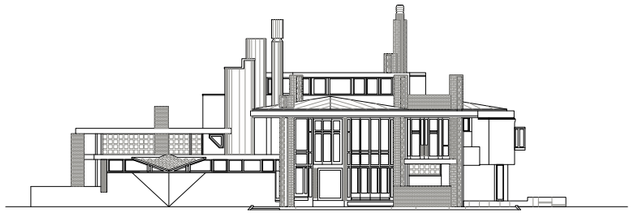
Bottom: Model of Casa Veritti made of pearwood, executed by Igor Silic (1984)
Source: Paladio Museum

Analysis

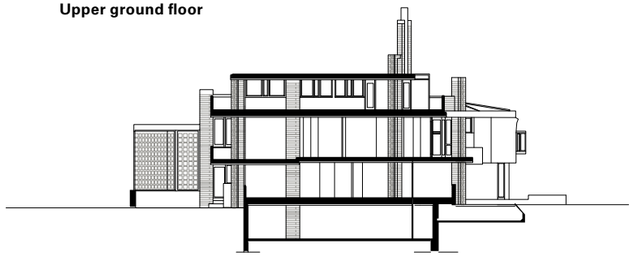
Salient External Elements:
- Overhanging ribbon
- Protruding step
- Interlocking elevated steps
- Cut-opening steps

Salient Interior Features:
- Service staircase – elliptical & concrete
- Modular concrete column
- Structural pillar of the building
- Unexpected wooden panels with cuts in the dining
- Spacious ambience
- Cusp-shaped revealing window
- Reverse vertigo
- Cuts in the panels as well as between the shelves
- Division of rooms by interior furnishings

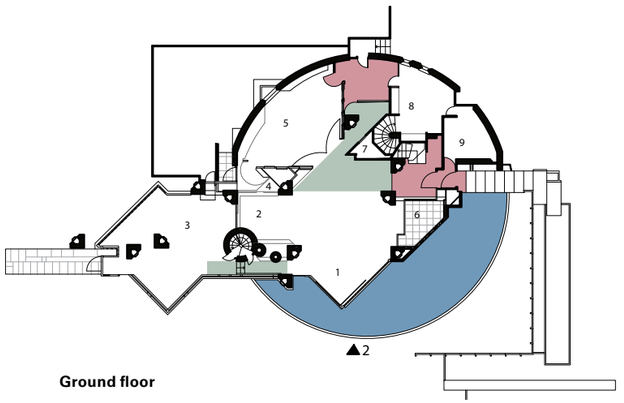
Combination of Materials:
Triangular pillars made up of prefabricated and super-imposed ashlars that stand as an independent plastic episode. Cut-outs are made for the perfect lighting ambience. The Venetian plaster is treated with spatula lime milk, the concrete hammered, and the woodwork in mahogany is used in one frame.



Upper ground floor

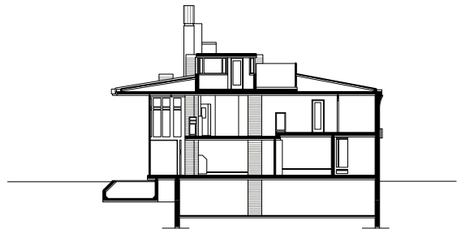


Section A

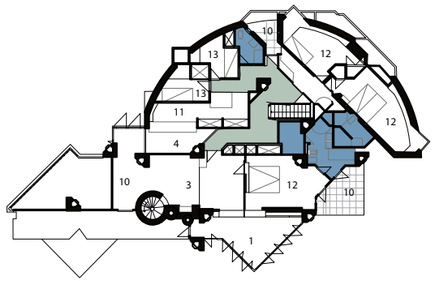


Ground floor

Upper ground floor



Section B



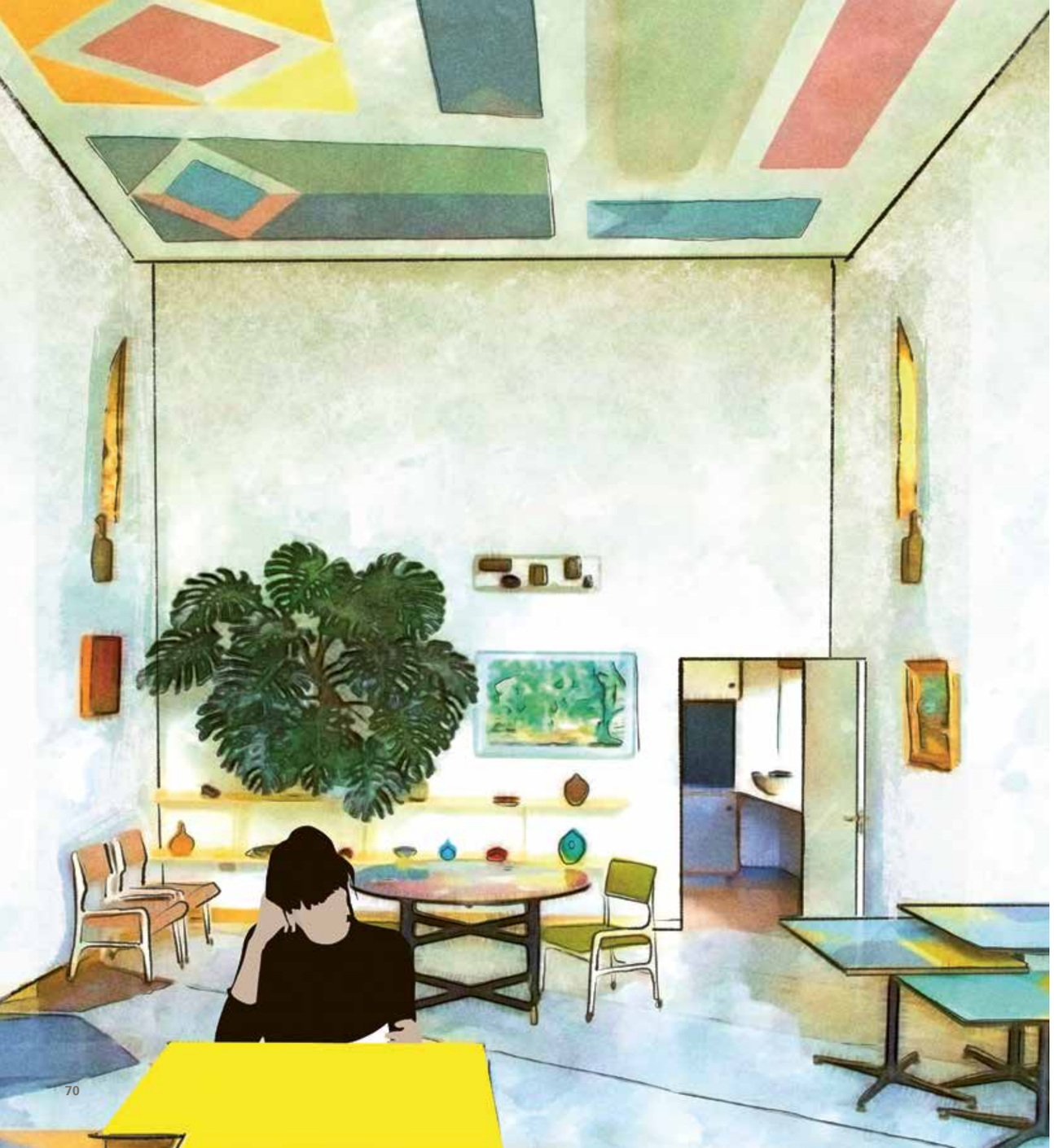
First floor

Legend

1 Living room
2 Fireplace
3 Greenhouse space
4 Bar
5 Dining
6 Loggia
7 Closet
8 Kitchen
9 Food storage area
10 Balcony
11 Dressing room
12 Bedroom

N

0 5 10



Villa Planchart
Caracas, Venezuela
Gio Ponti (1953–1957)

Anotidaishe Mavazhe

Planning Parameters

Principles of Composition
The space opens on many sides to other adjacent spaces. It leads to a series of changing architectural events, composed and integrated with one another; with crossed and crossing views, transverses, sequences, from top to bottom and vice versa; with level changes and transparencies, composing planes and spaces in a game with no interruptions, in which new perspectives always appear and are framed as the visitor moves through it.

Thin Edges
The wall, which is no longer structurally bearing but only a screen supported by the structure, must not have 'weight' visually and this is demonstrated by its thin edges. These façade walls are also separated from the roof; the broad gutter seems to be a continuation of the living room ceiling. This roof is like a large wing resting on the house to protect it. The exterior walls and the wing's underside are clad in white ceramic mosaic by Ceramica Joo.
Domus, February 2011

Location: Caracas, Venezuela
Client: Anala and Armando Planchart

Architecture: Gio Ponti/Studio Ponti Fornaroli Rossell

Type: Residence
Total floor area: 1,300 sqm
Structure: Concrete
Number of storeys: 2

Completion: 1953–1957

Lisa Licitra Ponti, *Gio Ponti: The Complete Works 1923–1978*, London, 1990.

Villa Planchart, Caracas, 1955

As he was to do with the Pirelli building, Ponti published his Villa Planchart twice (both times in Domus*): first as a design[1] and then again after its construction.[2] He described the principles on which it was based and the results, for he saw the circumstance as almost ideal, and able to set a standard.*

The client was ideal, a happy client («the client, says my friend Rogers, is the person without whom one cannot produce architecture, and with whom one cannot produce it either. But here, the client has been one with whom it has been possible, to the best of our ability, to produce architecture...»[3]). The house now belongs to the Fundacion Anala y Armando Planchart, which has maintained it intact, right down to its furnishings.

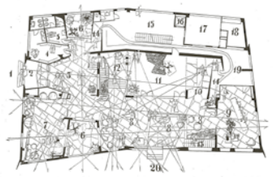
And this is fortunate, for this work of architecture — «a spectacular display of spaces for whoever enters it» — has a unique combination of inventions and delights, as rich as the tropical vegetation it incorporates. (Look at the patio decorated by Melotti,[4] and the small internal windows, and the little theatrical balconies that face onto the empty space of the two-story-high living-room, and the doors and ceilings decorated by Ponti.)

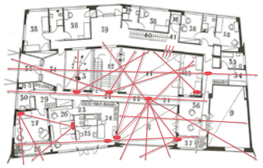
The principle of this work of architecture — which is the fruit (as the Pirelli building would also be) of the «new researches» emerging out of Ponti's journeys to Latin America in 1952 and 1953 — is the «evidence of the supported surfaces»: the non-bearing external walls appear to be detached one from the other, as well as from the roof and ground. This is evident at night as well, for the plans for this work of architecture included what Ponti called a project of nocturnal «self-illumination.» Without weight or mass (and «with the slenderness that Niemeyer has revealed to us»), the construction seems to rest «graciously» on the ground, like a butterfly.

In Caracas the house was immediately dubbed «a Florentine villa.» This pleased Ponti, since Italianness was something about which he had never worried («being Italian is enough»).

Ground floor: view from the entrance (1) through to the open-air dining area (10) across the patio (11); view from the library (7) through to the dining-room (9) across the living room (8).

Second floor: cross-view from one terrace through to the opposite one (32 and 34), and from the balcony-bridge (21/22) another cross-view between the patio (11) and the living-room.

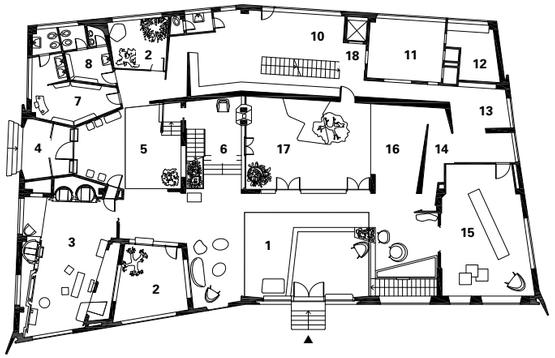




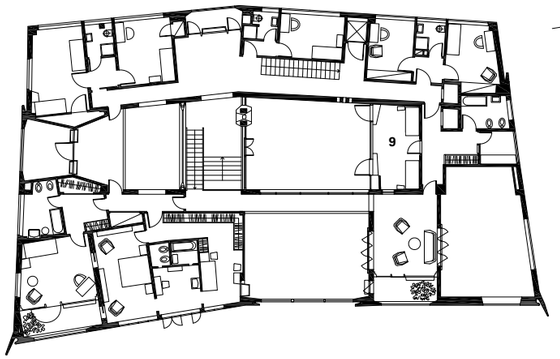
169

Legend

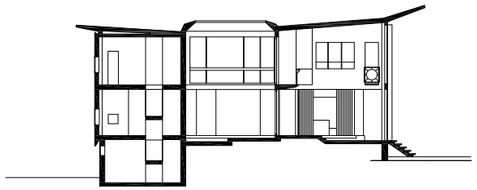
1 Double volume living room
2 Interior gardens
3 Library studio
4 Entrance staircase
5 Double volume atrium
6 Staircase
7 Women's cloakroom
8 Men's cloakroom
9 Guest bedroom
10 Servants' living room
11 Kitchen
12 Pantry
13 Office
14 Two chicane accessway
15 Formal dining room
16 Tropical dining room
17 Patio
18 Elevator



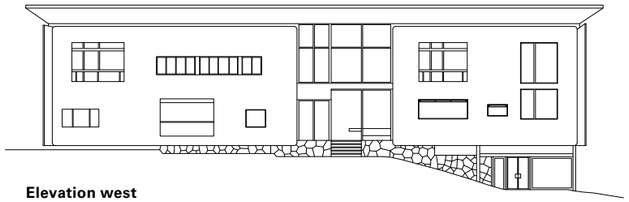
Ground floor



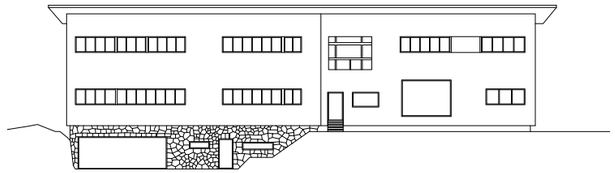
First floor



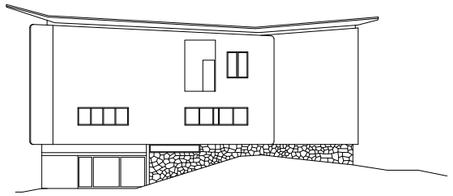
Section



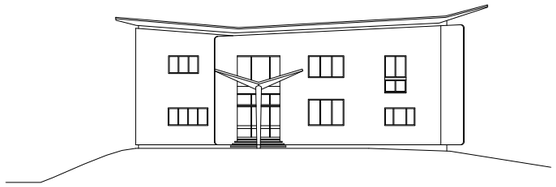
Elevation west



Elevation east



Elevation south



Elevation north

N

0 5 10

Arthur Elrod House
Palm Springs, USA
John Lautner (1968)

Ee Dong Chen

Planning Parameters

Incorporating Natural Elements
The natural rock of the San Jacinto mountains are featured prominently in the interiors. Lautner incorporates huge, natural boulders as walls and room dividers. The rocks were the site's strongest element and defined the resulting design.

Union of Architecture and its Interiors
In the Elrod house, the interiors were prioritized equally with the architecture and the furnishings complemented and enhanced the structure.

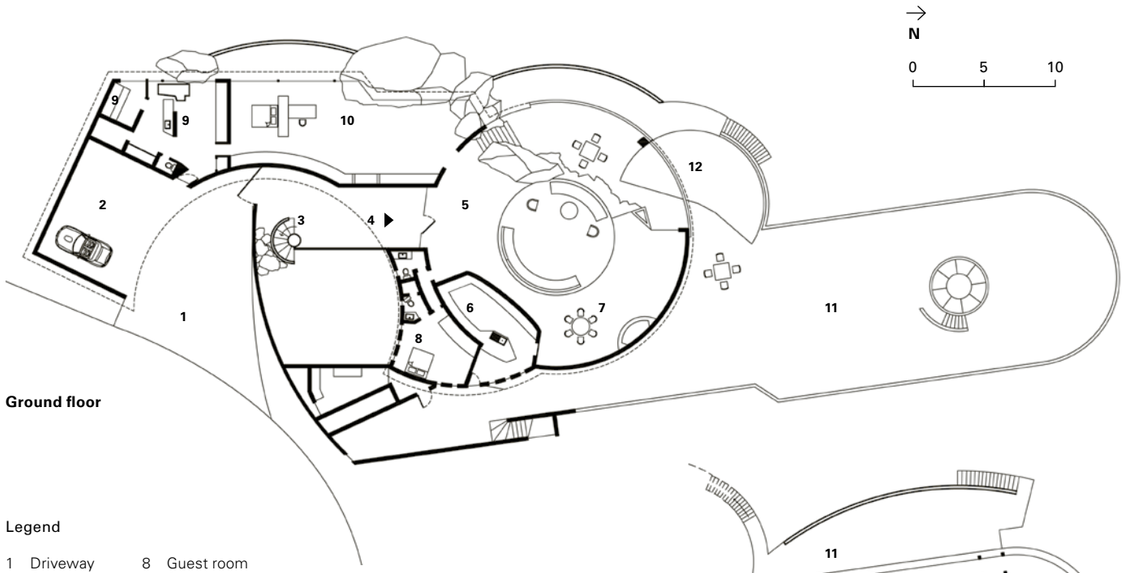
Circular Living Room
The circular living room stretches unequivocally for 18 metres in diameter. It is under a vaulted, conical dome ceiling comprising of nine angled concrete petals between nine wedge-shaped clerestory windows that flood the room with ambient natural light.

Project: Arthur Elrod House
Location: 2175 Southridge Drive, Palm Springs, USA
Client: Arthur Elrod

Architecture: John Lautner

Type: Residence
Total floor area: 836 sqm
Structure: Concrete
Number of storeys: 2

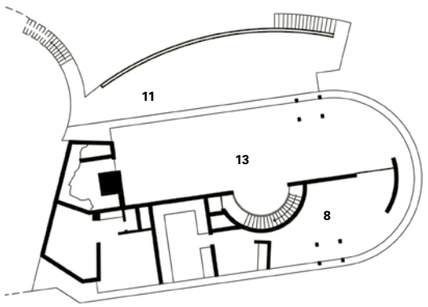
Completion: 1968



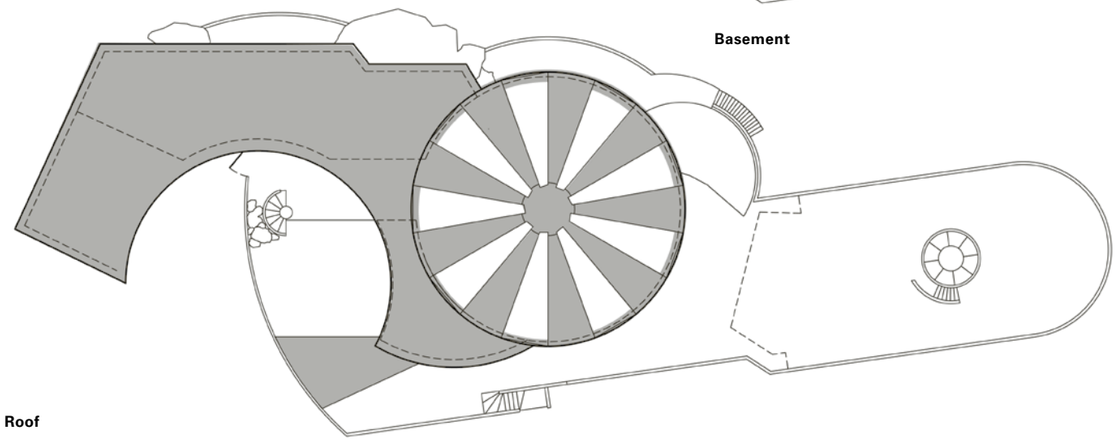
Ground floor

Legend

1 Driveway
2 Garage
3 Hallway
4 Entrance
5 Living
6 Kitchen
7 Dining
8 Guest room
9 Sauna
10 Bedroom/Study/Office
11 Terrace
12 Pool
13 Gym
14 Sculpture garden



Basement



Roof

Elrod House in Palm Springs is one of the most stunning villas seen in a James Bond film. It doubles as Willard Whyte's summer house in *Diamonds Are Forever* (1971).

Illustration: Natascha Meuser

Architectural Details

Stripped down to its essentials, the house consists of one giant circle and one long rectangle. The circle encompasses all the public spaces—living and dining area, kitchen, guest room, powder room, and terrace. The rectangle is the private side—a 60-foot-long space delineated by furniture groupings into a study/office and bedroom and then dressing room and bathroom suite. A series of circles announces the arrival at the house—curved motorcourt wall, carport, sculpture garden, entry walkway—and ends with the semicircular pool at the ridge's edge.

The conical canopy sheltering the living area is a 30-foot-tall and 60-foot-diameter poured concrete marvel divided into nine ribbed concrete wedges segmented by clerestories. "By doing it this way it's almost like a desert flower and these clerestories go around so you get different sunlight as the sun moves around. It fits right into the desert," said Lautner in *The Spirit in Architecture*. In his preliminary drawings, Lautner had marked the exact angles where the sun set. Seven of the nine clerestories were capped with triangular, copper roof panels that tilt upward to filter in light by degrees. The two that jutted out over the terrace and pool were open to views of Mt. San Jacinto and the sky.

Concrete, glass, copper, wood, and slate were the main materials used in the five-room, 3,700-square-foot residence. In keeping with his philosophy of organic architecture, Lautner integrated the site's massive boulders and rock outcroppings into the structure. Walls were given a ribbed texture by pouring concrete into wood board forms. The copper-sheathed entry gate was designed on a pivot; the 16-foot-tall glass front doors were frameless. Black slate was laid in a herringbone pattern all in one direction from the pathway that travels from the carport to the entry, down into the living/dining area through to the kitchen. Floor-to-ceiling glass panes zigzagged around the edge of the living room to cut down the glare and were mitered at the seams so that no frames would disturb the views. A curved fireplace delineated the space between the dining area and a corner seating area. The elliptical-shaped kitchen behind the curved living room wall had St. Charles steel cabinets—the wall cabinets faced in rich cocobarli wood and the base cabinets in gray plastic laminate. Past the bedroom suite, a set of stairs illuminated by lights covered with copper plates led down between rock outcroppings to the outdoor terrace and pool. The half-moon-shaped pool perched at the ridge edge was filled to the brim and spilled down over the concrete wall, a vanishing-edge technique that Lautner had first experimented with at Silvertop. The final construction cost, according to *Architectural Design*, was $300,000.

The cross-section shows those views from a seated or standing position—down toward Palm Springs, across to the mountains, and up to the sky. "The clerestories catch the different light of the morning sun and solve the problem of west sun and view," Lautner noted.

John Lautner Archive, Research Library, Getty Research Institute, LA
© 2018 The John Lautner Foundation

Elrod during a site visit in 1967.

John Lautner Archive, Research Library, Getty Research Institute, LA
© 2018 The John Lautner Foundation

The first plan of the two-bedroom, 3,700-square-foot house reveals the sequence of circles, from the front privacy wall out to the pool.

John Lautner Archive, Research Library, Getty Research Institute, LA

In the center of the master suite was a glass and steel desk and a low room divider with bookshelves of zebrawood. The door at left led into the bathroom.

Richard Cross

On the bedside shelf was a phone that connected to an intercom system, game of solitaire, phone and address book, notebook, small portable TV, and master panel switches that adjusted the bed and controlled the lights and music.

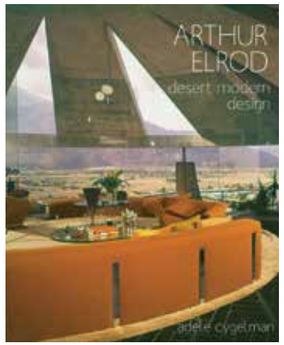
Marie Cecille. Archival Playboy Magazine material. Copyright 1971 by Playboy. Used with permission. All rights reserved.

The other side of the room divider became the headboard, with the bed facing a smoked glass mirror wall on which hung an Andy Mahon painting. So the bed faced away from the view, which was reflected in the mirror.

Leland Y. Lee

On the other side of the mirrored wall was the dressing area and master bath, complete with shower, sauna, sunken tub, wet bar, and exercise equipment. Reflected in the mirror where Elrod hung his bathrobe were the Lucite shelves that held his shirts and sweaters arranged by season.

