

# 13 CONCEPT AND TYPE

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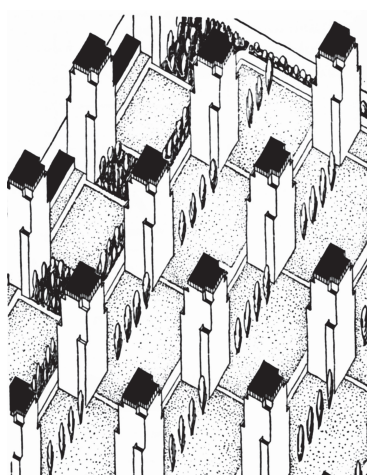
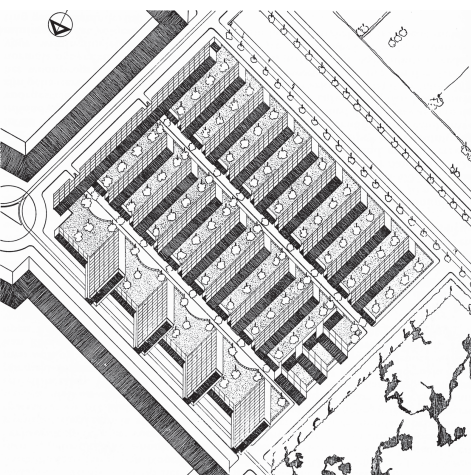
## 13.1 HOW TO GIVE FORM TO A DESIGN

We have been told for a long time that form follows function. Functionalists, in particular, held this view. But, if function directly generates the form, why, then, are there often many different solutions for one assignment?<sup>a</sup> Even when functionalism was in its heyday, one single assignment would result in a series of multiform designs, as demonstrated, for instance, by the results of the competition for low-cost working class housing in 1936.<sup>b</sup> These differences may be partly due to difference in insight, or interpretation of the assignment. If the differences between the designs were solely due to a different interpretation of the assignment, then, with the same interpretation of the same programme, the resulting designs would have the same form. The question remains: how does the programme generate form or, more specifically, how does the form of a bedroom follow from the function sleeping?

A functionalist will explain that this form is the result of careful analysis of all the activities that are part of the function sleeping. The dimensions and areas that follow from this analysis should lead to the ideal form of the bedroom; this also applies to kitchen, living room, etc. The result is a number of rectangular boxes that, together, fit overall dimensions. A sort of minimal envelop, not yet an architectural solution. For instance, what is wrong with the bedroom that Goff, the architect, designed for a house in Aurora (Illinois)? Why would this bedroom, placed in a quarter segment of a sphere, not follow the function?

The reasoning that form automatically follows function disregards two phases in the design process.<sup>c</sup> First, there is the phase of interpreting the assignment, as was mentioned. Then, there is the phase in which form and spatial arrangements are determined. In both these phases the architect makes active choices.

The first essential choices are made at the interpretation stage of the assignment and when developing a view of the project requirements in relation to the location. In many cases, certainly in the past, interpretation of the assignment was self-evident. The approach was mainly conventional: a certain project at a certain location should be handled the established way. That is how it was taught at the academy, or the way it had been done for years in a certain region. However, increasing complexity of assignments and current construction methods require a personal interpretation, based on an underlying principle, vision or concept. The notion 'concept' is further discussed below.