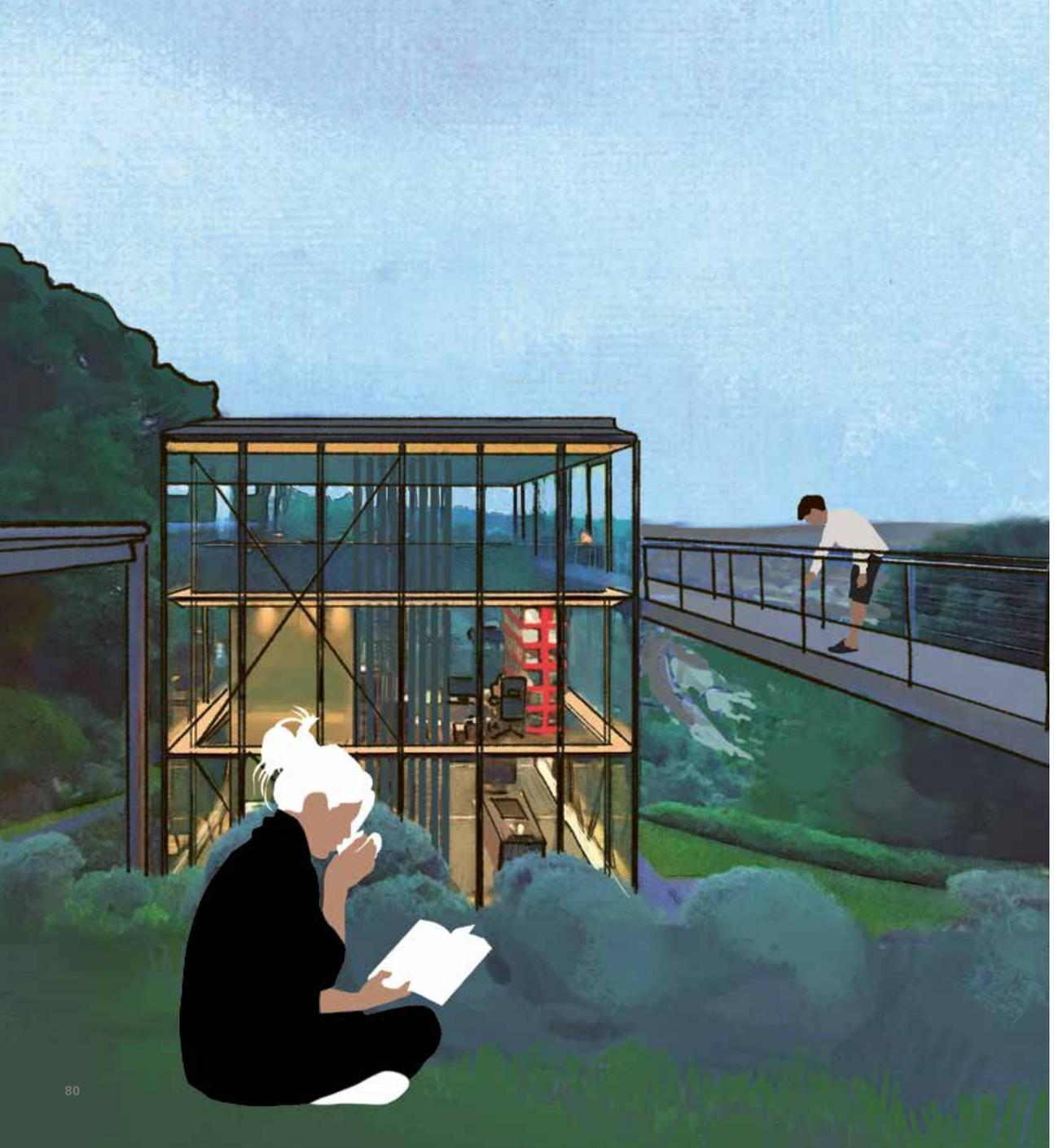
Leland Y. Lee



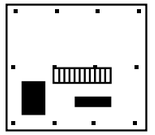
Left: Arthur Elrod was the most successful interior designer in the Palm Springs area from 1954 to 1974. His rise paralleled the growing modernist movement in desert architecture, and he worked alongside the leading Californian architects of the day.
Source: Adele Cygelman, *Arthur Elrod: Desert Modern Design*, Utah, 2019

Right: Sequence from the James Bond movie *Diamonds are Forever*, 1971
Source: AF archive/Alamy Stock Photo

The geometry of the house plays with intersections of a giant circle with rectangular areas. The central room: 9 metres tall and 18 metres wide, is covered by a wheel-shaped conical ceiling made out of concrete. The roof is divided into nine ribbed concrete wedges segmented by clerestories. Daylight enters overhead through angled metal fins that form frames for the glazing. Curved, sliding glass walls surround the front portion of the living area, opening towards a terrace and the swimming pool that both face the view. The circle encompasses all the public spaces such as the living and dining area, kitchen, guest and powder room, as well as the terrace. The rectangular space is a private 18-metre long space delineated by furniture groupings of a study office, bedroom, dressing room and bathroom suite. A series of circles announce the arrival at the house – curved wall, carport, sculpture garden, entry walkway and ends with the semicircular pool at the ridge's edge.



House R 128
Stuttgart, Germany
Werner Sobek (1999–2000)



Adriano Borges Dantas Rodrigues

Planning Parameters

Sustainability
The house is completely recyclable, produces no emissions and is self-sufficient in terms of heating energy requirement. By being entirely self-sustainable and computerized, this structure epitomizes the concept of efficiency.

Modular
The clean shape of the building allows both prefabrication and standardization of components. The house was meant to be built quickly and easily recycled at no undue expense.

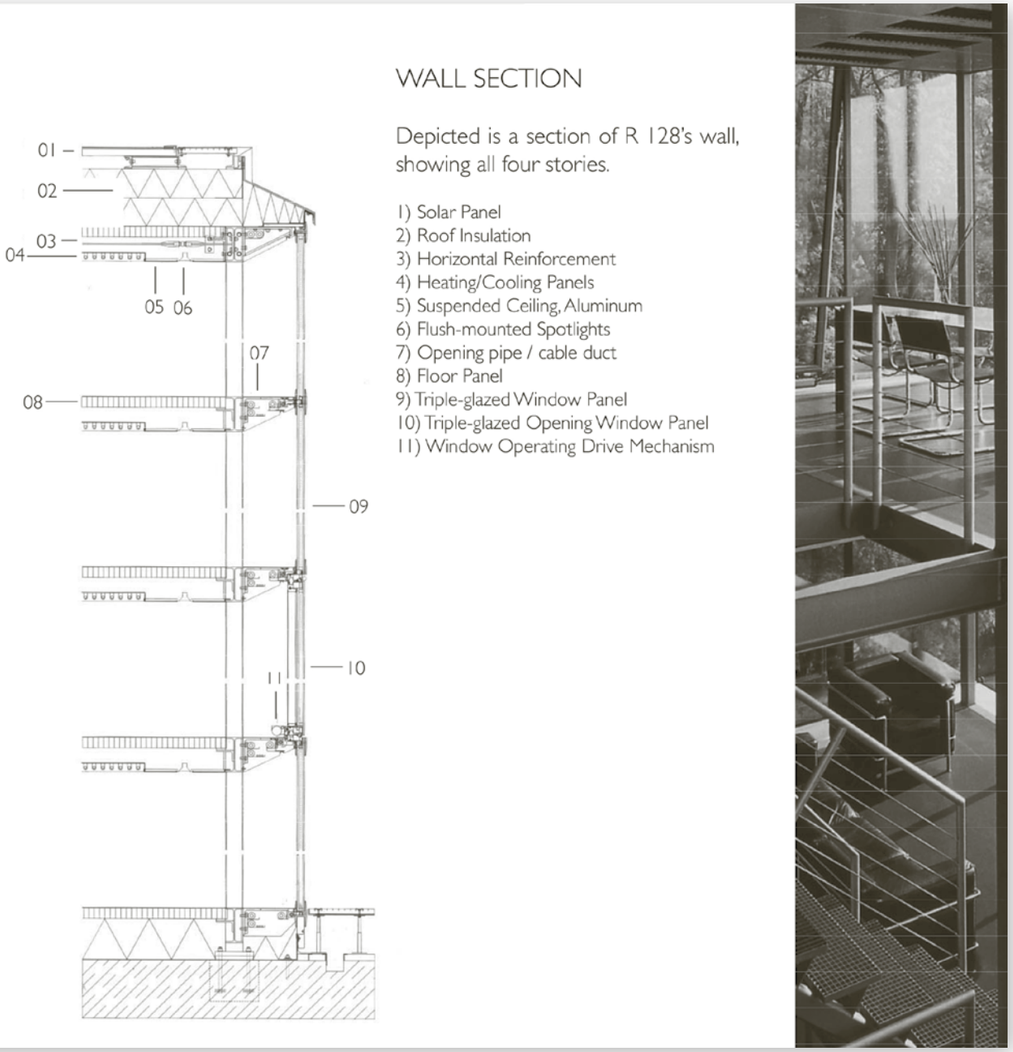
Transparency
The see-through surface becomes a tool of formal expression itself. The optical transparency allows for a perception of depth and the simultaneous view of objects in space.

Project: House R 128
Location: Römerstraße 128, Stuttgart, Germany
Client: Ursula und Werner Sobek, Stuttgart

Architecture: Werner Sobek Ingenieure GmbH & Co. KG, Stuttgart
Project participants: Transsolar Energietechnik GmbH, Stuttgart (Energy concept); Baumgartner GmbH, Kippenheim (Control engineering); IB Jochen Köhnlein, Albstadt (Building automation)

Type: Private residence
Structure: Steel
Site area: 4,500 sqm
Construction area: 69 sqm
Total floor area: 276 sqm
Number of storeys: 4

Completion: 1999–2000

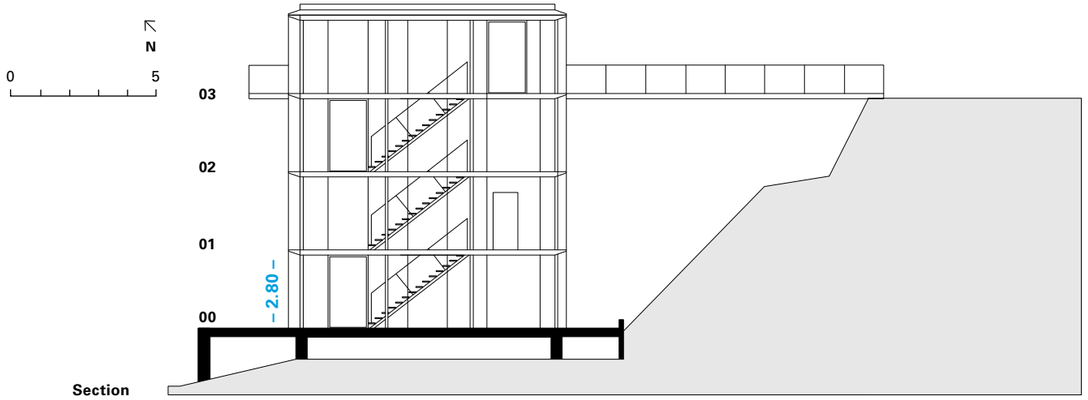


WALL SECTION

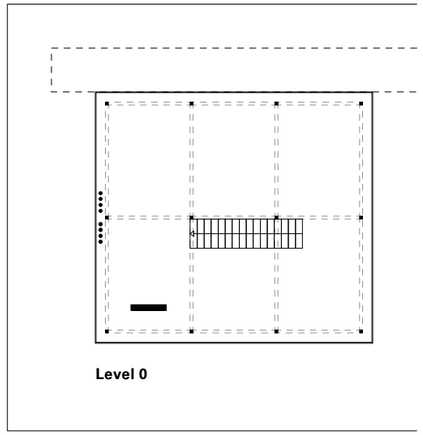
Depicted is a section of R 128's wall, showing all four stories.

1) Solar Panel
2) Roof Insulation
3) Horizontal Reinforcement
4) Heating/Cooling Panels
5) Suspended Ceiling, Aluminum
6) Flush-mounted Spotlights
7) Opening pipe / cable duct
8) Floor Panel
9) Triple-glazed Window Panel
10) Triple-glazed Opening Window Panel
11) Window Operating Drive Mechanism

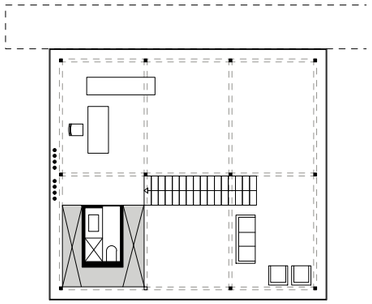
R 128 façade with construction details
Source: Werner Sobek Ingenieure GmbH & Co. KG, Stuttgart



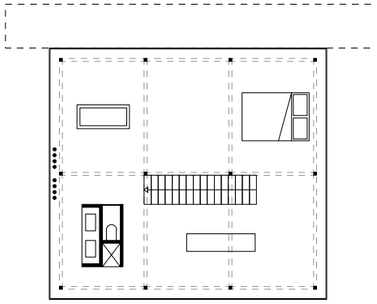
Section



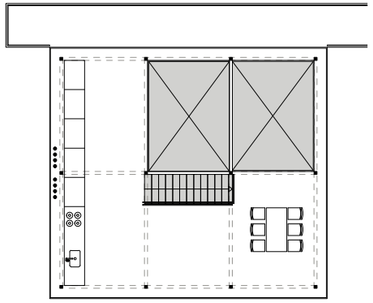
Level 0



Level 2



Level 1



Level 3

Casa em Bom Jesus II
Braga, Portugal
Eduardo Souto de Moura (2007)

Jasvinder Singh

Planning Parameters

Terraces
This large house is composed of a series of broad terraces that extend off a natural knoll. Each level of the house corresponds to a level of the terracing. The walls are all board-formed concrete; functioning as both a retaining wall in the landscape and as a wall of the house itself. The lower level roof becomes the earth-covered terrace for the level above. The heavy concrete construction and rough, windowless surfaces give the impression of a low-slung 19th century military fortification.

Rough Surface
Subtle banding is made in the rough surfaces of the exposed concrete through a change in direction of the boards. Its north side (entry) has been left almost entirely windowless while the south façade has large banks of glazing, particularly at the living spaces where a continuous wall of glass allows one to pass between the two dining rooms, the living room, a sitting room and the office.

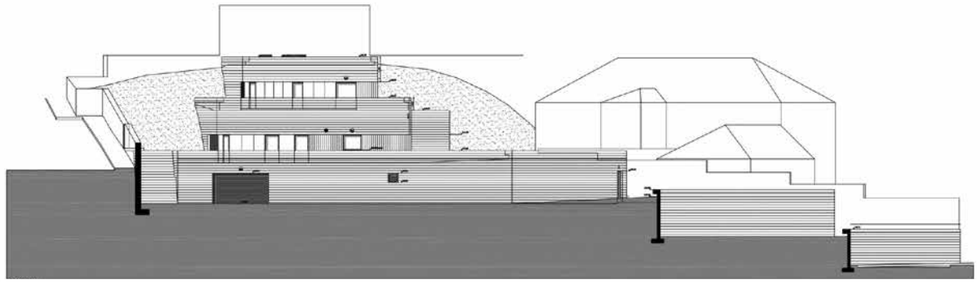
Project: Casa em Bom Jesus II
Location: Braga, Portugal

Architecture: Eduardo Elísio Machado Souto de Moura

Type: Residence
Site area: 1,171 sqm
Total floor area: 5,050 sqm
Structure: Concrete
Number of storeys: 3

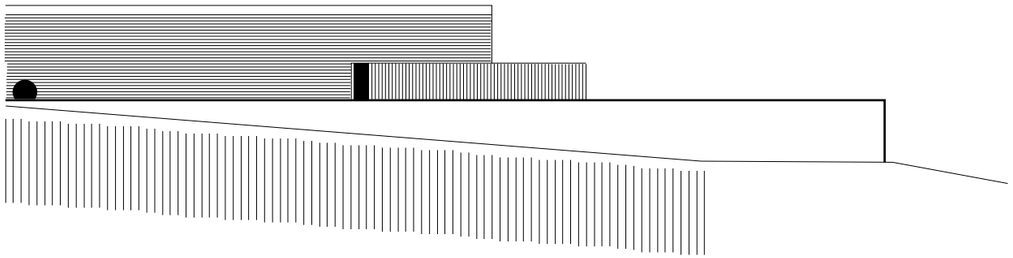
Completion: 2007

North-west elevation



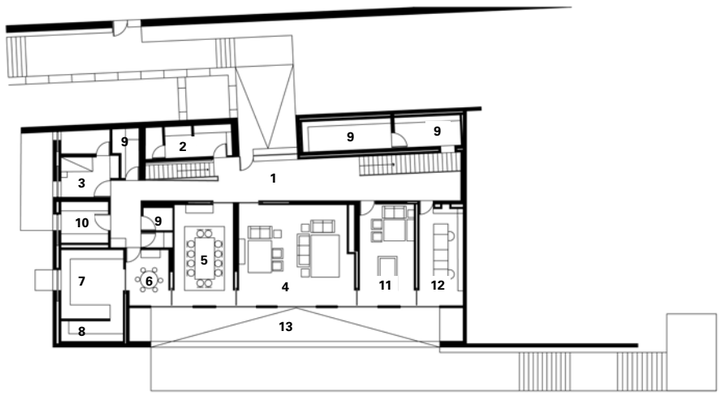
South-west elevation

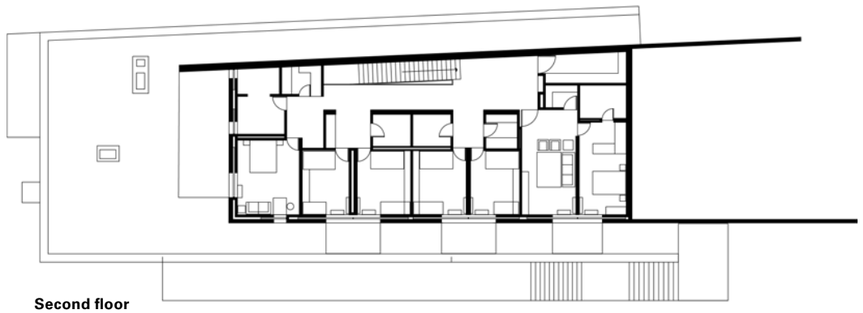
Source: https://divisare.com



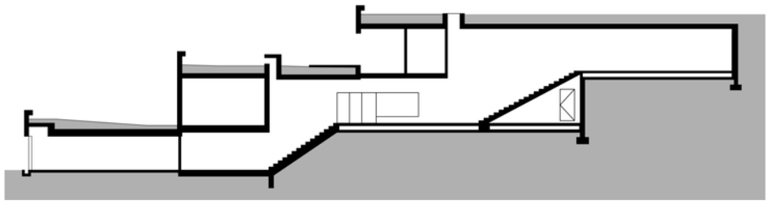
Legend

1 Entrance
2 Wardrobe
3 Staff
4 Living room
5 Dinning room
6 Lunch room
7 Kitchen
8 Pantry
9 Storage
10 Laundry
11 Game room
12 Office
13 Terrace

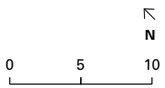


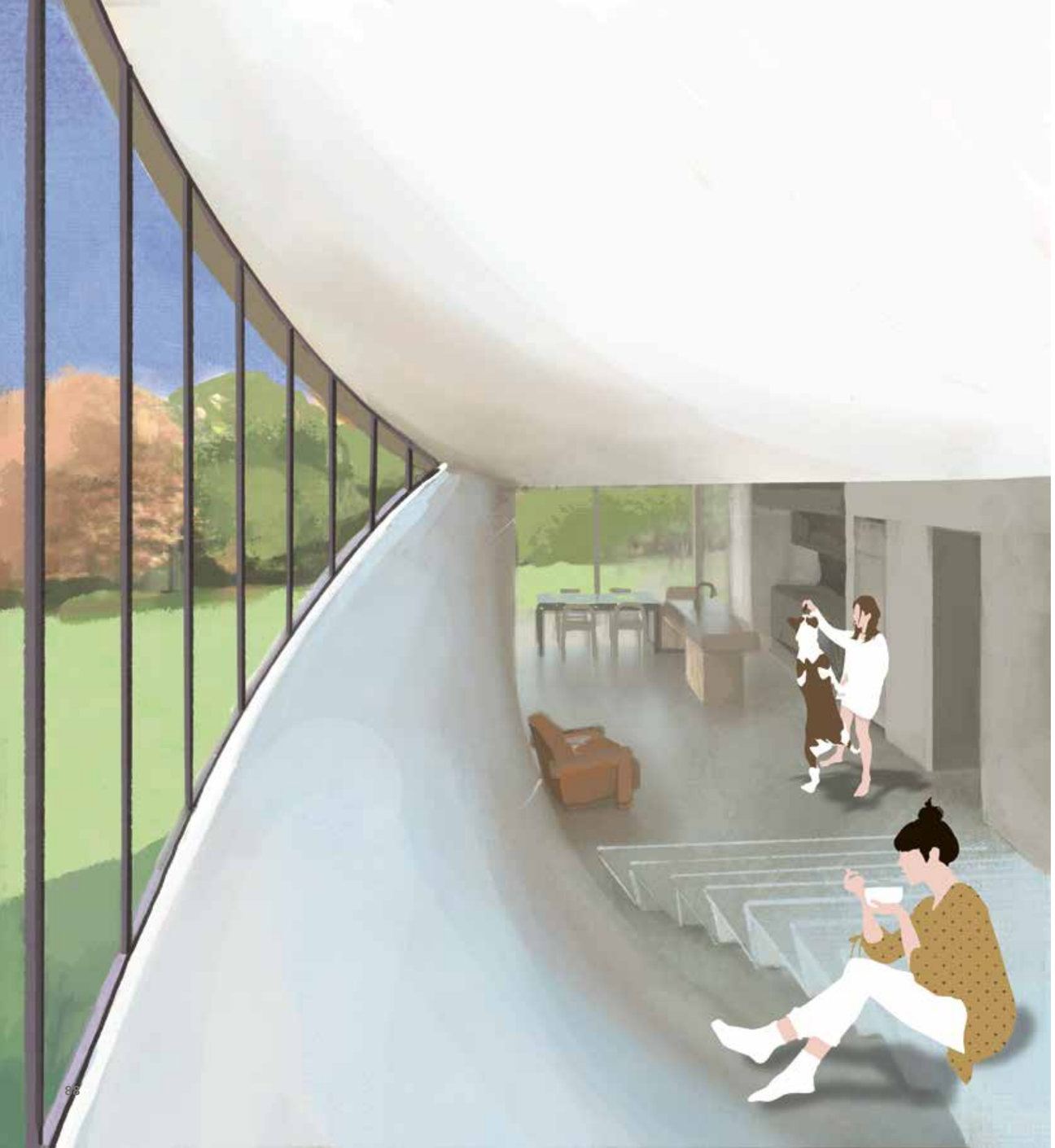


Second floor



Section





Villa NM
Upstate New York, USA
UN Studio (2000–2007)

Yong Thang Shaun

Planning Parameters

Volumetric Organization
The volume of the box splits into two separate volumes; one follows the northern slope smoothly and the other rises over the hill leading to a covered parking and generating an internal organization at two levels. The volumetric transition is generated by five parallel walls that rotate about a horizontal axis from vertical to horizontal. The resulting surface, keeping this transition is repeated five times in the building.

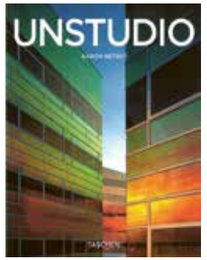
Spiral Path
The spiral path of the house reaches the top level suite, which overhangs the parking while resting on V-shaped columns and two other bedrooms. Rooms that require privacy are partially closed to the outside while all the others have large bay windows with unlimited access to views outside.

Project: Villa NM
Location: Upstate New York, USA
Client: Anonymous

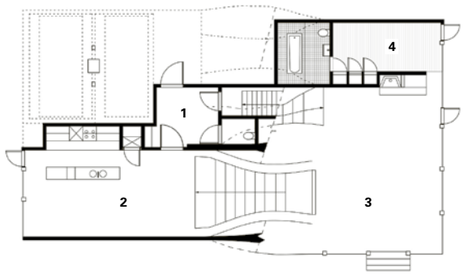
Architecture: UN Studio|Ben van Berkel, Caroline Bos

Type: Family House
Site area: 7,423 sqm
Total floor area: 250 sqm
Volume: 700 cbm
Structure: Concrete
Number of storeys: 2

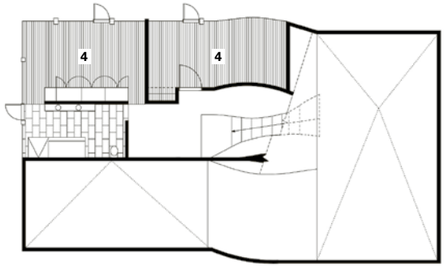
Completion: 2000–2007



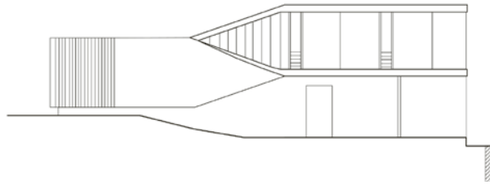
Aaron Betsky, *UNSTUDIO. Der schwebende Raum*, Cologne, 2007



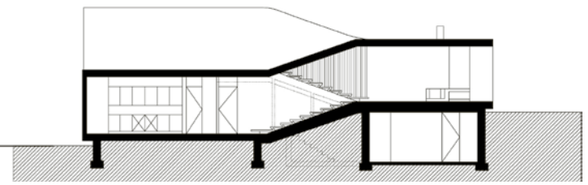
Ground floor



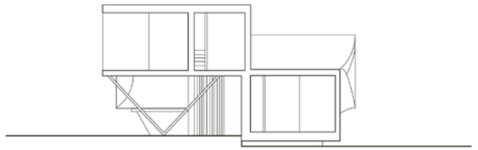
First floor



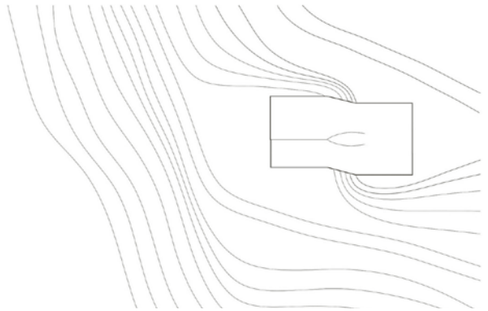
East elevation



Section



North elevation



Site plan

Legend

1 Entrance
2 Kitchen / Dining
3 Living room
4 Bedroom

N

0 5

Sengokubara S Residence
Hakone, Kanagawa, Japan
Shigeru Ban Architects (2013)

Sanem Bakan

Planning Parameters

Invisible Partitions
The aesthetics of borders are shown when spaced wooden slats form partitions and doorways between rooms, allowing views between spaces. Sliding doors can be fully open, connecting with the central courtyard and unifying inside and outside.

Radial Arrangement
The design has a sequence of open-plan rooms that face inwards towards the teardrop-shaped central courtyard. The eight sliding doors give residents the option of creating one large unified area and promote fluid movement.

Sloped Roof
The roof is sloped inwards to create a shaded canopy that sweeps across the courtyard's rounded edge. The roof's uninterrupted curve ascends from the first level to the mezzanine and the highest section of the villa while reaching ceiling heights of 2.4 m to 7.5 m.

Project: Sengokubara S Residence
Location: Hakone, Kanagawa, Japan

Architecture: Shigeru Ban Architects, Tokyo
Project Team: Shigeru Ban, Nobutaka Hiraga, Wataru Sakaki, Jun Matsumori

Engineering: Hoshino Structural Engineering
Type: Private house
Site area: 1,770 sqm
Total floor area: 577 sqm
Usable area: 452 sqm
Structure: Timber
Number of storeys: Ground floor + mezzanine

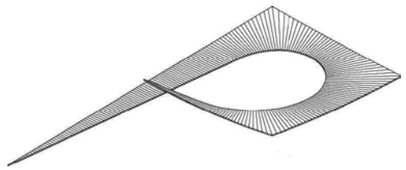
Completion: 2013

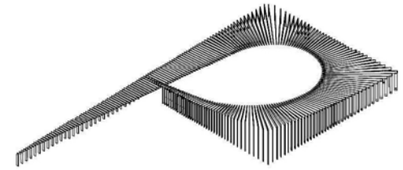
Above: The drop shape form is the space with one corner. The garden is viewed as peaceful and self-contained outdoor room.
Photographs: Hiroyuki Hirai / Courtesy of Shigeru Ban

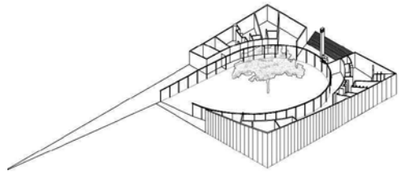
Centre: On the underside of the fine metal shell, the load-bearing wooden construction stands close together, almost like the lamellae of a mushroom.

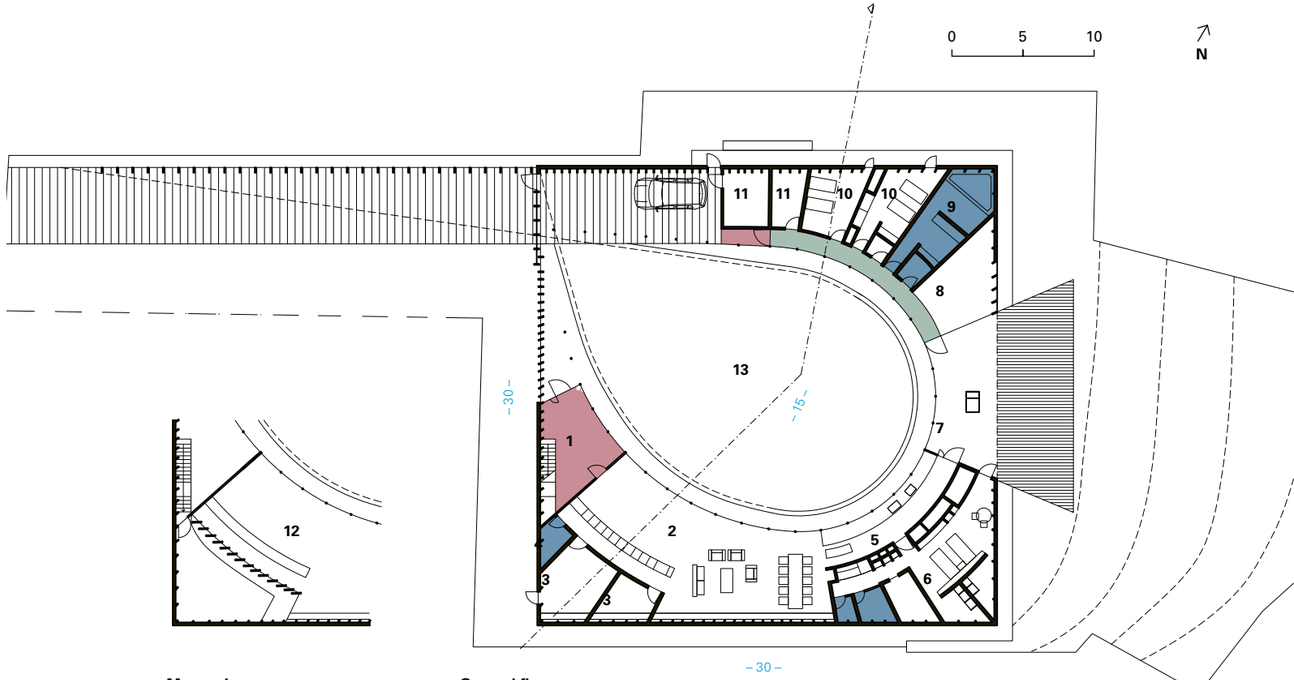
Biological nature of a mushroom
Photography: George Jurasek

Right: Architectural diagram
Illustration: Global Architecture Archive



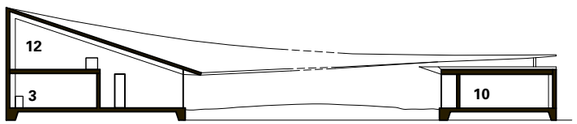






Mezzanine

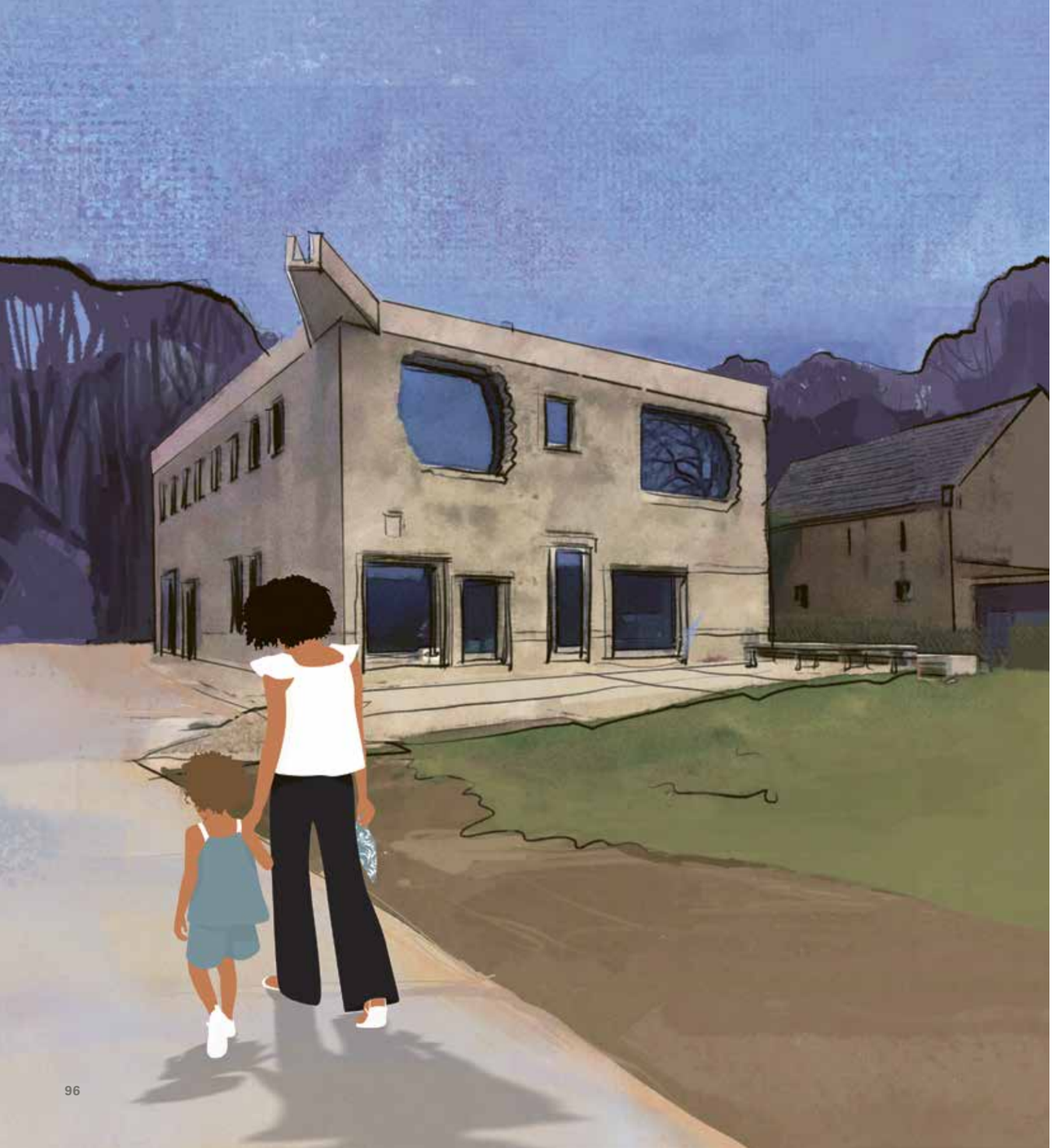
Ground floor



Section

Legend

1 Entrance
2 Living and dining
3 Study
4 Guest toilet
5 Kitchen
6 Bedroom
7 Terrace
8 Training room
9 Bathroom
10 Guest room
11 Storage room
12 Mezzanine
13 Courtyard



0131 Antivilla
Potsdam-Krampnitz, Germany
Brandlhuber + Emde, Burlon (2010–2015)

Tristan Bergmoser

Planning Parameters

Bypassing Mandatory Standards
The house questions the mandatory standards in current building regulations by proposing a new understanding of architecture and the environment.

Aesthetics of Ruins
Brandlhuber's luxury is the temporary space that is realised cheaply. It's shared with others without the pressure that a capital-intensive investment would inevitably have created.

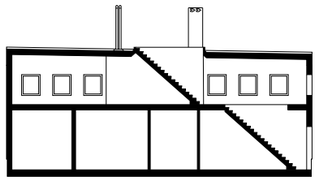
Uncomfortable Bareness
This project is dedicated to the question of how architecture can creatively respond to changes in its social, material and cultural conditions. Instead of the maximum technical feasibility, Brandlhuber implements what is necessary for a minimum.

Project: 0131 Antivilla
(Renovation of the VEB Ernst Lück lingerie factory in the former GDR)
Location: Potsdam-Krampnitz, Germany

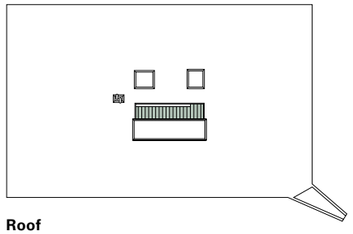
Architecture: Brandlhuber + Emde, Burlon
Project Team: Elsa Beniada, Peter Behrbohm, Klara Bindl, Romina Falk, Victoria Hlubek, Tobias Hönig, Cornelia Müller, Markus Rampl, Paul Reinhardt, Jacob Steinfelder, Caspar Viereckl

Engineering: Pichler Ingenieure (Structure)
Type: Vacation house
Site area: 1,466 sqm
Total floor area: 765 sqm
Usable area: 445 sqm
Structure: Concrete
Number of storeys: 2

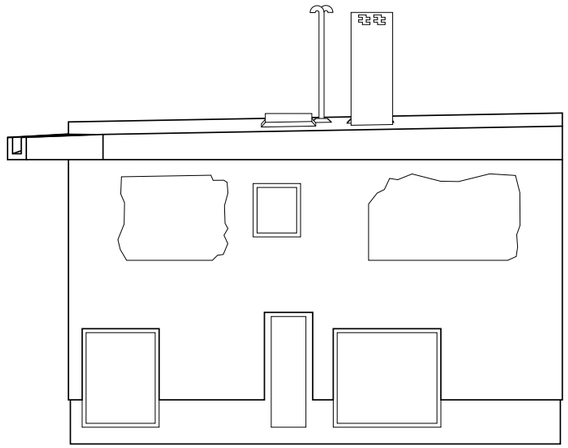
Completion: 2010–2015



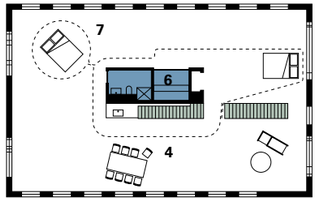
Section



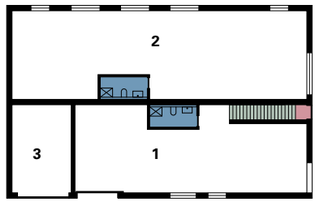
Roof



Façade



Second floor



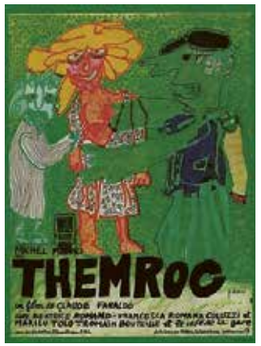
Ground floor

Legend

1 Atelier 1
2 Atelier 2
3 Garage
4 Kitchen/Dining
5 Living
6 Sauna
7 Sleeping

N

0 5 10



The movie *Themroc* (1973) by Claude Faraldo tells the story of a French blue collar worker who rebels against modern society, reverting into an urban caveman.
Source: film poster

A ruin in Hashima, about an hour off the west coast of Nagasaki, Japan. After the shutdown of the coal mines in 1974, people where evacuated. A whole city turned to decrepit ruins.
Source: southtopia.wordpress.com

Conical Intersect (1975) by the US artist Gordon Matta-Clark torqued and 'cut' into two derelict seventeenth-century Paris buildings adjacent to the development site of the Centre Pompidou. The project reveals the multivalent nature of his prescient specialty in sustainability and artistic re-use of the environment.
Source: Gordon Matta-Clark

Making the audience aware: 'We're stopping everything. And it is not all gloomy.'
Source: Themroc

‘We feel a pleasant sensation when we dance according to certain laws; we should be able to arouse a similar sensation in someone whom we lead blindfolded through a well-built house.’

Johann Wolfgang von Goethe

The Foundation of the Design
Five Planning Parameters

Illustration: Natascha Meuser

The Foundation of the Design
Defining Five Planning Parameters

Natascha Meuser

WE INTRODUCED A HIGHER LEVEL OF PROFESSIONAL, COLLABORATIVE MEETING TOOLS.

Design project framework
The following five planning parameters provide a way to think about the design of a villa systematically. Students have to take into account universal goals and requirements as well as the various site properties and client needs, in order to provide universal ideas from which a design for a particular place and client is developed.

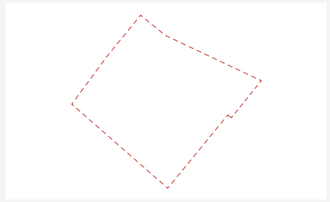
Site Analysis
Response to Context

Functional Grouping and Zoning
Architectural Forms and their Spatial Organization

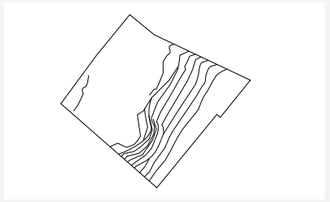
Circulation
How People Move through Space

Building Forms
The Architectural Presentation of the Building

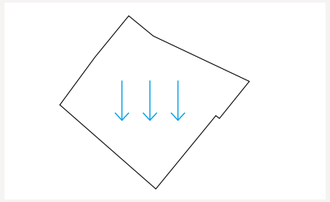
The Architecture of the Private Room
A Complex Geography of Intimacy



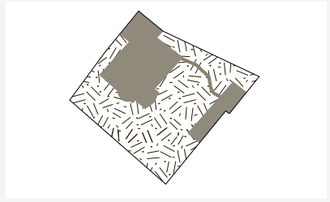
Property Boundaries



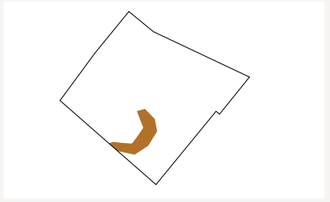
Land Contours



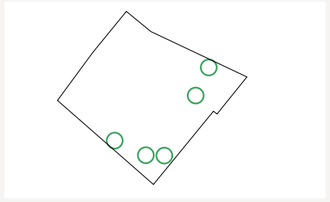
Surface Drainage



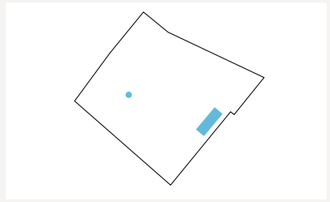
Soil Condition



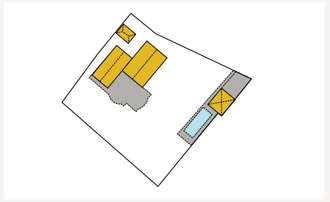
Rocks and Boulders



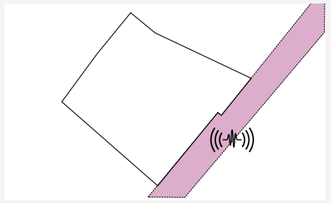
Trees



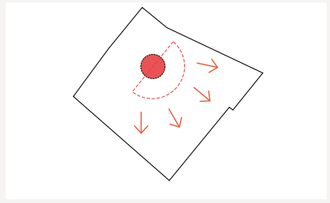
Water



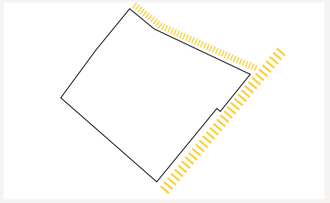
Existing Buildings



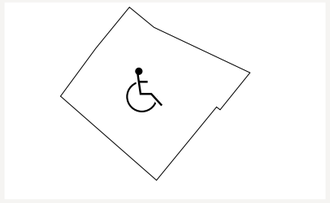
Noise



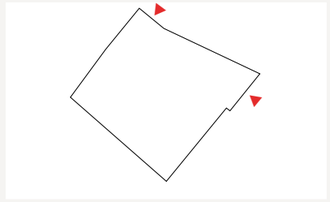
Viewsfrom the Site



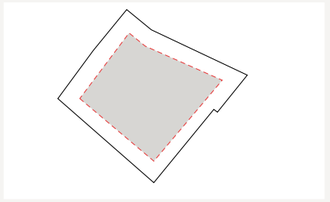
Vehicular and Pedestrian Traffic



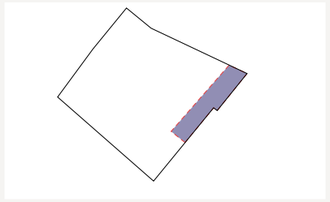
Accessibility



Entry to the Site



Total Site Zoning



Car Storage

Site Analysis
Response to Context

1

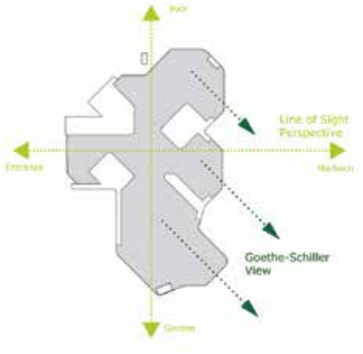
A contextual analysis is a research activity that helps to understand and build relationships between development and context. The context refers to the environment in which a development is located. It is the specific and immediate setting in which the development sits and with which it engages. The features of the context area must be described accurately and in detail. To do this:

- Visit the context area in person
- Take photographs, measurements, drawings and notes
- Obtain survey data, council reports and planning scheme documents.
- Prepare a context description

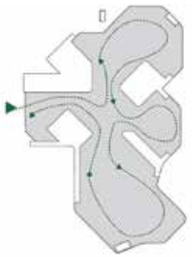
Understanding the context of a site is key to enabling the designer to weave the new design in with the existing fabric of the site. It allows to understand the existing opportunities, or problems in a site, and make informed decisions on how to respond to the findings. Many of the decision that are taken on the project will be a response to the site of the proposed building and its context:

- Location
- Neighbourhood environment
- Zoning and size
- Planing regulations
- Naturals physical features
- Existing buildings
- Circulation (vehicle and pedestrian movements in, through and around the site.
- Climate (rainfall, snowfall, wind directions, temperatures, sun path)
- Sensory (views, noise)

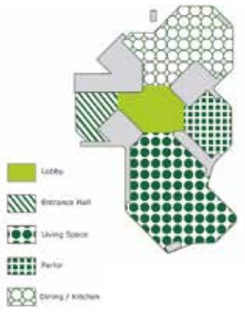
and so forth



Visual axes / lines of sight



Movement and circulation

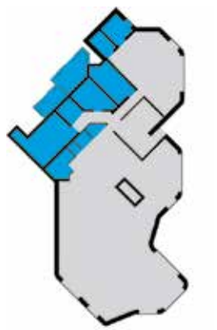


Core / program / skin

Spatial concept

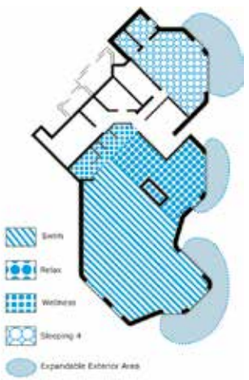
Maximum of privacy

Programmatic display



Spatial concept

Movement and circulation



Programmatic display

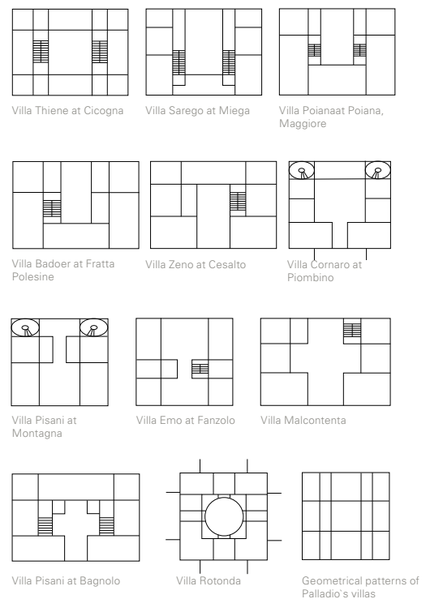
Villa Familie May Maier
Architect: Mayer H. Architect
in: MiyoungPyo, *Architectural Diagrams*, Berlin, 2020.

Functional Grouping and Zoning
Architectural Forms and their Spatial Organization

2

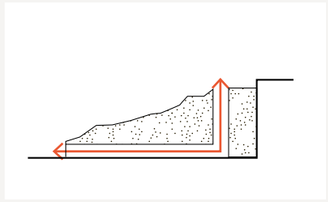
WE LEARNED TO USE THE VIRTUAL MARKUP TOOLS AND MANAGED COMMUNICATION ACROSS THE VIRTUAL WORLD.

Over the past decades the diagram has developed into a constitutive, generative medium for architectural design, in the process becoming a commonplace term. Architectures are often implicit collections of diagrams, elements of the visualization tools of the design process. Diagrams thereby participate in the creation of architectural forms and their spatial organization.
Different meanings of the diagram could be established in the architectural design: the definition of the diagram varies from the significance of a preliminary sketch to a schematic representation of the design concept and the process of generating architectural forms. The function of diagrammatic processes in the transformation and generation of new pictorial forms in the overall architectural design process has become central – for example, in the transition from the analysis of a specific location to the first conceptual design sketch. The diagram has become an essential translator between information and forms, data and design products.