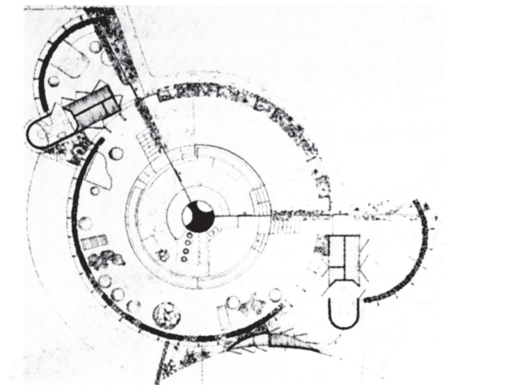


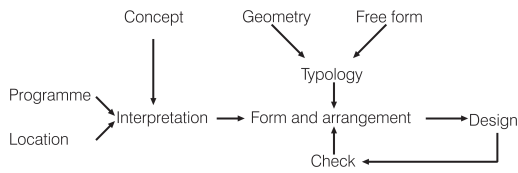
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a The idea that the assignment generates the form has also kept a whole generation of CAAD specialists busy.  
b Ottenhof, F. (1981) *Goedkope arbeiderswoningen* (1936).  
c Please note that Sullivan with his tenet that form follows function did not mean that the form automatically follows from the function. In his view, one should choose the form which best fits the function. Sullivan, L. (1956) *The autobiography of an idea* (1924).  
d Photograph: Jan Molema. Source: Archis (1996) nr.6 p.21.

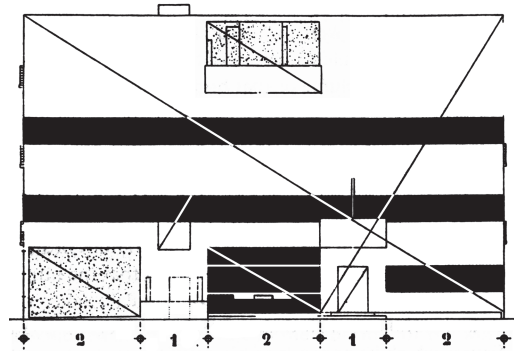
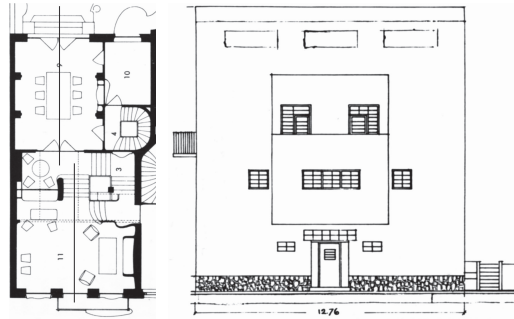
68 Contest submissions for cheap labour housing Van den Broek (left) en Van Lochem (right)<sup>b</sup>

69 House in Aurora, designed by Goff. The bedroom is situated in the top half segment of the sphere<sup>d</sup>





70 Schematic representation of the phases and influences in the design process



71 Horta, floorplan with shifted axes, private house. Loos, front façade *Haus Möller*, Le Corbusier, front façade *Villa Stein*, Rietveld, *Schröderhuis*, open corner.<sup>e</sup>

### 13.2 RECURRING PRINCIPLES OF SPATIAL ARRANGEMENTS CAN LEAD TO THE USE OF 'TYPE' SOLUTIONS

Once the interpretation has been made, the spatial arrangement and the decision on the form will, in broad outlines, be developed by a process of searching for solutions, making assumptions and testing results. Searching for a main principle for the spatial arrangements and for a form where it is assumed that there will be a fit to the assignment, and then testing the results as to how these work in practice. For centuries, the same criteria guided this process. Vitruvius spoke about 'durability, convenience and beauty'.<sup>a</sup>

The form can, in principle, be derived from geometry or from nature, in the last instance reduced again to geometrical form. If principles of spatial arrangements or form structures keep recurring, this may indicate use of a 'type' solution. From experience, we know that certain forms, schedules or models are more useful than others. In particular, when there is repetition, or when project requirements are very strictly defined (housing, theaters, prisons, etc.), the same principles recur regularly.

### 13.3 THE CONCEPT HAS NO FORM

In recent decades, the notion 'concept' came to achieve a prominent position in architectural theory. What does 'concept' mean in relation to architecture? Before addressing this question, I will first indicate why a concept plays such an important rôle in present-day architecture.