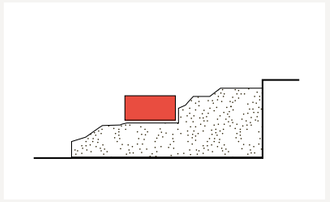


Villa Thiene at Cicogna | Villa Sarego at Miega | Villa Poianaat Poiana, Maggiore
Villa Badoer at Fratta Polesine | Villa Zeno at Cesalto | Villa Cornaro at Piombino
Villa Pisani at Montagna | Villa Emo at Fanzolo | Villa Malcontenta
Villa Pisani at Bagnolo | Villa Rotonda | Geometrical patterns of Palladio's villas

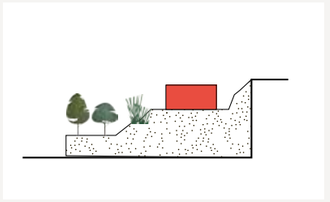
Rudolf Wittkower, 'Palladian Villa Types', in *Architectural Principles in the Age of Humanism*, London, 1952.



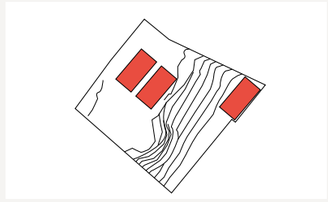
Enter the Building Underground



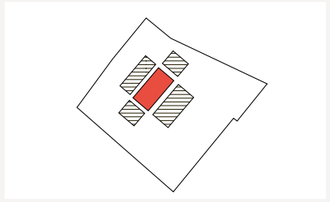
Enter the Building Overground



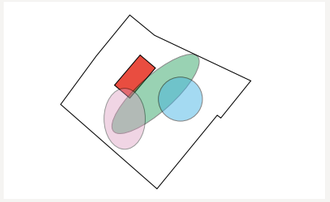
Use Vegetation as Acoustic Puffer



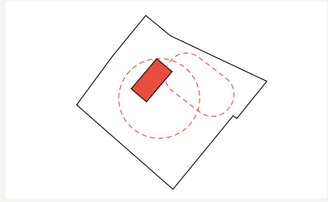
Perpendicular to Contours



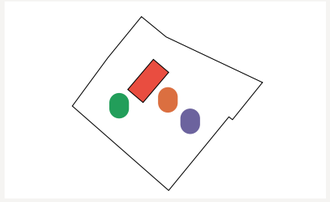
Look for Open Sides



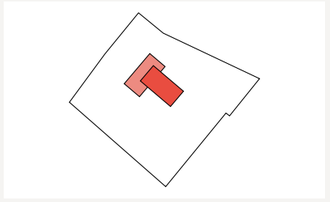
Over Slope



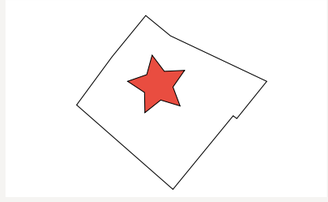
Integrate Space Circulation



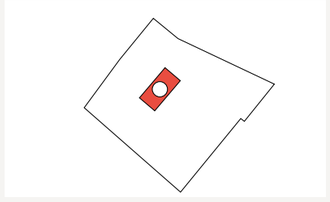
Create Hotspots



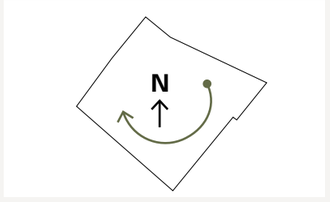
Overlap Volumes



Blubb



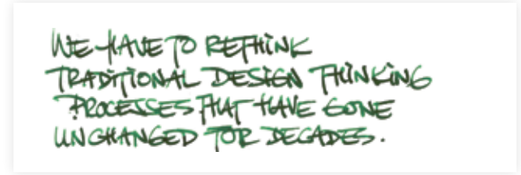
Create View Features



Respect the Sunlight

Circulation and Building Form
How People Move through Space

3



Horizontal Circulation
This might include hallways, atria, paths, entries and exits. It is also affected by the furniture layout, or other objects in the space such as columns, trees, or topographic changes. This is why architects usually furniture as part of a concept design, because it is critically linked to the flow, function and feeling of the space.

Vertical Circulation
This is how people move up and down within the building, so includes things like stairs, lifts, ramps, ladders and escalators which allow us to move from one level to another.

Use
Public circulation is the areas of the building which are most widely and easily accessible. In this guise, circulation is often overlapped with other functions, such as a lobby, atrium, or gallery, and is enhanced to a high level of architectural quality. Issues of visibility, how crowds move, and clear escape routes are essential.

Private Circulation
This accounts for the more intimate movements within the building, or the more ugly ones which require a degree of privacy. In a house this might be the back door, in a large building the back of house, staff offices or storage zones.

- Direction of movement: horizontal or vertical
- Type of use: public or private, front of house or back of house
- Frequency of use: common or emergency
- Time of use: morning, day, evening; continuous

Students have to take into account universal goals and requirements as well as a variety of the site situations and client needs to provide universal ideas from which a design for a particular place and client is developed.

Building Forms
The Architectural Presentation of the Building

4

Before embarking on any design, architects consciously or unconsciously make a decision on typology. This choice arguably exerts the greatest influence upon the form of the building. Architects endeavour to map out a coherent design which meets the intended usage requirements of the client and can be implemented under a budget and the time schedule drawn up. From a client perspective the functional requirements of a house can generally be described in terms of quantity and quality. Based on studies and analyses of projects which have already been completed three main forms of building can be identified – i.e.

- The ‘decorated box’ (Robert Venturi)
- The imitation of nature, and construction as an art form (Otto Wagner)
- Building with cultural meaning or context
- particular forms not directly attributable to any one of these main categories

Illustration: Hans Ludwig

Photography: Aurelly/Istock

The Architecture of the Private Room
A Complex Geography of Intimacy

5

The room is the product of specific historical circumstances and is always undergoing change. The form of the room subtly conveys how individuals have been differentiated and defined as subjects with concomitant gender and class associations. The concept of private and public life is subject to constant change, which is also expressed in architecture. Therefore, it is worth looking back at how the development of specific habits and customs formed the basis of our current understanding of privacy in the domestic sphere. Although the notion of privacy didn't emerge within domestic architecture until the late eighteenth century, the concept of 'private space' casts a long shadow in the history of human associations. Contrary to its appearance, the room is never autonomous; rather it is always the outcome of a subdivision process within a broader social space: a house, building, settlement, or town. Students were asked to develop a clear theory of how analysis helps you frame your developing position.

Social
Who are you designing for?

Programme
What are the basic activities that need to be accommodated?

Measurement
On what basis can you design and the evaluate successes or failures of that design?

Time
How do you measure occupation and/or use over time?

Photographs: Yerasimi Architectural Photography

The Roof as a Landmark
Lost among the Dense Green

Sanem Bakan

The first architectural structure that comes to my mind when I think of the aesthetics of harmony is the T-house by Onur Teke, completed in 2013. This is due to the interior, exterior relationship and material choices. T-house is settled in an olive grove in Mordogan, an Aegean town. It is designed for a retired couple who respected 'the draw of the area' to begin an olive forest.
The house is reached by a path, located on the mountain foot. Settled amongst the olive trees, the building could easily be lost among the dense green tissue if it did not have a steep roof. The only thing I could notice about the house while walking towards the building was its roof which gently marks the landscape.
When I reached the entrance, the front concrete wall shells greeted me with a beautiful wooden roof and terrace. After a walk around the house, I understood that the design consists of two reinforced concrete rectangle volumes placed at an angle of ninety degrees to each other. The two volumes are separated from each other and are connected by a glass-covered volume between them. The transparent mass which is also the kitchen is a nodal point that provides a connection to all wooden terraces that surrounds the house.
The kitchen is like the heart of the T-house, and it was one of the most impressive parts for me. In the house, you can stay in touch with the exterior and nature in every opening and it strengthens the sense of place. Also, the colours and textures of the materials creating harmony with the surrounding. Reinforced concrete walls were formed by pouring into wooden molds to create the trace of the natural texture of the wood.
The design feels like it melts the borders between the interior and exterior because of how the materials and division of the volumes were used.

Public and Private Space
Levels of Privacy

Mehmet Caferoglu

In this exercise, I would like to talk about a family house again. When I think of the relationship between interior and exterior, I initially think about this house and the effect it had on me before seeing famous buildings. The house I mention is on the Greek island of Rhodes, my father's hometown.
My experience is from six years ago, when I had the chance to stay for two weeks in this house where my grandmother grew up in. As a person who grew up in a metropolitan city, the relationship between home and the outside world is very different in the old city part of the island.
There is no car or public transport as everywhere is within walking distance. The narrow medieval streets are not suitable for vehicles except motorbikes and bicycles. From the street, it is impossible to see inside the houses; this gives the streets a labyrinth-like feel. So finding the house is always an adventure; even after weeks you can get lost. From outside, the house seems to consist of only a flat high wall and a door. This closed façade to the street creates a completely private area inside the building. When entering through the door, expecting to enter the interior area of the house, I find myself under a large arch connecting to the courtyard. The courtyard is a very special garden. I've never felt so sheltered in the garden of any home. Surrounded by walls of about 8 metres high, the garden forms a private living space that is cut off from the outside world, like the house.
For me, the most special place is its roof, which is easily accessible. It is perhaps the only place where you can communicate with the outside world while at home. It is possible to view the old city from above. Meeting your neighbours on these flat roofs is quite ordinary.

Hidden Rooms
The Feeding Door Leading to the Ecstatic World

Riddhi Kumar

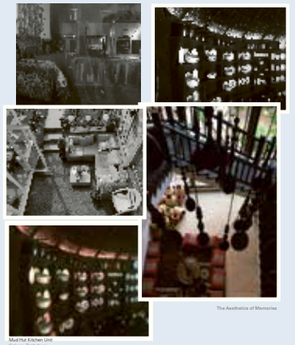
Standing at the very entrance of this house, the first striking thing observed by anyone would be the huge mango tree, but for me it's the white coloured screens right behind it in the front vicinity. I always wait for my grandma to call out my name from the grilled door/window. This simple steel screen plays a very important role in the emotions felt when we enter this beautiful house, as this is the place from which she keeps an eye on the main gate and awaits us. My cousins, friends and I used to play all kinds of games in this huge arena at the front, but the most exciting task used to be hiding on the terrace, because there weren't any staircases leading to it. So, some of us used to climb a humongous tree and jump to our destination, landing on our hands, and we did the same on the way back.
This ladder was pretty adventurous. The texture and the colour of the concrete on the exterior walls was always very sober in its outlook and tactile in nature. It gave us a cheerful feeling looking at it, especially with the small fence on the left, which also led to the main entrance of the house. This frame reflected the colour-coordinated beauty of a dwelling amid greenery. The setting affected one's emotions positively.

The Aesthetics of Memories
A View into the Past

Try to capture memories from the first ten years of your life. The exercise is an attempt to capture the vague memories of your early years. As with waking up in a dream, certain images flash up, often triggered by smells and sounds, memories or spatial situations.

The Aesthetics of Harmony
The Relationship between Interior and Exterior Space

Atmosphere is a characteristic feature of every spatial situation. Describe an atmosphere in which a situation created by architecture immediately affected you. Discover the unpredictable combinations of daily life and its spaces.



Mud Flat Kitchen Unit
Salinas, Zimbabwe

The Aesthetics of Memories

The Courtyard
How to Create a Space Under the Open Sky

Anotidaishe Mavazhe

The courtyard can be called an architecture of the veil because it centres around internal spaces that are not visible from the outside. Consequently it satisfies a profound requirement for an open living space. The entrance of the house is accessed through a modest space leading into a spacious and beautifully landscaped courtyard. The passageway entry comprises of a couple of wooden entryway leaves, reinforced with lead plates fixed with steel nails. The external doors represent simplicity, a quality also demonstrated in the lack of decorations of the external windows; therefore, to judge the level of wealth or poverty of the houses from their external appearance is difficult. The entrance door leads to a narrow passageway, at the end of which another door filters the entrance to the courtyard, allowing this latter to be completely private and visually isolated from the outside. The ground floor experiences even temperatures throughout the year. It is thus an appealing living space in times of extreme temperatures. The basement acts as a thermal moderator during the hot and dry season by regulating the prevailing winds within the courtyard. The courtyard is a threshold between exterior and interior spaces. The transition from the outside to the inside is set apart by a difference in spatial experience from a modest and occasionally bold entrance to a highly decorated internal open courtyard with a central fireplace as well as aesthetically pleasing façades.
Landscaping plays a vital role in the courtyard. It consists of decorative plants, such as climbing jasmine and rose bushes, which add colour to the courtyard atmosphere, and trees.
The interior façade surface material is mainly compressed earth while the windows on the façade are highly decorated with in with intricately woven geomatric patterns and shapes.

An Introspective Flashback
Architecture and Heritage

Surabhi Nigam

Growing up in a small city in India when there were not enough activities to participate in during summer vacations, I loved visiting my grandmother's house, because of the affection I had for her and the number of treasures she had enclosed in a box that made me happy. Today, one of the strongest memories of my childhood that induces a sense of immediate architectural imprint in my mind is the old house of my grandparents. Built in 1918 and still standing, it now falls in the few remaining heritage segments of the city.
When an image is etched into your mind, it sticks and forms into a memory, and in this scenario it creates a canvas which will keep painting itself. The majority of the Houses in this street are heritage structures with intricate ornamental detailing and planar traditional elements that translate into an incredibly strong spatial quality. The house is a dual plot row house with a narrow secondary street and similar traditional buildings in its proximity. The outside is a façade that features a combination of similar looking doors and windows. Inside the the building is a courtyard with carved stone pillars rotating the perimeter.
All the windows consist of intricate wooden carvings which do justice to the pure teak wood staircase inside the house, which leads up to an open space with old furniture on the first floor. There is also a balcony; extremely narrow in nature, it is just big enough to house a few pots and plants. I value things with history and my grandparents' love of collecting treasured elements which fulfilled my 'cabinet of curiosities'.
One thing I remember more than anything else at my grandparents' house is the feeling of comfort and the feeling of being welcomed and safe.

Light and Shadow
How to Create a Harmonic Balance between Light, Wind and Space

Thang Shaun Yong

During my short internship in Japan, I had the pleasure of working with Ar. Kazunori Sakai, who introduced to me a new perspective on architecture. Each of his designs was tailored to the client's requirements, but always stayed true to his style - a harmonic balance between light, wind and space. One such example was the house in Hiramatsu, a home with no visible external windows on its façade. As per the client's request, the house was to be private, blocking any views to the inside from passers-by; the distance between the street and the house is almost negligible. As I approached the entrance (shown in the image), I was surprised to be greeted by a flood of light, despite the lack of visible windows that might have been the source of light. The slim corridor pulled me towards the light source, into the living room and I finally realized where the light came from: In the centre of the house was a courtyard that filtered light into the interior spaces of the house. The combination of approach and light when walking into the house was as if taking a breath of fresh air while the flood of light from the courtyard illuminating the living areas gave an outdoors atmosphere to an indoor space. Everything revealed itself as I took my first step into the house.

‘Letting the ideas of the client’s family and the architect’s own mature together into a joint project is always an exciting process.’

V-Shaped Villa
With Extensive City Views

Mehmet Caferoglu
Izmir, Turkey

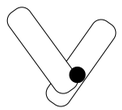
The aim of the design was to benefit from the exceptional location with its unique view by keeping the construction volume on the site as low as possible, while at the same time providing the highest possible quality of indoor and outdoor use.

Interacting Volumes
The ground floor, which is fully glazed towards the slope and accommodates the living area, is structured by V-shaped splayed supports and protrudes over the hill in an L-shape. Thus it forms a protective inner courtyard with a generous terrace and a pool. On the part of the building parallel to the slope, there is a partially overhanging level that opens up to the valley. It is used for the family's private rooms – the master bedroom, kids' room, bathrooms and personal office. The building part has its own roof terrace, which is entered by the main stairs. The cantilevered ground floor is situated on a basement block, which is built one level lower and parallel to the slope. The basement block's roof area is used one level higher as a roof terrace with a swimming pool.

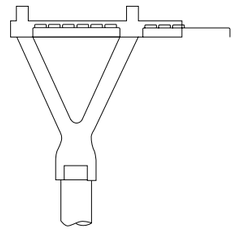
Privacy as Purpose
The building volumes are laid out so as to create maximum privacy. The main goal here was to create a central courtyard that acts as an intimate patio. In the parts of the building facing the neighbours and street, sunshades formed as linear concrete elements present the view of the landscape in areas such as the kitchen without interruption. This effect strengthens privacy.

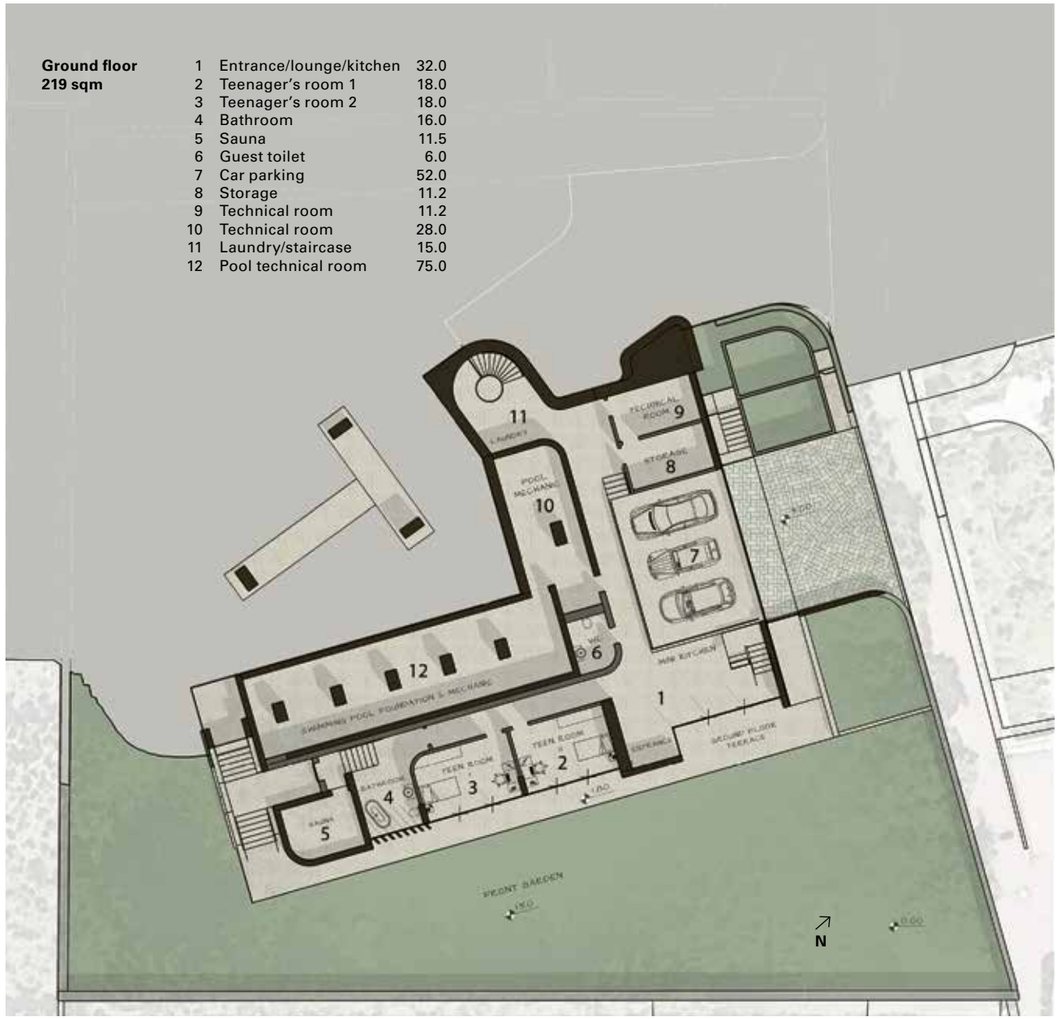
Catching the Best View
The second-floor bedrooms and roof terrace capture the best vistas of the landscape. Besides, this orientation enabled the building to have a unique V-shaped design. Special sliding sheets of glass surround all surfaces facing the inner courtyard. No reinforced concrete wall or columns is used in this façade as a structural element. V-shaped steel carriers entirely support the second floor on this façade. These steel trusses, which add a signature characteristic to the building, further strengthen the living room's panoramic view and gym with the dark grey colour used.

V-shaped Building
With its unique V form, the building ensures that every room enjoys lots of light and a phenomenal view. The design of the footprint results in a large open area in the middle, opening up the building. The unique design of the house is also reflected through creating a mixture of private and common terraces.



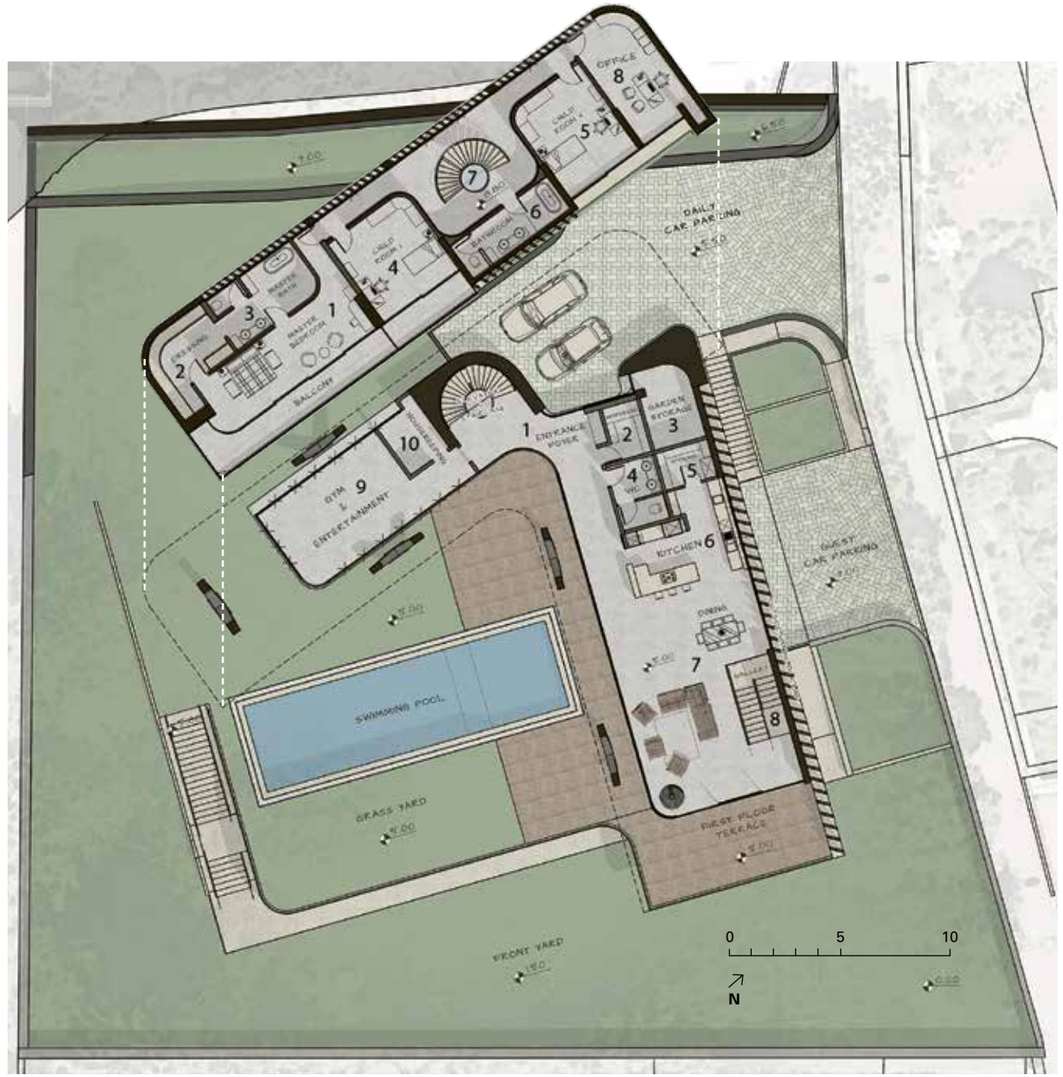
V-shaped Columns
The aesthetic aspect of this construction is given by the shape of the structural elements, in this case the V-shaped columns. The shape is based on technical considerations, the aesthetics of it being a plus. From the static point of view, the V-shaped column follows the load diagram and leads to a new, true structural form.





Ground floor			
219 sqm	1	Entrance/lounge/kitchen	32.0
	2	Teenager's room 1	18.0
	3	Teenager's room 2	18.0
	4	Bathroom	16.0
	5	Sauna	11.5
	6	Guest toilet	6.0
	7	Car parking	52.0
	8	Storage	11.2
	9	Technical room	11.2
	10	Technical room	28.0
	11	Laundry/staircase	15.0
	12	Pool technical room	75.0

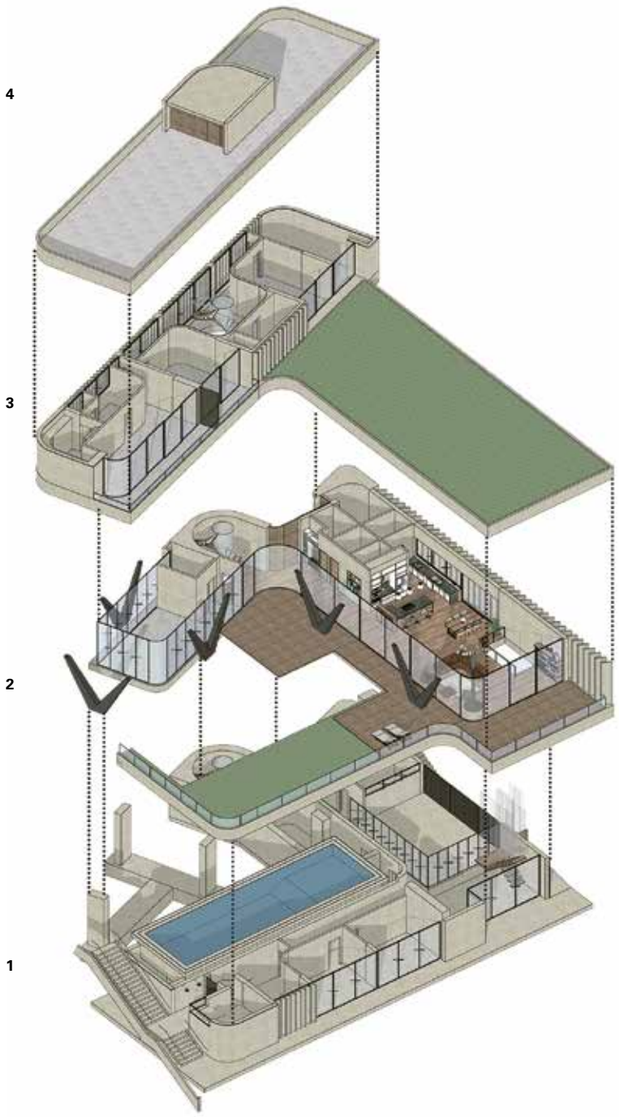
Ground floor	**219**
First floor	**225**
Second floor	**190**
Total sqm	**645**



First floor			
225 sqm	1	Entrance	25.0
	2	Wardrobe	6.5
	3	Garden storage	10.5
	4	Toilet	11.3
	5	Kitchen storage	5.0
	6	Kitchen	23.0
	7	Living room	70.0
	8	Staircase gallery	9.0
	9	Gym/entertainment	35.0
	10	Housekeeping storage	7.0

Second floor			
190 sqm	1	Master bedroom	31.0
	2	Dressing room	13.0
	3	Master bathroom	15.0
	4	Child's room 1	22.5
	5	Child's room 2	22.0
	6	Bathroom	12.0
	7	Staircase	25.0
	8	Office	22.0

ABOVE: Ariel view. The entrance and exit is located at the upper part of the plot via Betpfad.
LEFT: There is a separate driveway to the garage.
RIGHT: Driveway and daily parking lot in front of the house entrance.



Axonometric explosion drawing

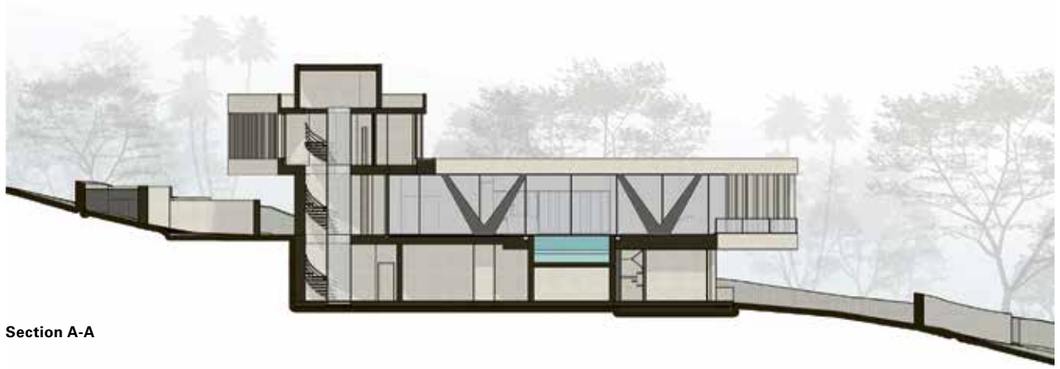
1 Ground Floor
The basement contains separately developable residential units, which can be used by the family or rented out. On this floor, there are also ancillary and technical rooms, a sauna, and the garage.

2 Common Areas
The main level is formed by the V-shaped floor plan with an inner courtyard. The staircase acts as a hinge. It connects the common area with the private building block and the technical rooms in the basement.

3 Private Areas
On the first floor is the private building bar. It is rotated 20 degrees to the upper property line.

4 Roof Level
The almost roof terrace with an area of 200 square metres is accessed via the circular stairs.

North elevation



Section A-A

Backyard with hillside view from the north side
In the parts of the building facing neighbours and the street, linear, sloping concrete elements form the openings.

Kitchen and dining area
The vertical, slightly inclined concrete shutters create ceiling-high glazing with simultaneous privacy protection.

East elevation

Section B-B

Construction and common areas
The main level is formed by the V-shaped floor plan with an inner courtyard. The V-shaped columns emphasize the visual aesthetics.

View toward the central courtyard
The common areas are openly designed with extensive glazing that allows visual references. The central point is the inner courtyard with a pool.

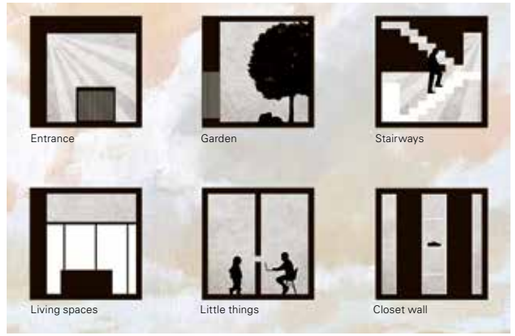
The Journey Home
Enhancing Spatial Qualities through Poetic Narratives

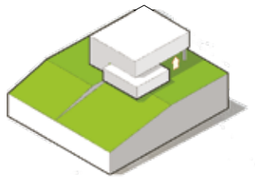
Yong Thang Shaun
Kuala Lumpur, Malaysia

Poetry of Light
Light is an element that could either give life to space or take it away. Both the presence and absence of light lends a certain quality to the spaces it affects. How does light welcome a person as they take the first step into their house? How does light emphasize an element as if it is a painting that changes depending on the time of day? This design introduces the poetics of light into its spaces to further enhance its spatial quality and to enable its users to experience a personal narrative that is home.

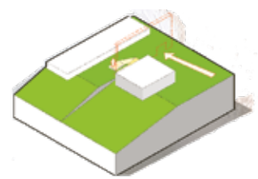
Blurring the Line between External and Internal
Situated at the top of a hill surrounded by greenery, the site is not short of beautiful views. Using spaces to frame these views by either minimizing or maximizing them gives each space its qualities. Showing a glimpse of the next space as if a preview to what comes next would create a sense of curiosity and expectation of what lies on the other side. How does one combine the beauty of its surroundings to the interior spaces of a home? This design blurs that line that separates them.

Spatial Narratives
Each space is a response to its user's needs. How would one want to be greeted as they approach the entrance of their house? How would one want to feel as they prepare a set of breakfast in the kitchen? What would one want to see as they transition from one space to another? While it is the bigger things that make a house, it is the little things that make a home.

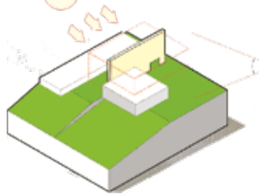




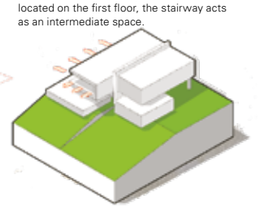
Parking
The main spaces are elevated to allow parking below.



Building shape
Circulation in and out of the house revolves around the wall. As the private spaces are located on the first floor, the stairway acts as an intermediate space.



Public and private
The wall separates the public and private spaces on both levels of the house. It visually disconnects outside views into the more private spaces and also shelters the bedrooms from the south-west sun.



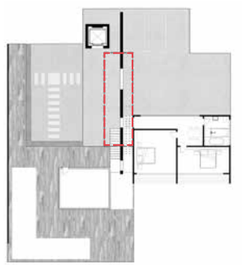
Building shape
The form consists of three blocks; ground floor bedrooms, upper floor bedrooms and open living spaces. The west block allows views to the beautiful scenery of the south-eastern and southern landscape.

Ground floor
105 sqm

1	Car park	
2	Main entrance	
3	Pantry	18.0
4	Toilet	10.0
5	Bedroom Leo	25.0
6	Bedroom Luis	20.0
7	Gym	26.0
8	Elevator	
9	Terrace	
10	Pool/Jacuzzi	

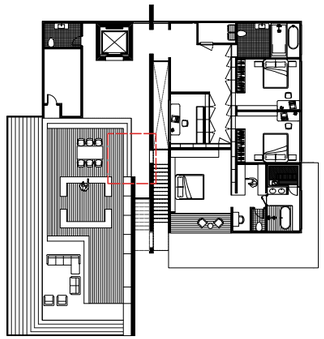
First floor
430 sqm

1	Kitchen/living/dining	110.0
2	Terrace	50.0
3	Storage	14.0
4	Toilet	5.0
5	Elevator	
6	Laundry room	4.0
7	Toilet	13.0
8	Corridor/closet storage	13.0
9	Office	12.0
10	Bedroom Ella	19.0
11	Bedroom Anton	19.0
12	Master bedroom	51.0
13	Sauna	5.0



The Entrance

The design strives to introduce the feeling of 'home' to its users at the entrance itself: from the warm slit of light that comes from above, highlighting the entrance door, to the preview of a warmer landscape that lies on the opposite side. The separation of private and public space defined by only a wall generated curiosity and expectations to users on either side of the wall.

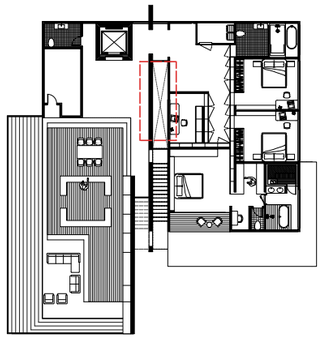


Light as a Guide

Light is one of the main elements of the house. The circulation from the garden to the stairs and finally to the living room is connected via the strip of light that illuminates the stairway separated by a wall. The presence of light brings continuity as one moves from one space to another. Just as in the garden below, one will be welcomed by a flood of light as they enter the living room.

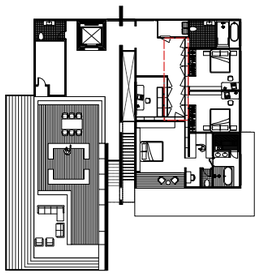
Little Things

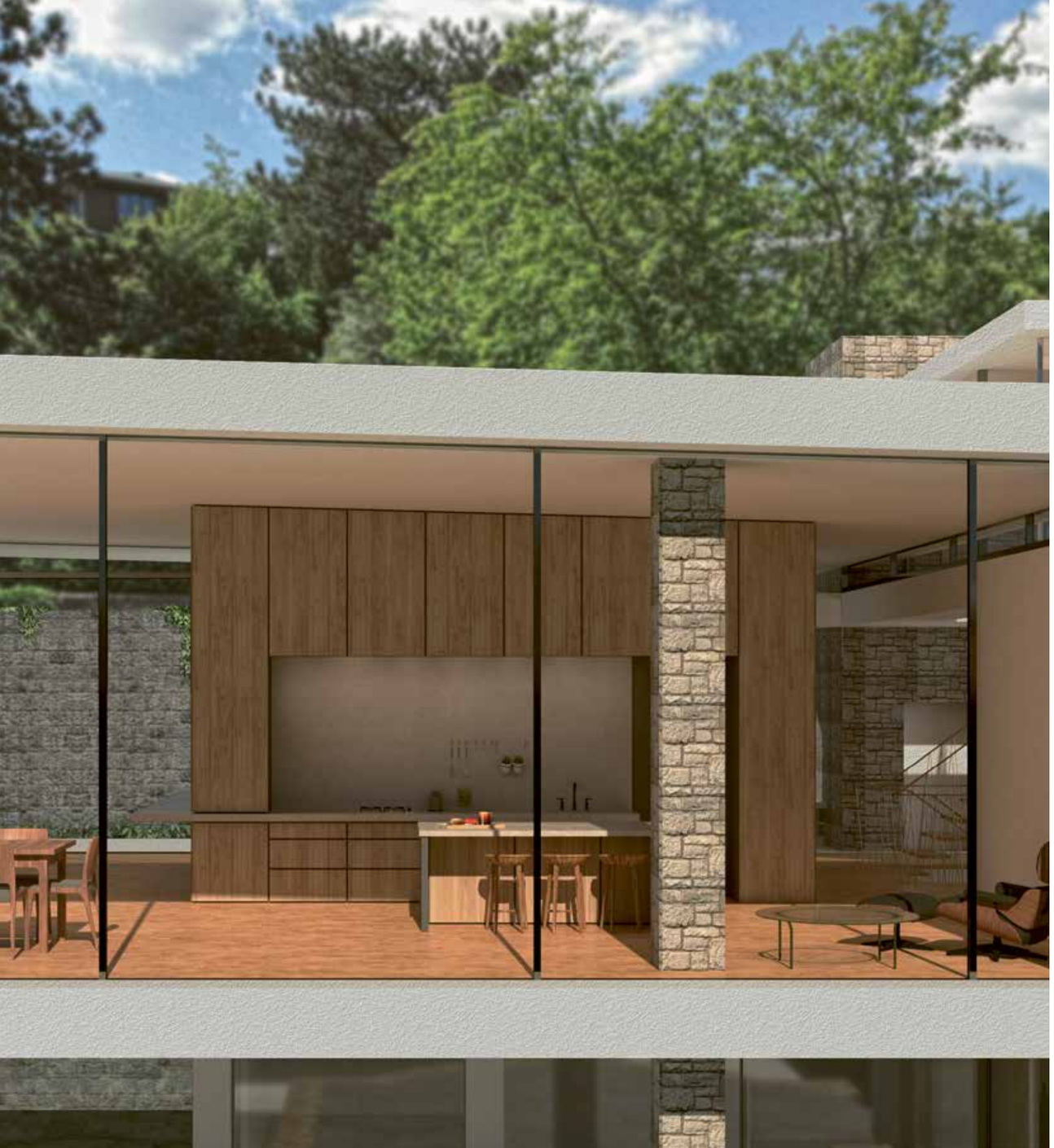
The wall is both an element that separates and connects. Visually, it prevents outsiders from seeing into the house's private garden on the ground level as well as separating semi-public spaces (cooking, living and dining areas) with the private spaces (bedrooms). However, the single slit about the height of child is added to the wall to allow the user from the office to have a glimpse of the activities that occur on the other side.



Closet Walls

A big house would definitely require ample space for storage, especially when the client is in the fashion line of business. Instead of only allowing closets in the individual bedrooms, the bedroom corridor is lined with closets that serves as a wall. One could open a closet to reveal a set of china dinnerware or find themselves in the bathroom of the house.





Back to the Future
Revisiting Mid-Century Modern

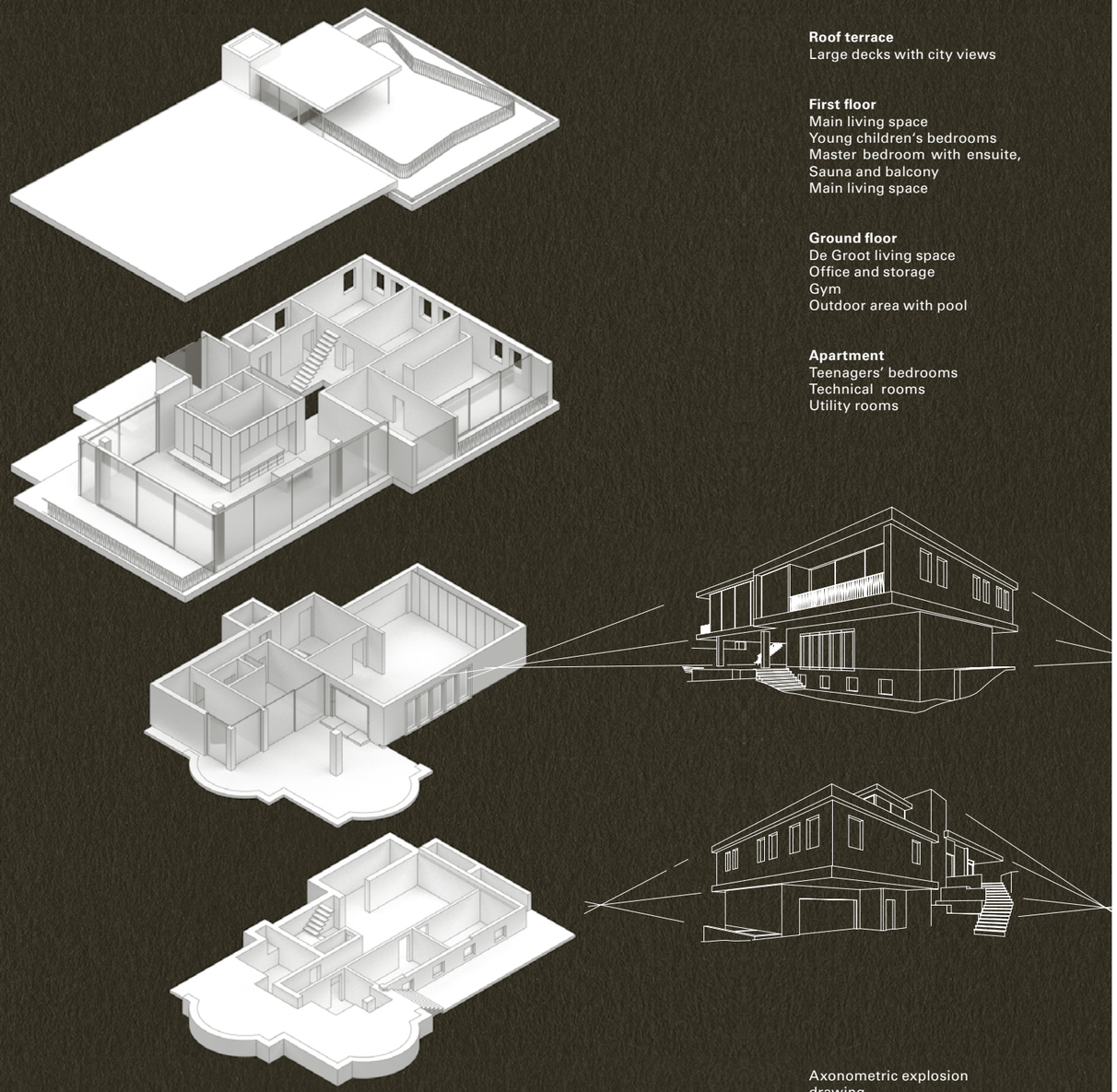
Tristan Bergmoser
Melbourne, Australia

Revitalise
When initially assessing our site, there is a temptation to demolish the existing building and start from scratch. This somewhat unremarkable house was built in the early 1950s and from images does not appear to be architecturally significant. Despite this, the old structure represents around 250 sqm of 'free' space. By maintaining this space, a costly demolition is avoided as is the environmental impact of discarding and rebuilding. Whilst outdated in design by today's standards, the house, planned by the notable German architect Fritz August Breuhaus de Groot, maintains a distinctive 1950s character. Somewhat of an architectural chameleon, de Groot's body of work includes mostly villa homes of varying styles and sizes. Along with his architectural pursuits, he was known for his design of furniture, interiors and the Hindenburg airship.

Recontextualise
In order to take advantage of the city views, most of the living program will need to be housed on a new first floor. In designing this light, open space on top of the existing ground floor and basement, several different types of space are naturally created. The character of each floor can therefore be moulded into a unique area that fits the function assigned to each level. Most of the everyday living functions are located on the spacious first floor, complete with an extensive open-plan living space. Light colours and timber are used here to reflect the expansive views from the hill plot. The ground floor is mainly occupied by the original house, which provides the opportunity to create a tribute space to the original 1950s styling. The basement level is currently a neglected space, however it is surprisingly well lit. This space will be converted into a standalone apartment space, one more colourful and playful than the other two levels. This bright styling will offset the basement location.

Rediscover
Whilst the original architect, Fritz August Breuhaus de Groot, did not maintain a cohesive style in his buildings, the mid-century period is well known for its distinctive architecture. The final design sought inspiration from his peers such as Richard Neutra and Mies van der Rohe. The sweeping roof and large pool area take inspiration from Palm Springs buildings such as the Kauffman House. The circulation of the first floor, based around a central core, is inspired by the layout of Mies' Farnsworth House. Although scaled up to fit a larger home, the simplicity of his original concept is reflected here. As mentioned above, the original De Groot living room has been converted into a new alternative living space. This is a love letter to the extravagance of upper-class 1950s living. The design allows space to park vintage cars and the decor encourages quiet reflection over a glass of whisky or cigar.