In an interview Rem Koolhaas said this:

*"I find the notion of 'concept' very difficult. When I, myself, was teaching, I found it difficult to explain what a concept is, and whether it is necessary. Today, I find it an absolute necessity. The concept is the theme on which the design is based. One can sum it up in one sentence. It can be very primitive, but it is still a test of your design"*<sup>b</sup>

Nouvel states on the subject:

*"I am always able to describe with enormous precision any of my projects in five written pages. It simply happens like that, and it is essential. But, at the same time, there is a moment in the process where the argument is there and I have no longer the need to keep talking about it, because the essential point is to fix the concept. This is the moment when, through a sort of miracle, other things will be produced. The work becomes more plastic; memory and attention take over."*<sup>c</sup>

From Renaissance to the end of the nineteenth century, concepts, as we view them now, had no significant rôle. The discussion concerned primarily correct style. When discussing style, one usually thinks in the first place of appearance, the form of elements used and differences in decoration. However, a second, underlying system with regard to style can be discerned. The art historian Emil Kaufmann calls this system the 'architectural system'.<sup>d</sup> It delineates the structure of the designs attributed to a particular style, the way in which the elements are assembled and spatially arranged, and indicates which set of instruments has been applied. Spatial arrangement and composition of buildings were to a large extent determined by the prevailing architectural system. Until the beginning of the nineteenth century, the underlying system was hardly ever discussed.

### 13.4 THE CLASSIC SYSTEM PUT TO THE TEST

Around the 1900s, several architects began to work on fundamentals of the system. Horta queries symmetry, Loos attacks ornamentation, Le Corbusier redefines the classical rules for composition, Rietveld and Mies van der Rohe open up spatial arrangement.

Thus, slowly, but surely, a new form of architecture was developed, typified by absence of a coherent architectural system. Le Corbusier also, using the 'five points' and the 'Modulor', did not manage to create a new and generally accepted architectural system. Although elements of the classical architectural system can be found in many creations of modern

a Vitruvius and M. Morgan (1960) *Vitruvius: The ten books on Architecture*, p.17.

b Leupen, B.A.J. and N. Bisscheroux (1984) *Interview met Rem Koolhaas*, p.51.

c Zaera, A. (1994) *Incorporating: Interview with Jean Nouvel*, p.17.

d Kaufmann, E. (1955) *Architecture in the age of reason*, p.75 a.f.

e Sources respectively: Catalogue with the Horta Museum, Risselada, M. (1988), Rowe, C. (1982), Overy, P. et. al. (1992).



architects, the programme is now the basic issue. While transparency, apparent weightlessness and machine aesthetics form the basic idiom of the Modern Movement, each new design seems to be seeking its own identity, its own concept.

### 13.5 THE CONCEPT ORGANISES DESIGN CHOICES

When one common view still dominated the architectural system, the architect had a clear set of rules while making the numerous architectural choices with which a designer is confronted, choices about dimensions, proportions, rhythm, spatial arrangement, composition, structure, use of materials, etc.

That each design needs its own legitimacy or concept, is not only the result of the urge for innovation amongst architects, but also of the growing complexity of building specifications and materials and building techniques now available.

A concept does not have to be decisive about the form of the definitive design. It expresses in first instance the overall idea, the character and direction in which the solution is to be found. The concept expresses the basic thought behind the design, it gives direction to design choices and, at the same time, excludes alternatives: in a way, it organises the design choices.<sup>a</sup>