South elevation



Roof terrace
Large decks with city views

First floor
Main living space
Young children's bedrooms
Master bedroom with ensuite,
Sauna and balcony
Main living space

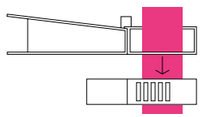
Ground floor
De Groot living space
Office and storage
Gym
Outdoor area with pool

Apartment
Teenagers' bedrooms
Technical rooms
Utility rooms

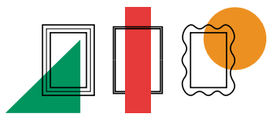
Axonometric explosion drawing

Original building materiality

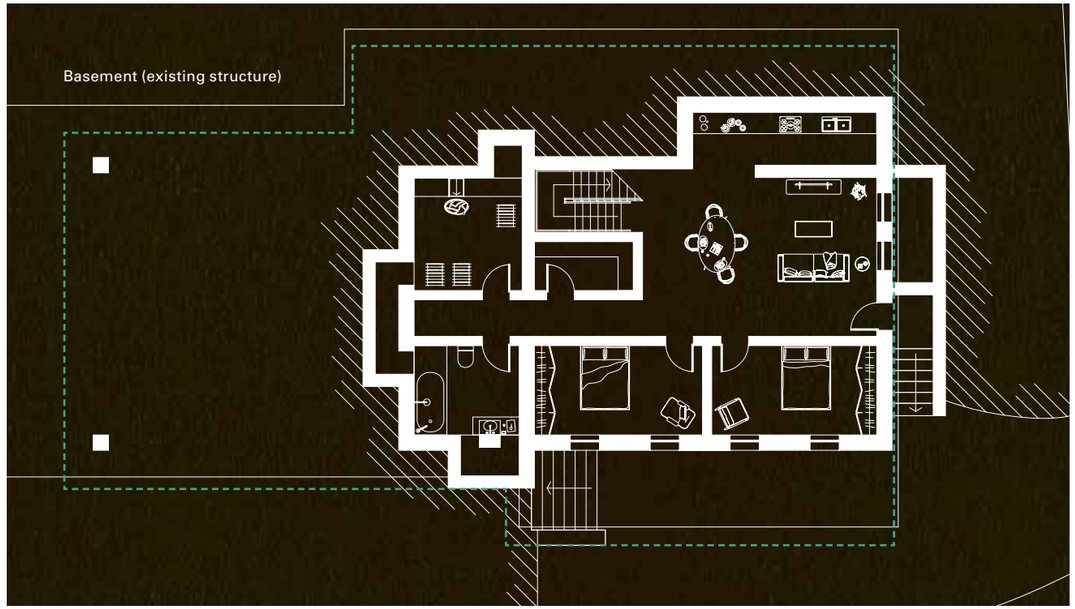
Revitalise

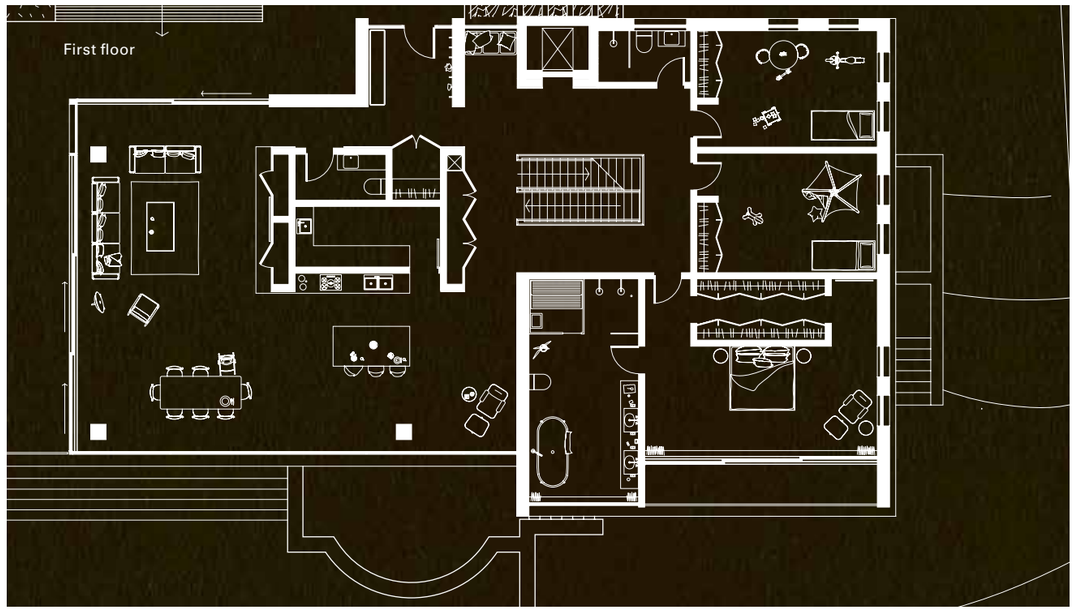


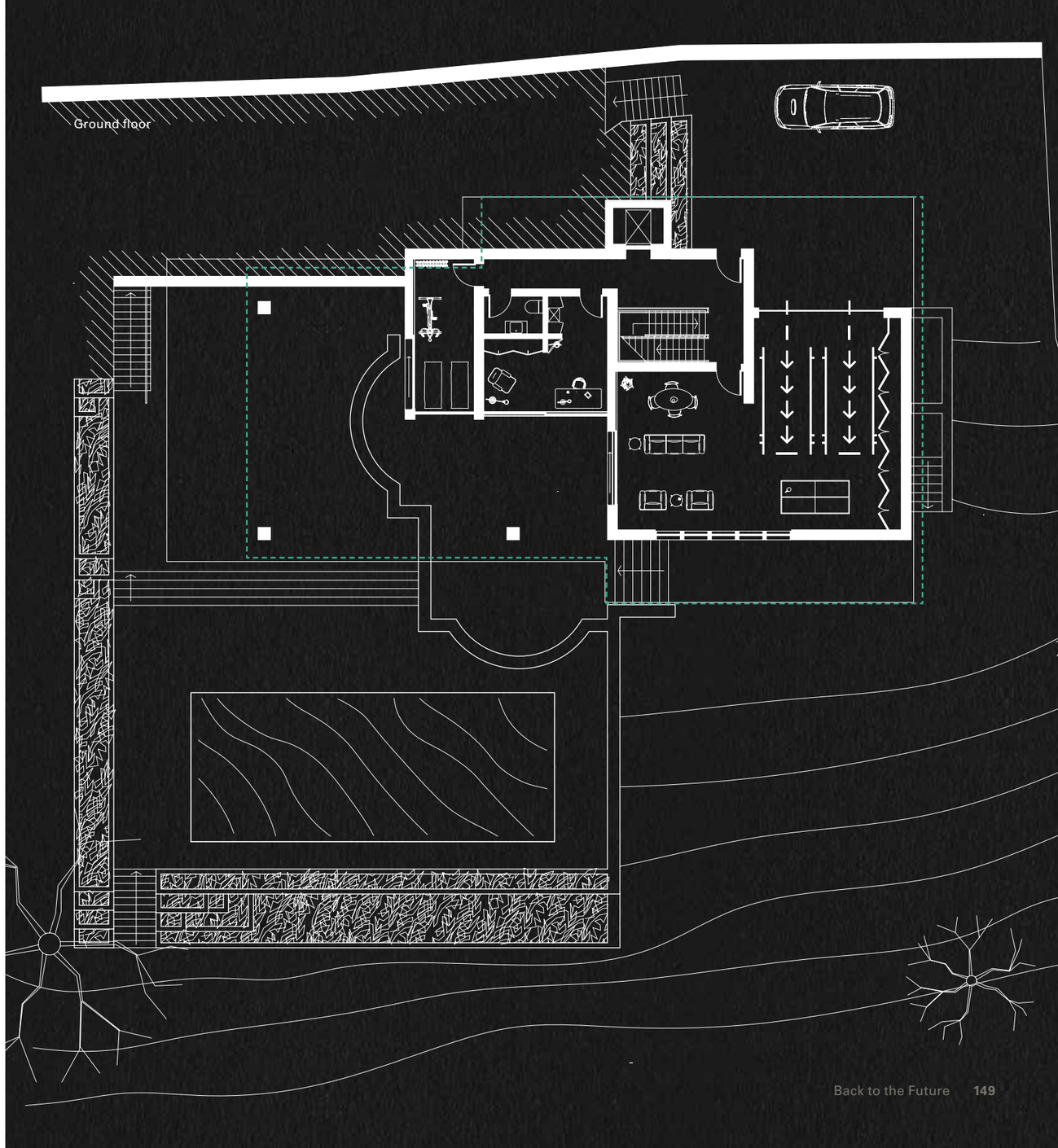
Recontextualise



Rediscover


Basement (existing structure)

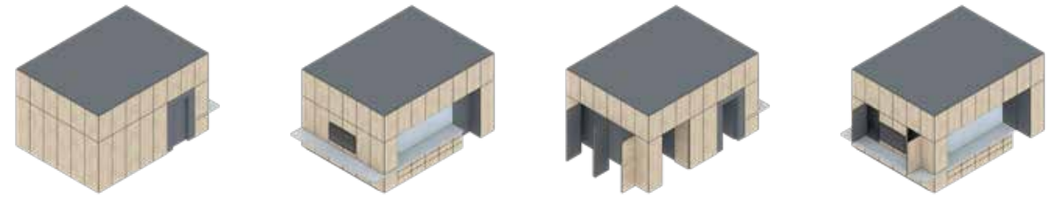

First floor


Ground floor

First floor living

De Groot living room

Lower ground apartment



Internal core
First floor

First floor living

De Groot living space

Roof terrace

The Three Puncture
A Bar with Vision

Surabhi Nigam
Indore, India

Like a large imprint of a wild animal, the house claws into the mountain. The building stands out for its unusual dimensions and shape. If you are building on a steep south-facing slope with a beautiful view, one thing is clear: the house must open up to the light and the view. Because of the steep slope of the terrain, one almost feels like one is floating above the wide valley.

The building consists of three rectangular shapes oriented along the contour lines of the hill to create both dynamic and unique constellation of rooms. The final composition establishes the framework for an individual room organization of the traditional family home. The finger-like bridges extending out from the common area create moments and thrilling interactions between the different areas of life, facilitated in each. The core of the house consists of an open living area. Each bar houses unique programs of modern life. The rhythm of voids and spaces creates a series of moments and interactions between them. Being unable to move directly across each room forces its inhabitants to do new forms of interaction and vitalizes the transit. It is thus activating every corner of the house.

The residence opens up to the south with three generous glass fronts. In between the bars, courtyards connect the various functions. The basement is a hideaway for both family and guests with a fitness room, guest room, office, and lounge area for the two older kids. A common private courtyard connects several rooms. The entrance of the house is on the ground floor, including a barrier-free elevator. The upper floor is accessed via a generous staircase that leads to an open space, the core heart area of the house. From there, the residents reach common living areas with a different grade of privacy. The bedrooms are located in the western block, with the children's rooms facing north. The living and kitchen areas are connected via a terrace, which nestles between the two wings.

Ground floor *(230 sqm)*

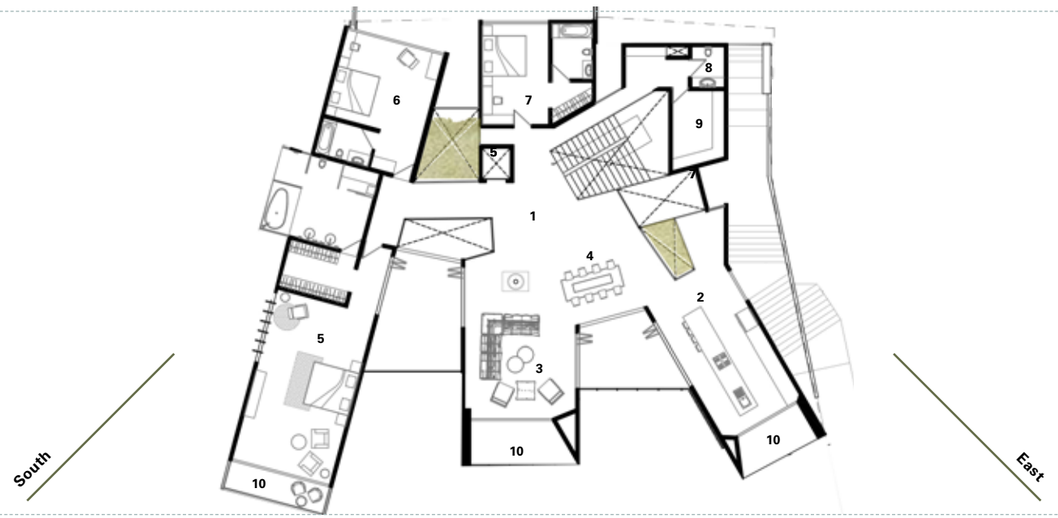
1	Entrance/circulation	30.0
2	Lounge	25.0
3	Suite Luis	35.0
4	Suite Leo	40.0
5	Office	13.5
6	Laundry	5.0
7	Security	4.0
8	Wardrobe	5.0
9	Gym	20.0
10	Garage	50.0

Specifications
Site area: 2,000 sqm
Total floor area: 525 sqm
Structure: frame structure
Materials: concrete, rammed earth, glass, metal.

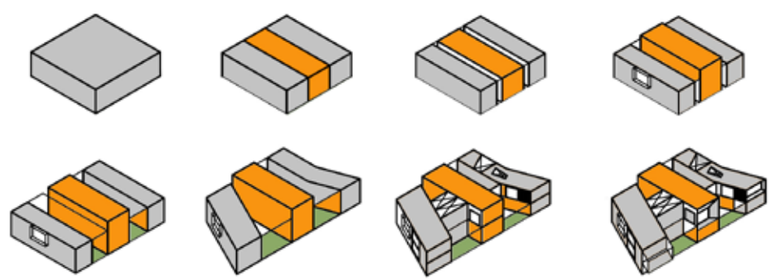
Building Shape
The building consists of three rectangular shapes oriented along the contour lines of the hill to create both dynamic and unique constellation of rooms.

Inspiration
Multiple differential spaces force its inhabitants to do new forms of interaction and vitalizes the transit. A rhythm of voids and spaces creates a series of moments.

Orientation
The residence opens up to the south with three generous glass fronts. The rooms are optimally lit through the rotation of the building bars.



Design Concept
The diagrams show how elements within the design program developed and how the building cubes interact with each other.



First floor *(230 sqm)*

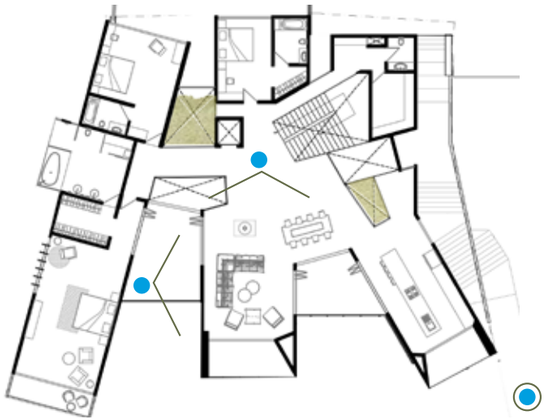
1	Circulation	30.0
2	Kitchen	30.0
3	Living	43.0
4	Dining	10.0
5	Master suite	65.0
6	Suite Ella	20.0
7	Suite Anton	19.0
8	Guest toilet	4.0
9	Servants/storage	12.0
10	Terraces	65.0

South elevation

Pool area

Section

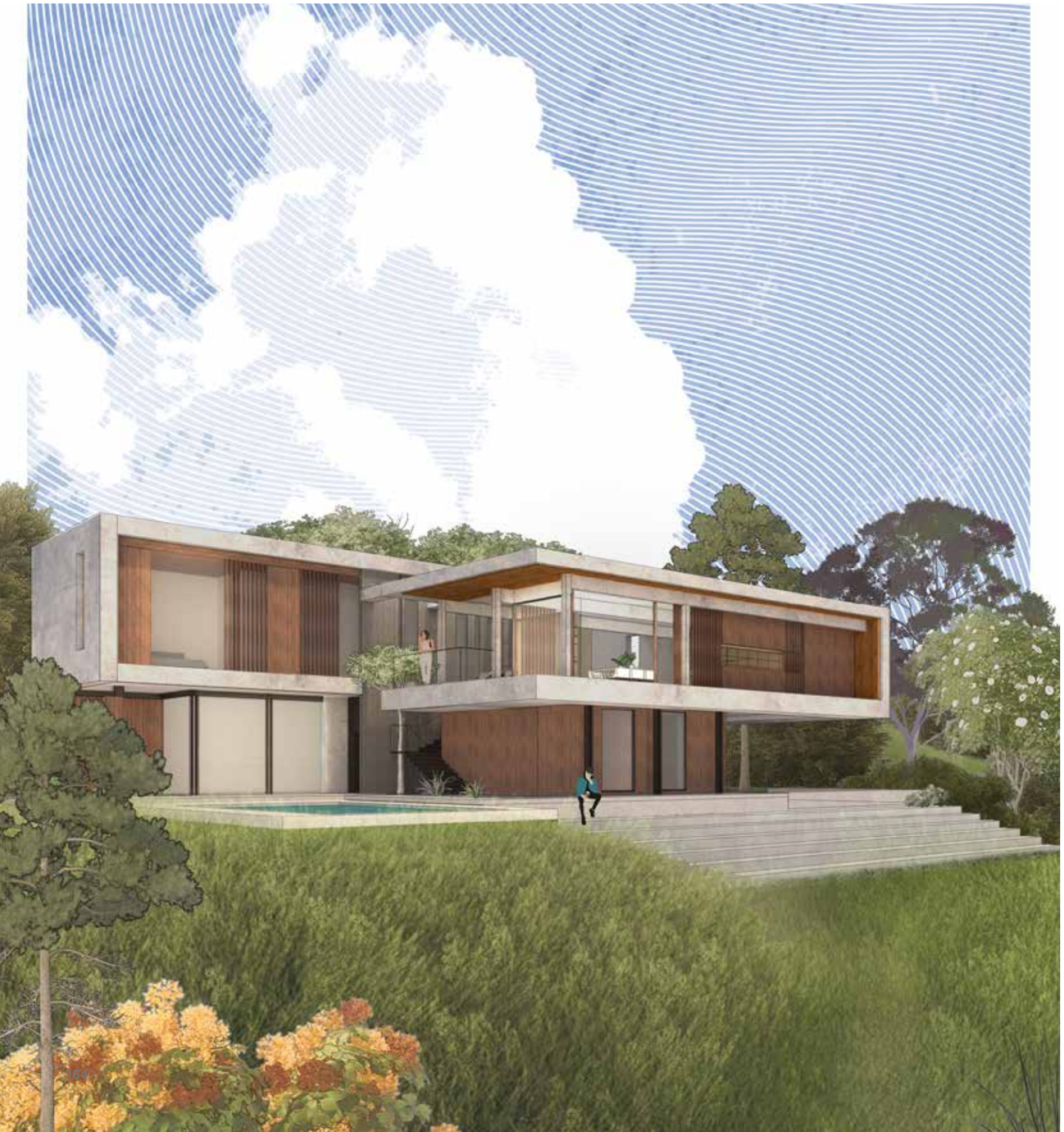
Night Perspective: Garden View
The building is designed in a way that every opening becomes a inviting entrance into the home. The facade breaks up the usually flat back of the house into a dynamic surface through which the eye of the viewer can meander.



Camera position

Open Living Room
The finger-like bridges are grouped around an open core area of the house. They protrude 5 to 7 metres above the base floor. The bars each take up different areas of life and open up visual references.

Open Floor Plan
Despite the architect's strong spatial moves, the family's common area remains a centrepiece of the house and retains its open floorplan.
RIGHT: We spend our lives immersed in ever-changing environments of light.



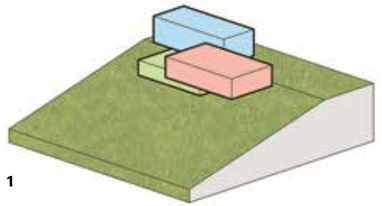
Frame House
Integrating Views into Spaces

Ee Dong Chen
Kuala Lumpur, Malaysia

Walls as a Privacy Statement
A home is a sanctuary where one can retreat to relax in peace. Privacy is the most important factor in the design. To counter nuisances from the street and the eyes of prying neighbours, a huge wall is established as an architectural statement to accentuate the importance of privacy.

Blending Interiors and Exteriors
As the building is situated on a high site, it'd be such a waste to not extend views from inside to outside. However, the exterior surroundings and nature can also be brought into the house and integrate them with life within. The openings that puncture the walls essentially act as large windows that 'frame' the view of the outside picturesquely. Views are not just about looking from inside to outside; they are also about bringing the outside inside.

Spaces that Flow
Journey, interaction and views – in my opinion these are the elements that makes a home more engaging to its users.
Dining, living, kitchen, terrace – they are all treated as one big open space, a special space where the family gathers and update each other about their lives. Hence, I wanted to establish one huge space where everything and everyone comes together without forgoing what each space was meant to function as. There is a smooth transition of space without the need for walls. Hence, on the first floor where the family spends most of their time, floor levels are used in this sense – there are almost no doors or solid walls in the 'living spaces' unless they are private rooms.



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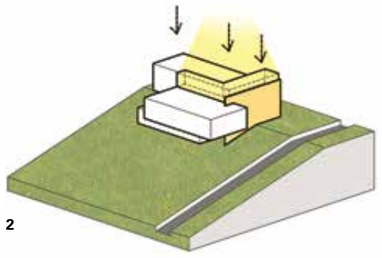

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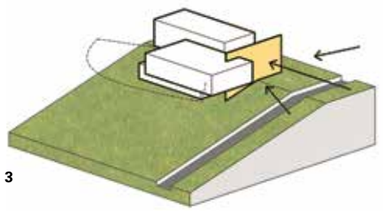

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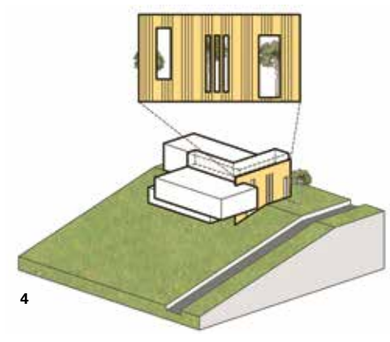


4

1 Interlocking Blocks
Spaces of the house are zoned according to needs: private rooms, living spaces, and other ancillaries.

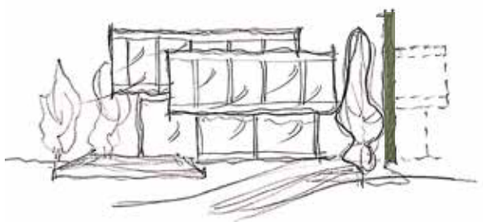
2 Light and Circulation
Natural light is brought into the home through skylights to ensure spaces are well-lit.

3 Framing Views
Bringing the exterior into the interior. The inhabitants of the house have their own space but with a sense of the outside. Views are not just about looking from inside to outside; we can bring a little of the outside into the house as well.

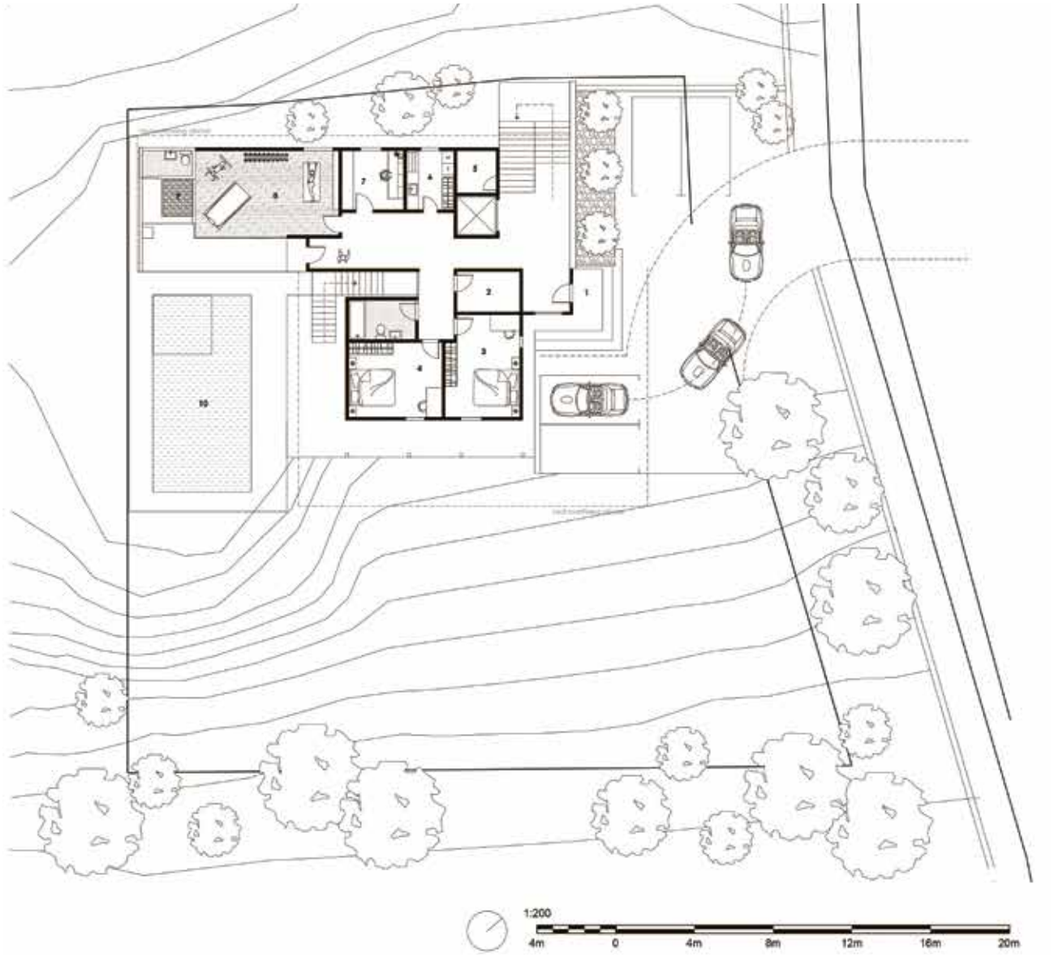
4 Textured Wall as an Architectural Feature
To accentuate the public-private divide in the direction of north-west to south-east. It is a privacy statement to block important private spaces from the prying eyes of neighbours on the top, the side and from the street.

5 The Aesthetics of Spatial Boundaries
In this design, the wall becomes a vertical plane. It begins to claim attention as a sculpture or a scene by providing the framing background for what happens in front of and behind it. The sketches below show variations during the design process.

5



Entrance
An introverted design where a wall shields the user from the openness of the street. Upon entering, one is guided up the main staircase by a flood of warm, natural sunlight along the textured wall that gives the home a little more architectural definition.



Ground floor *(inside: 130.5 sqm/outside 96 sqm)*

1	Entrance	39.5
2	Storage	6.5
3	Room Luis	19.0
4	Room Leo	18.0
5	Technical room	5.0
6	Laundry	7.0
7	Office	9.5
8	Gym	31.0
9	Shower/guest toilet	7.0
10	Pool/Jacuzzi	40.0
11	Outdoor deck area	45.0
12	Corridors	26.0

First floor *(262.5 sqm)*

1	Living	59.5
2	Kitchen	17.5
3	Dining	22.0
4	Terrace	31.0
5	Pantry	9.0
6	Storage	8.0
7	Master bedroom	52.0
8	Room Ella	16.5
9	Room Anton	16.5
10	Misc./toilets/walkways	30.5

A Modern Design with a Mid-Century Touch
The house will be kept into a minimal palette of simple materials – thick concrete C-shaped shells supported by concrete frames, glass and a mix of black steel mullions. To achieve an integration of mid-century modernist style. the use of wooden accents help bring out a mid-century vibe and warmth to the design.

Access
A little cosy nook as an in-between space, mediating the living, dining and kitchen with the outside terrace. Another flight of stairs leads to the pool directly.

Journey
The first sight that meets the eye as the user makes the journey up to the main floor is the kitchen. This space is on a platform, raised slightly above the other spaces.

A Stage on the Hill
Preserving What Exists

Adriano Borges Dantas Rodrigues
Ribeira do Pombal, Brazil

The simple shapes are strong silhouettes in a colourful landscape. They are inspired by the curved lines of Roberto Burle Marx. There is a strong villa at the top. This wood box oriented towards Würzburg isn't just a simple box. The wooden pallets on the façade play with the observer's perspective – an optical illusion made possible by the different sizes and orientation of the pallets. They give movement and a feeling that they are separate volumes, but joint in a simple and elegant fit.

The shaping of the landscape took its starting point from the existing context. It goes along with the shaded areas, connecting the existing garage, with a bifurcation connecting the pool and the new garage uphill. The colour contrast of the pavement, black and white, is a characteristic and also a tribute to the sidewalks designed by Burle Marx. It brings a tropical environment to Bavaria, in the southern part of Germany.

When inside you will experience an interior that is well connected both horizontally with vibrant and bright corridors, and vertically with a staircase that follows the curved concrete wall in the heart of the house. Also, the interior is simple and rectangular, as the family intends to spend generations living there; this way, it is easier for them to make adjustments and add extensions without losing the aspect of the architecture.

On the first floor, the office has a privileged view of the gardens and Würzburg as well. The teenagers are close to each other on this floor, which gives them privacy. The gym also works as an aquarium, with large glass sliding doors which connect outside and inside; workouts are therefore more integrated into both the house and the landscape. The guest room has total privacy and works as a hotel room within the villa. Also, the guest room and the garage doors are made as one element, with sliding wood panels. It is an elegant sight for those arriving at the new entrance on the top of the hill.

Upon entering the second floor, you arrive in a 17 x 2 metre corridor with plenty of sunlight from the skylight and a huge window at the end of it. It also connects the childrens' area on the right side and the parents' areas on the left side. This way, the kids have enough space to play within their rooms and in the corridor itself, without disturbing what's going on in the living room. The living room, kitchen and pantry work together as one entity, but with two completely different environments. The living room has a grey furniture colour palette; meanwhile the kitchen and the pantry feature clean, white cabinets.

The master bedroom has a bath with views to the woods in the backside, a dressing room connecting the bath and the room, and the room opens to the balcony. All these four elements are linked very directly. This makes the resident couple's routine of taking a bath, resting and contemplating Würzburg as pleasant as possible.

References: Façade and Landscape Elements

Raymand Jungles - New York Botanical Garden, 2018
New York Botanical Garden, 2018

SEHWArchitektur
Einfamilienhaus in Berlin, 2018

Arquitetos Associados
Centro Educativo Burle Marx, 2009

How Roberto Burle Marx Elevates Landscape to Art
You return to Eden by preserving what exists of the original or creating new versions of it. Roberto Burle Marx, the great Brazilian landscape architect, did both. From the 1930s onwards, mainly in South America, he designed some of the modern world's most distinctive parks and gardens. The aim of this design is to transfer traditional artistic expressions into the landscape design, by using abstract forms, shapes and colors.

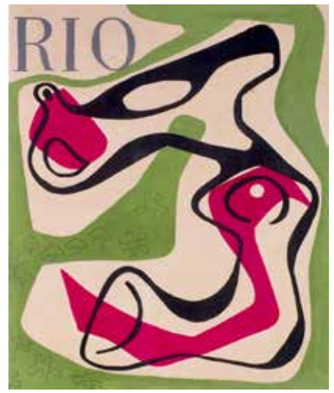
SEHWArchitektur
Einfamilienhaus in Berlin, 2018

N+P Architecture
Villa S, 2015

An Architecture in Solid Wood as a Contribution to Sustainability
Wood was always present. Present in nature and present as a building material. We are used to wood indoors and outdoors, in the cities and in the countryside. The untreated wooden façade of a cottage, the south wall bleached by the sun, the north side uniformly grey. All made of wood. As children, we built huts out of scraps of wood, both of us. We cut down trees in the woods and made fires while hiking. Let us think of houses, or more precisely, old houses, then immediately of wood, its grain, its smell and the sound of an old wooden floor when you walk across it.

SEHWArchitektur
Einfamilienhaus in Berlin, 2018

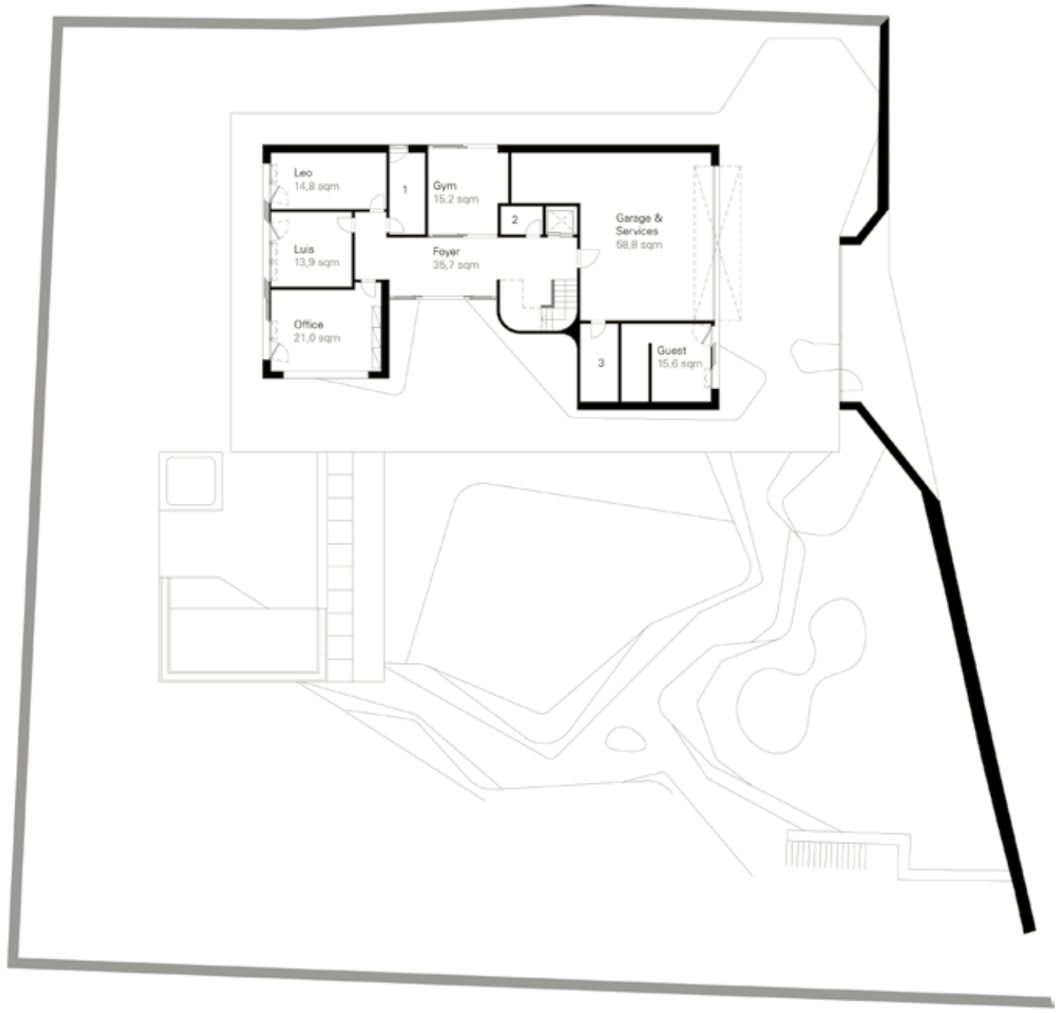
N+P Architecture
Villa S, 2015



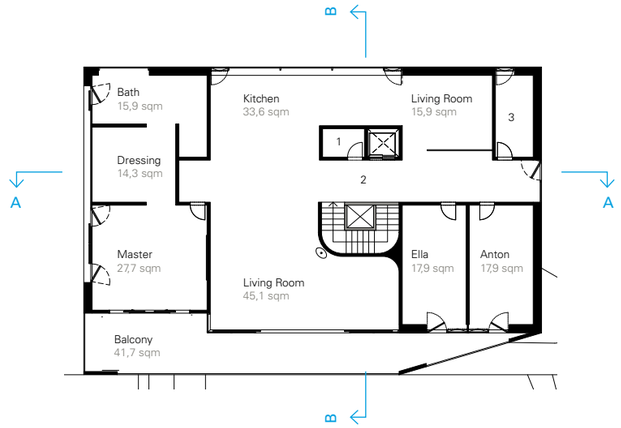
A Garden Like a Sculpture
Cover design for a 1953 issue of *Rio* magazine. Burle Marx experimented with new forms in different formats, including works of sculpture, which he often integrated into his landscape designs.
Image Courtesy of Sítio Roberto Burle Marx, Rio de Janeiro

Bird's-eye view

East elevation street view

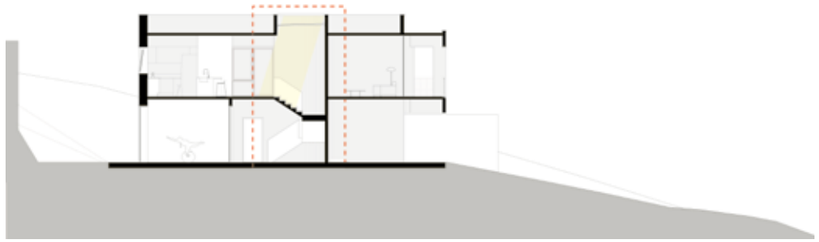


Ground floor (133 sqm)



First floor (163 sqm)

Section A-A

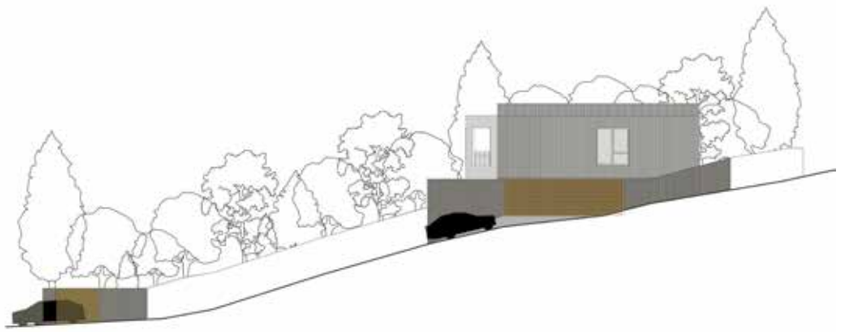


Section B-B

South elevation

North elevation

East elevation

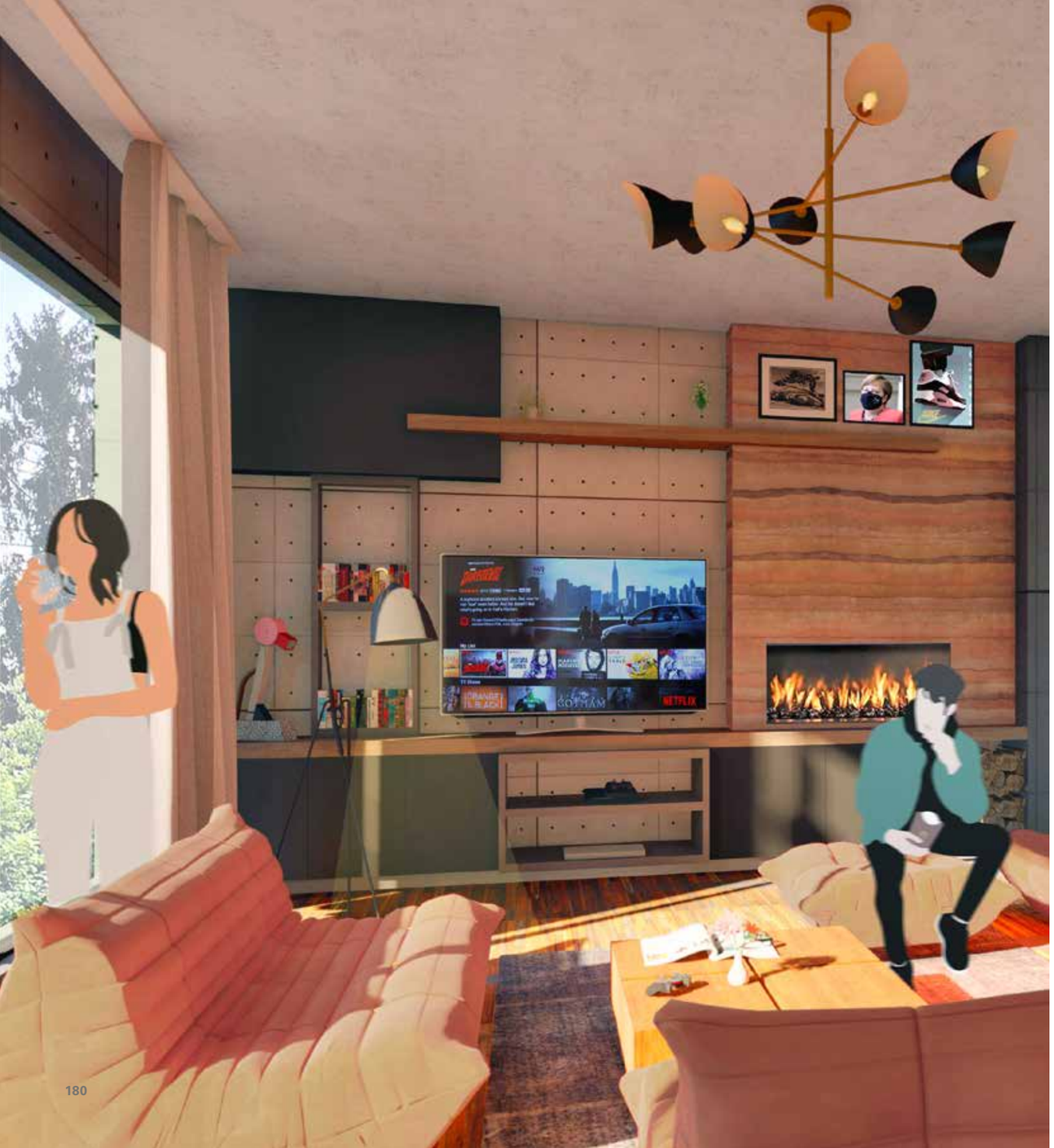


Street elevation

Pool area

Entrance area

Kitchen and living area



Parallilismós
An Architectural Veil

Anotidaishe Mavazhe
Harare, Zimbabwe

Enlivened by beam structures. Concrete rectangles perpendicular to one another form unique dwelling. A rammed earth column stands as the vertical element holding the house. This house was imagined as an unfurling arrangement of basic geometric structures that composes an entire spatial experience. The structure plan is moderate and the material scale is monochrome. It incorporates exposed concrete, and wood, all found in shifting amounts on the outside just as the inside of the home. The material and shading palettes were enormously controlled so not to overburden the space; permitting space itself to be a sufficient airy platform. The floor plan of this house consists of two main areas for living and sleeping, each of which opens onto views of the landscape.

Design Composition
The house is made from the idea of beam structures, supporting each other in the form of an upward parallel spiral. The form is of simple geometry and clear, sheer lines. This technique creates interesting juxtaposing spaces within the dwelling.

Materials
Taking on the challenge of constructing a building that fits within the landscape. Inspiration from the Beam geometry led to the use of concrete as the main material. Concrete is used to create a weathered camouflage.

Views/Courtyard/Patio
The Dwelling has an architectural veil that focuses on the threshold and transition between inside and outside spaces. The courtyard and patio provides light into the house as well as ventilation summer.

Ground floor *(141 sqm)*

1	Room Luis	17.0
1	Room Leo	17.0
2	Bathrooms	14.0
3	Laundry	6.0
5	Office	11.0
5	Gym	13.0
6	Pool	44.0
7	Garage	36.0
8	Entrance hall	63.0

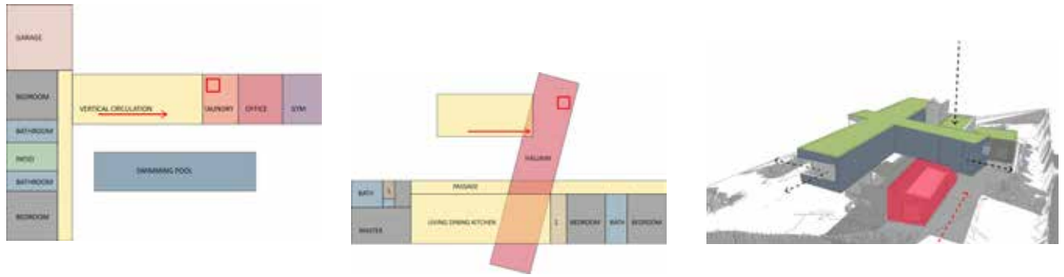
Ground floor

Section B-B

Ground floor *(182 sqm)*

1	Master bedroom	32.0
2	Open space	102.0
3	Pantry	6.0
5	Kids bedrooms	28.0
5	Bathroom	13.0
6	Hall	44.0
7	Entry hall	36.0

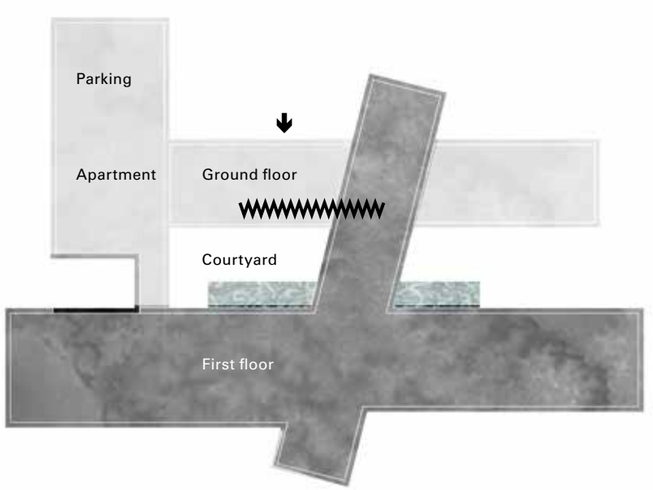
First floor



Functional diagrams

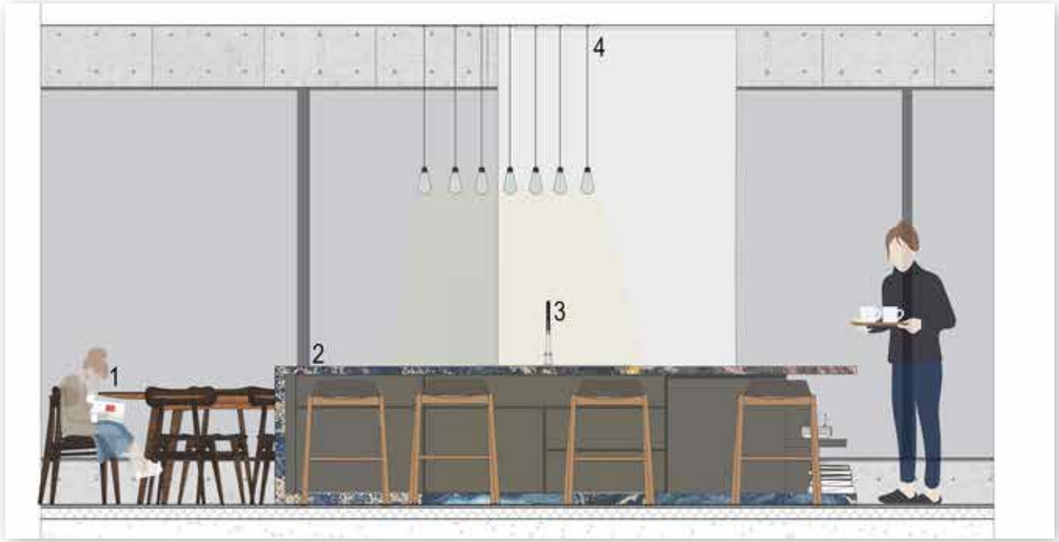
East elevation

Section A-A



Legend

1 Safavich retro carpet
2 Walnut coffee table
3 Togo sofas
4 Agate island table
5 Stainless steel kitchen sink
6 Walnut veneer black leather stool
7 Agate kitchen unit
8 Kitchen fridge unit
9 Mid-century walnut table
10 Wooden floor



Living and dining area

1 Linen cotton curtain
2 Rammed earth fireplace
3 Fireplace
4 Bookshelf
5 Floor lamp
6 Wooden door

The Unordinary House
Rethinking the Basic House Form

Sanem Bakan
Izmir, Turkey

What is the first shape that comes to your mind when we say house?

The design was designed as a form, inspired by the simple home form that first appeared in our minds. The purpose of the design is to question the known home form again using sustainable materials and an open plan layout. Accordingly, the simple house form was divided into two to create two zones. These two different zones were separated as night use and day use and positioned according to the sun and vistas. The kitchen and circulation part placed in the middle of the house. The kitchen located in the hearth of the house is designed as a gathering area for the family.

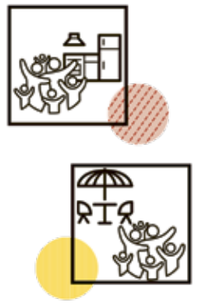
For clients who care about the use of terraces and kitchens, areas where they can use these areas in different ways have been created. Terraces with different purposes were created around the house. Entrance terrace, pool terrace, main terrace and green roof created to catch different views on the site. While the green roof creates a garden on the house for the family, it also collects rainwater and offers a sustainable solution.

The main entrance to the house is on the first floor that was raised to a height of 1.5 metres to fit the slope of the land. It was built with a ramp and a ladder for direct access to the first floor. Thus, an uninterrupted use was provided between the first floor and the back private garden. Also, raising the first floor by 1.5 metres from garden level gives an advantage for the parking lot. The entrance terrace creates a parking lot underneath with using the slope of the land.
The first floor contains almost all the spaces for everyday use. The main bedroom, children's bedrooms, kitchen, dining room, living room are situated in this area. From the living room, the office on the rooftop and the green roof garden can be reached via stairs and an elevator. On the lower floor are the entertainment area, gym and technical rooms, along with the rooms of young people independent from the family.

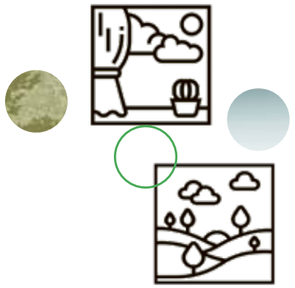
Rammed earth, concrete and steel were used as main building materials. Thus, sustainable material use was increased while creating a modern industrial style in the architecture of the house. In addition to being a sustainable material, rammed earth contributes to the interior architecture. It is designed as an element added to the interior design such as the fireplace, cabinets and shelves – all are designed on these thick walls.