### 13.6 A CONCEPT MAY BE PRESENTED IN DIFFERENT WAYS

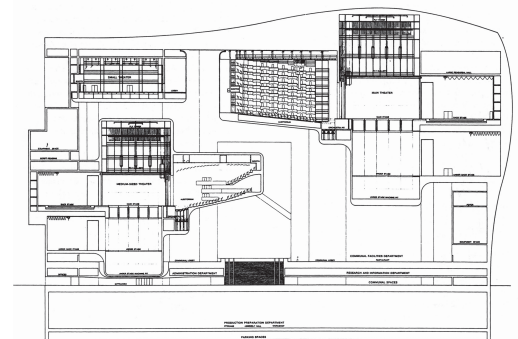
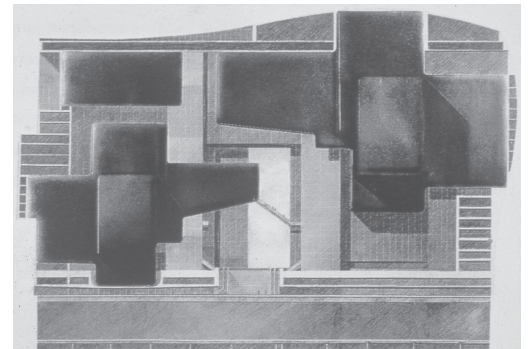
A concept may be presented in various ways: in a scheme, by visual images, in words. The procedure at the office of the French architect Jean Nouvel can serve as an example and illustration. Before the first line is drawn on paper, extensive discussions are organised between designers and specialists on sub-areas. Drawing is only allowed to commence when a description of the project – a concept – is clear to the mind's eye. This procedure pre-supposes wide knowledge of possibilities and great power of imagination.<sup>b</sup>

An example of such a verbal concept is the concept of the design of the Prize for an opera house in Tokyo (1988) designed by Nouvel. As the result of a series of discussions within the office a leading metaphor was chosen: a vast travel case of a musical instrument. On the outside the building should have a smooth black skin; on the location of the great hall it should have a slightly bulging surface. On the inside golden-hued auditoriums were placed in space, like instruments in a case.

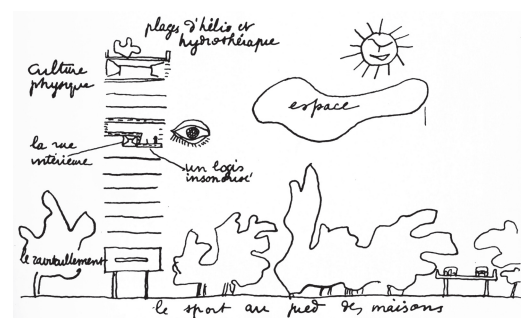
The risk of a metaphoric concept lies in taking the metaphor too literally; for instance a hamburger joint in the shape of a hamburger. That may be funny briefly, but does not generate interesting buildings. While designing on the basis of metaphor the difficulty is to maintain a sufficient level of distance from the literal interpretation.

Le Corbusier condensed the 'Unité' concepts – several concepts form the basis of the work – to two sketches, where points of departure like light, air and space, view, the pilotis and the roof-garden may be found back.

Along the same lines functionalism may be conceived of essentially as a concept: 'form follows function' is a discourse guiding the subsequent design decisions. Although an analysis of the programme of requirements does not result automatically in selection of a shape and certainly does not generate a shape – like functionalists pretend – functionalism obtained for itself via the metaphor of the machine-aesthetics a language of shapes.

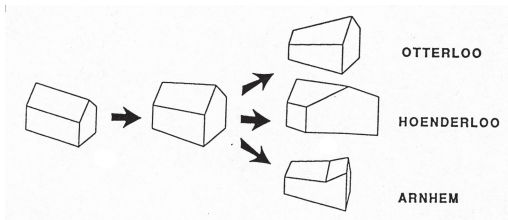


72 Nouvel in co-operation with Starck, design for an opera house in Tokyo, model and cross-section.<sup>c</sup>



73 Le Corbusier, sketch of the concept of his 'Unité'.<sup>d</sup>

- a Leupen, B.A.J. and C. Grafe (1997) *Design and Analysis*. p. 13. Originally published in Dutch: Leupen, B.A.J., C. Grafe et al. (1993) *Ontwerp en Analyse*.
- b Leupen, B.A.J. (1989) *Een nouvel concept*, p. 85.
- c Source: Leupen, B.A.J. and C. Grafe (1997)
- d Source: Samonà, A. et al. (1976)



74 MVRDV, scheme of the concept for admission lodges on the 'Hoge Veluwe'.

### 13.7 A HOUSE OF STEEL, WOOD, OR STONE

An example may clarify how a concept guides design decisions. The Foundation 'Nationale Park De Hoge Veluwe' published in spring 1994 a controlled prize for the design of admission lodges. The existing ones were constructively but in sad shape and longing for successors; added to that, for safety and comfort of personnel, new requirements applied to the lodges.