PLANNING PARAMETERS

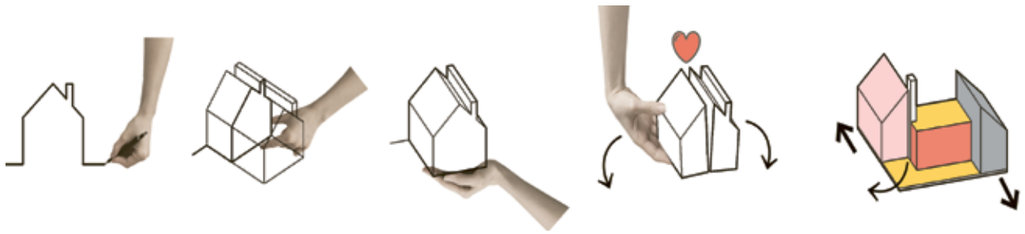
Space and Order
Life around the kitchen



Vistas
Frame the views



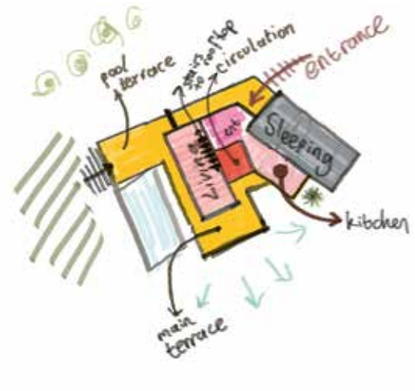
Sustainability and Materials
Harmony of textures



Draw **Pull** **Make 3D** **Break** **Arrange**

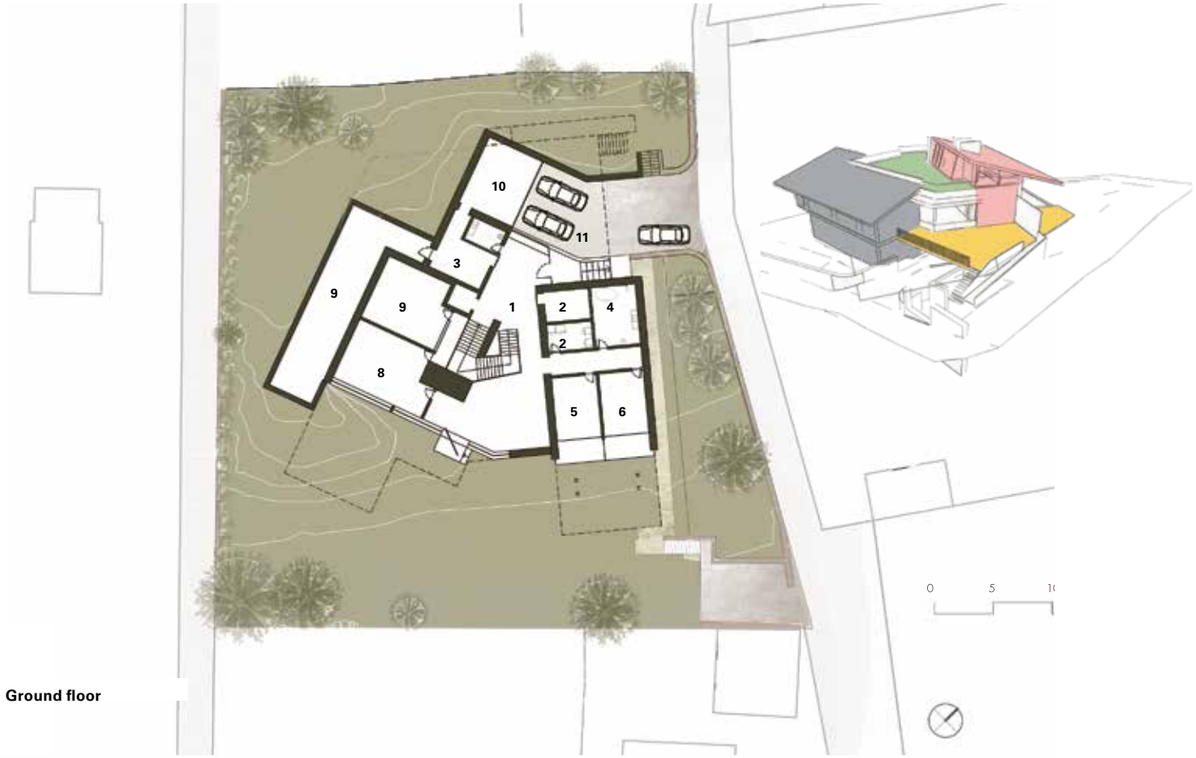
The spaces are designed in volumes that are divided into two: a **private zone** and a common zone. The kitchen and circulation part is placed in the middle of the house. The kitchen located in the heart of the house is designed as a gathering area for the family.

Terraces with different purposes were created around the house. There is an entrance terrace and a pool terrace. The main terrace and green roof are designed to capture the various different views on the site.



Sustainable construction is a cycle that includes living organisms, *Animalia*, and *Homo sapiens* in a balanced environment. Sustainability is the ability to continue a defined behaviour indefinitely. Environmental sustainability is the rate of renewable resource harvest, pollution creation, and non-renewable resource depletion that can be continued indefinitely. In the construction field, buildings should be designed around environmental constraints. Construction materials should be locally sourced, replenishable, compostable, non-toxic and demountable. The roof is finished with solar panels that provide energy for electricity and hot water.

The aim of the project was to follow an expressive architectonic form using materials that allow a robust quality. The roof was lifted and twisted in response to sun orientation, allowing the PV panels to benefit from it. It collects rainwater, harness solar energy, and controls natural lighting into the centre of the plan at different times of the day via light canon. The house takes advantage of its passive design elements, corresponding with its solar and sebum roof allows natural sun lighting in from its openings towards the scenic landscape, as well as sun shading during summer and heat gain during the winter.

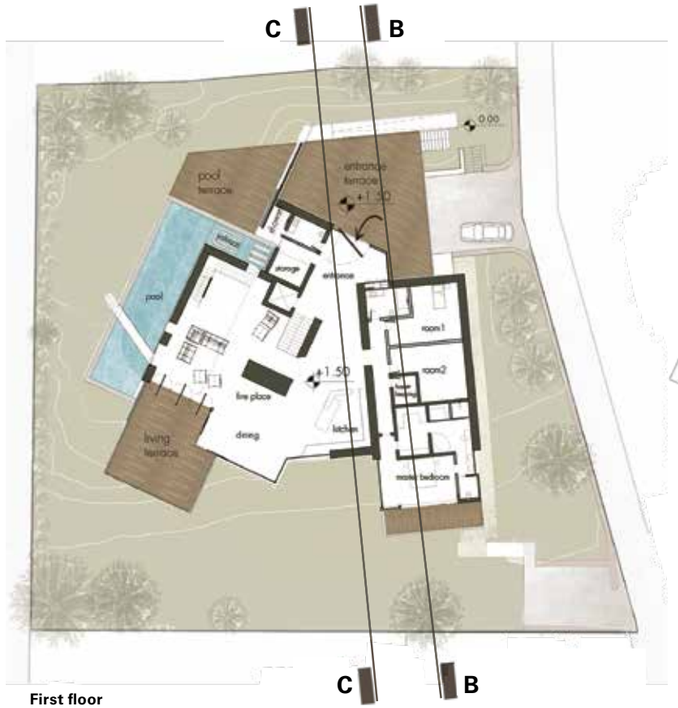


Ground floor

Section C–C

Ground floor *(334 sqm)*

1	Entrance/ward./toilet	25.0
2	Storage	30.0
3	Laundry	10.0
4	Bathroom kids	18.0
5	Room Leo	24.0
6	Room Luis	24.0
7	Kids Lounge	45.0
8	Gym	35.0
9	Technical room	95.0
10	Storage	18.0
11	Garage	30,0



First floor

Roof plan

First floor *(315 sqm)*

1	Entrance/ward./toilet	45.0
2	Kitchen	25.0
3	Living	75.0
4	Dining	30.0
5	Storage	10.0
6	Bathroom kids	13,0
7	Room Ella	24.0
8	Room Anton	24.0
9	Housekeeping	9.0
10	Master bathroom	20,0
11	Master bedroom	40,0
12	Terraces	(210,0)

Roof *(37 sqm)*

1	Circulation	12,0
2	Office	25,0
3	Green roof	(150,0)

SectionB–B

Section

South elevation

Pool area

Dining area

Sanctuary Home
Triad of Privacy, Retreat and Vision

Ashfaq Bin Arif
Dhaka, Bangladesh

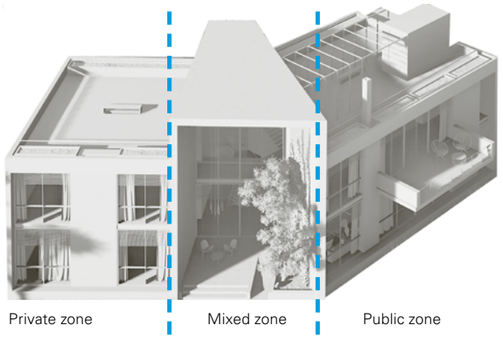
A home is a place where we feel the most connected on a personal level, where we can sit carefree on the floor even though there are chairs and couches nearby ready to serve! It is a place of relief and relaxation after a hectic day from the office, college, or school. I visualized a home as a cosy and open space at the same time. It will give the right amount of exposure to the exterior while keeping spaces to retreat and reflect.

The site on Betpfad 3 in Würzburg is a dreamland to live in and raise children. Being a hilly site, and greenery on all sides I wanted the project to celebrate this beautiful bond of the site with nature. I used some interesting transitional spaces, a fountain, a garden, a playground, a swimming pool, and an open deck for a playful flow of connection between the interior and exterior spaces. Children feel the happiest where they can run and play around and release their energy. In terms of form, I wanted to keep a straightforward form in terms of function and visual appearance. I started with three blocks of private, mixed, and public functions in terms of zoning. I introduced an angle between the forms to follow both the site alignment and the North-South alignment. To achieve this, I introduced a fifty-degree angle between the two blocks. The Eastern block has all the private functions, while the Western block has all the public functions. And there is a triple-height shaded deck along with a special family stair. On the first floor, this connecting block becomes a bridge connecting public and private.

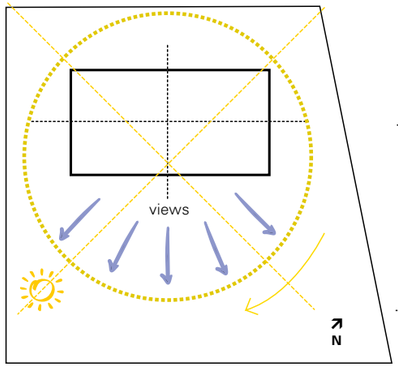
In terms of site and surroundings, this location has a north to south slope of about more than three meters. On all four sides of the site are cover with greenery and foliage. And because of the slope, in spite of these trees, the beautiful panoramic view towards South - Eastern side becomes open. A part of the bank of the main river can be seen from here. Such a site free of many constraints of usual sites inspired me to use all of the site forces as much as possible. For example - this site is open to the sun because there are no big structures around except for some trees. I opened the home towards the southern side to allow maximum light, air, and ventilation while keeping the openings minimum in the northern side. This arrangement will help to sustain heat during winter times and keep the house cool during summer times. Also, trees with heavy foliages are used near the pool area to ensure privacy and some shading from the sun.

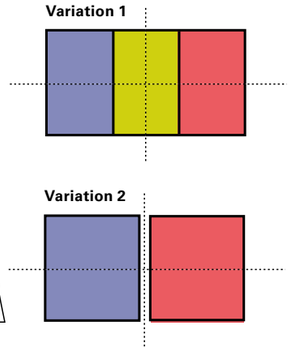
Architecture is not complete until it is lived in. I believe this home can hold all the family members dearly throughout its life.

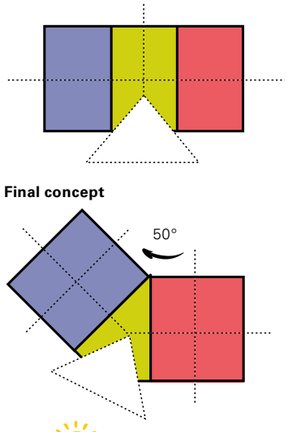
Design Parameters

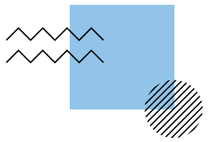


Building Passport
Building type: family residence
Location: Betpfad 3, 97082 Würzburg, Germany
Site area: 2,000 sqm
Floor area: 447 sqm
Number of storeys: 2 plus roof garden

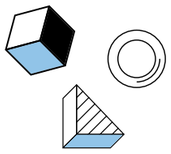




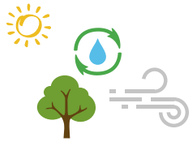




Playful Transitions
Introduces interesting transitional spaces between indoor and outdoor spaces



Basic Shapes
The shape of the house varies between formal precision and free and relaxed forms



Sustainability
Uses natural elements available on the site, such as sun, views, air flow, trees, slope

The Water Feature : The Fountain

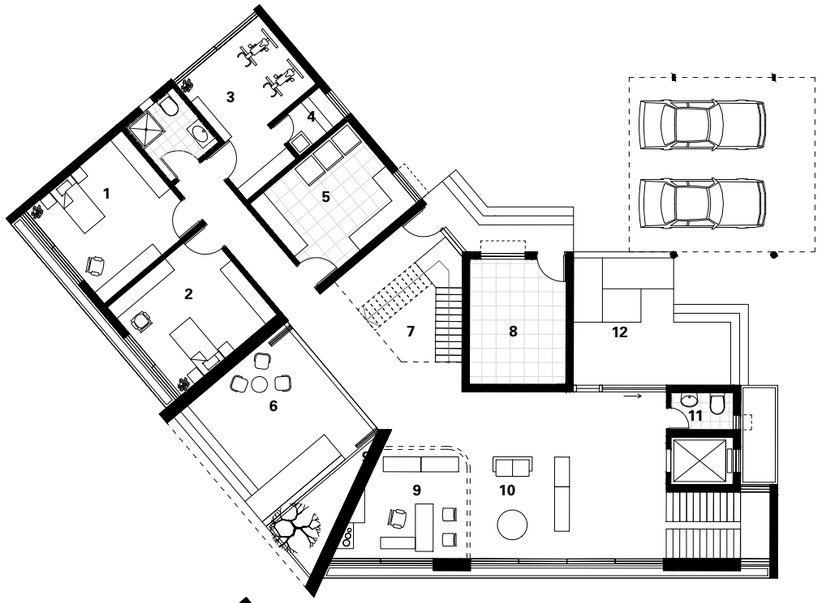
A home on such a site should flow outside. To hold the serenity and essence of this place, a fountain is introduced in front of this house. There are low and high seating arrangements. One can sit down on the floor of the deck with legs in the water or sit on the bench. The sound of flowing water along with the greenery and chirping singing birds. The wind will mix with the feelings of the hill. A rustic green stair comes down from the open-air deck to this fountain where one can sit and relax and enjoy the evening.

‘A living space should be a sanctuary. It has to be a place where you can reflect on your life. When one arrives home, there’s a very tranquil feeling.’

Tadao Ando

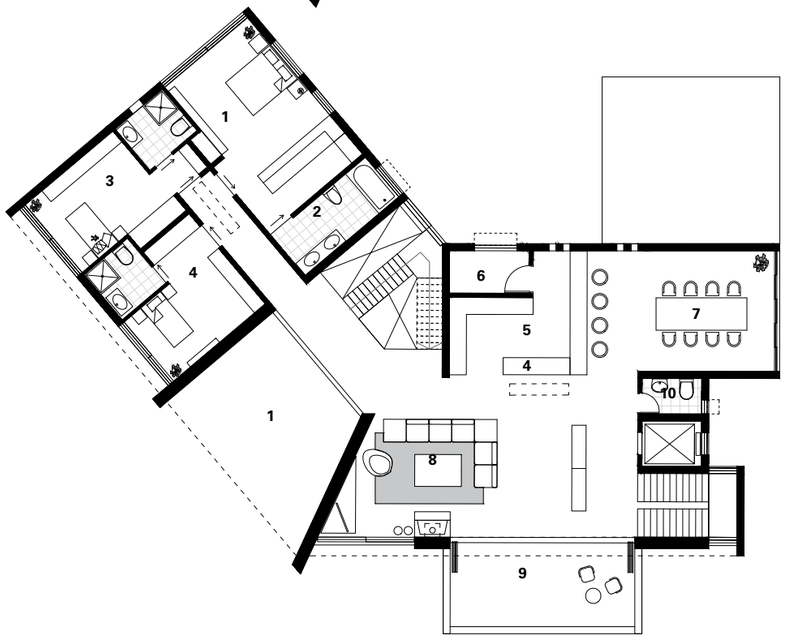
Ground floor *(222 sqm)*
Scale – 1:200

1	Luis’s bedroom	17.0
2	Leo’s bedroom	16.0
3	Gym	14,0
4	Sauna	3,0
5	Laundry/storage	15.5
6	Shaded deck	31.5
7	Family stairs	10.0
8	M/E tech. room	13.5
9	Office	20.0
10	Lounge	16.0
11	Guest toilet	3.0
12	Entrance	20.0
13	Circulation	42.0
14	Decks	90.0



First floor *(295 sqm)*
Scale - 1:200

1	Master bedroom	25.5
2	Master bathroom	9.0
3	Bedroom Ella	20.0
4	Bedroom Anton	20.0
5	Kitchen	24.0
6	House keeping	4.0
7	Dining	21.0
8	Living	36.5
9	Terrace	20.0
10	Guest toilet	3.0
11	Circulation	42.0



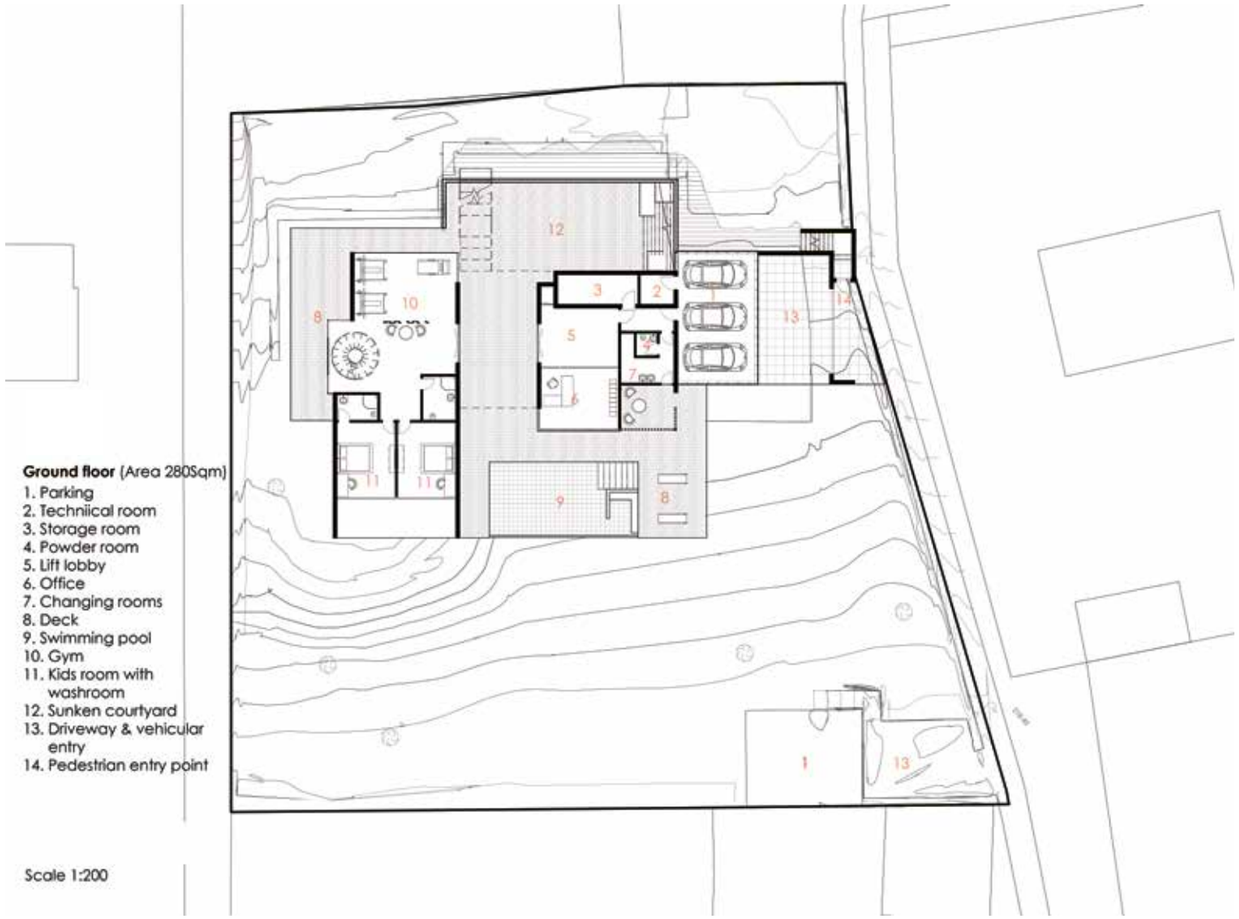
Pixel House
How Extruded Concrete Volumes Form a Hillside

Jasvinder Singh
New Delhi, India

The inspiration for this villa came from the most unexpected place – the pixel. It inspires with its intersecting layers of spaces that ensure no one at home feels alienated as well as its simple palette suggests that the building is a product of the site itself. The residence is built for a patchwork family with a couple and four children. The scheme had to make room for both privacy and togetherness, which resulted in a mixture of quiet spaces for solitude and shared areas that would allow congregations of different sizes.

One arrives at the first-floor main entrance by crossing a pathway laid adjacent to an outdoor garden. The gate to the house is sheltered by a sculptural concrete canopy that imparts 'a certain sense of arrival'. Inside, a gracious open space leads one to the living area, spilling into a dining and kitchen. A key space is a round, free-standing staircase that sits in front of a glass façade. The first floor is completely private and dedicated to a master bedroom and two kids' bedroom and two open terraces. To manifest the 'geometricity' of the volumes, the architects have used stone, wood, and exposed brick in conjunction with contemporary furnishing within the interiors. On the exteriors, wood and stone envelopes the house.

On the ground floor, the entrance leads via the garage into the functional block with office and technical rooms. The ground floor is accessible from the first floor via the generous spiral staircase leading to the teenagers' bedrooms and providing access to the gym and terrace. High-quality building niches are created between the room pixels, which as terraces, generate a connection to the outside space. A unique feature is a pool on the south side that can be seen transparently from the western side.



Ground floor (Area 280Sqm)
1. Parking
2. Techniical room
3. Storage room
4. Powder room
5. Lift lobby
6. Office
7. Changing rooms
8. Deck
9. Swimming pool
10. Gym
11. Kids room with washroom
12. Sunken courtyard
13. Driveway & vehicular entry
14. Pedestrian entry point

Scale 1:200

N

First floor (Area 280Sqm)
1. Entry
2. Living room / lobby
3. Powder room
4. storage room
5. Kitchen
6. Laundry room
7. Dining room
8. Deck
9. Inverted Balcony
10. Master Bedroom
11. Master Bath with sauna
12. Walk in closet
13. Kids room with washroom

Scale 1:200

N

Appendix

Authors and Participants

Jochen Eisenbrand, chief curator at the Vitra Design Museum in Weil am Rhein. After completing a master's degree in cultural studies at the University of Lüneburg, Germany (1998), he received his doctorate at the University of Wuppertal, Germany, in 2013. He has been in charge of a number of international exhibition projects. He has co-edited several exhibition catalogues.

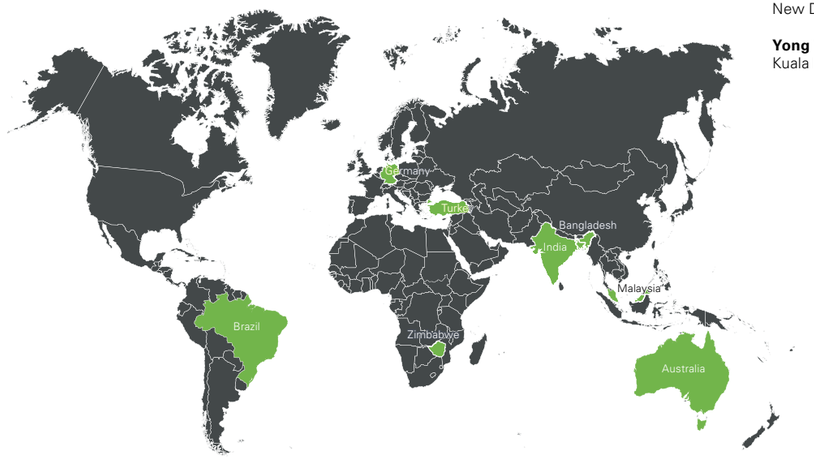
Hans Wolfgang Hoffmann, architectural critic, born 1970 in Berlin. Graduated from Technical University of Berlin with focus on sociology, building typology and urban history in Central and Eastern Europe. Editor and author of numerous publications in newspapers and magazines as well as architectural guides. German correspondent of *SPEECH*, Moscow.

Florian Mausbach, born 1944 in Koblenz. Studied architecture and urban planning at the TU Braunschweig /TU Berlin. Urban planner in architectural offices in Düsseldorf. 1976/1977 lecturer at the Foreign Language Press Beijing. 2nd state examination in urban development in Hesse. 1981–1990 Urban planner with the city of Frankfurt am Main. 1990–1995 head of the Building and Planning Department of the city of Bielefeld. 1995–2009 President of the Federal Office for Building and Regional Planning, Bonn/Berlin. Now chairman of the Association ArchitekturPreis Berlin and the Association for the Reconstruction of the Villa Wolf by Mies van der Rohe.

Natascha Meuser, PhD, architect, born 1967 in Erlangen. Professor at the Anhalt University of Applied Sciences/Dessau School of Architecture. Studied in Rosenheim and in Chicago at the Illinois Institute of Technology. Numerous publications in the field of educational buildings and research on Architecture and Zoology. In 2020, she founded the *Institute of Zoo Architecture (ZooArc)*.

Susanne Schneck, dentist, born 1981 in Munich. Studied at the University of Würzburg. Received her doctorate in 2009. She specialized in orthodontics at the University of Bonn (2013). From 2013–2018 she worked as an orthodontist in Würzburg. Since 2018 she is running her own company, distributing nutritional supplements to Pharmaceutical wholesale.

Wong Zhen Fai, architect MA, born 1996 in Kuala Lumpur. Graduated from Taylors University in Subang Jaya, Malaysia (bachelor's degree). Started as an architectural photographer and 3D visualizer. A graduate of Anhalt University of Applied Sciences, Dessau (master's degree). Currently practises interior design for residential projects in Malaysia.



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