The MVRDV office developed a concept for the admission lodges as simple as it is efficient. The shape of each small building may be reduced to the archetypal shape of a house with a pointed roof. By morping, attenuating, and folding this main shape each lodge can boast its own shape. This way a playing with perspective emerges to the person observing the lodges.

### 13.8 A 'POWERFUL' CONCEPT PERVADES A DESIGN INTO THE DETAILS

The concept used by MVRDV is strongly similar to the concept used by the Italian visual artist Mario Merz for the igloos he created. Merz made a series of installations with a basic shape that may be carried back to the igloo archetype. However, in contrast to this frozen Eskimo abode Merz does not use ice, but a range of different materials like slate, glass, wax or asphalt. By realising the igloos in an unfamiliar material Merz obtains an alienating effect.

Inasmuch as MVRDV executes the main shape of the archetypal house each time in a different material, this office follows the same line of thought as Mario Merz. However, the MVRDV objective is not to create alienation, but distinction and contrast.

The selection of the material may be understood from the immediate context at first sight. The house made of brick may be regarded as an answer to the present brick home at the entrance Otterloo; while the wooden house is undoubtedly an answer to the forest and particularly the tree, almost the Siamese twin of the entrance pavilion at the Arnhem side. The selection of corten steel at the Hoenderloo entrance may be thought of as an allusion to the military training area that side of the Veluwe region.<sup>a</sup>

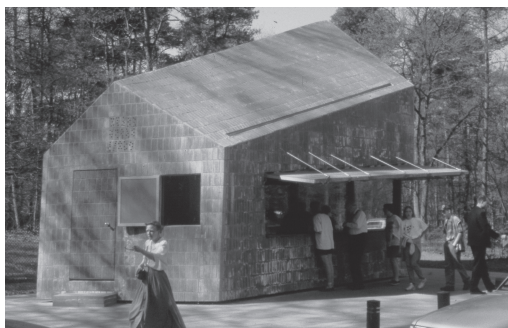
In a wider sense the context also influenced the selection of the material by the designers. In this vein the concurrence, or maybe on the contrary the conflict between conserving a bit of nature and culture, in a wider and more restricted sense influenced the concept. Culture in a wider sense relates to manipulating nature at the beck and call of hordes of visitors: the 'Hoge Veluwe' as a soft park of fun, culture. In a more narrow sense culture comprises the works of high arts stored in and around the Kröller Müller Museum. Likewise the corten steel may be regarded as a direct reference to visual artist Richard Serra, while the brick at the admission lodge near Otterloo evokes images of the work of Per Kirkeby.



75 Mario Merz, two installations of an igloo (photographs by author).

<sup>a</sup> In a discussion with Winy Maas he mentioned that the choice of the corten steel was suggested by colour. The rusty colour is functioning in Autumn as a camouflage colour between the red beeches.

76 MVRDV, three admission lodges, in brick (left), steel (middle) and wood (right) (photographs by author).

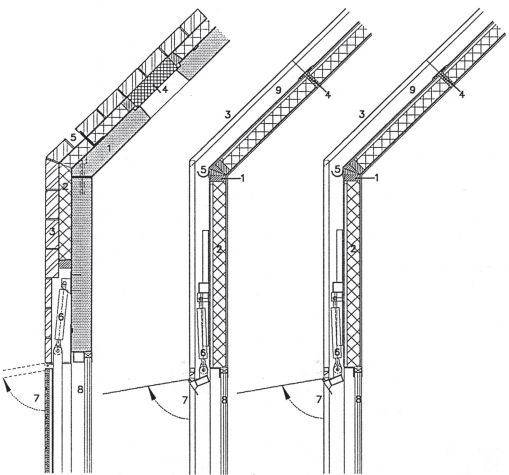




The concept used by MVRDV is so powerful, that it determines the design decisions not excluding detailing. The selection of one material per lodge caused the designers a lot of trouble, particularly in the case of brick. The skin of brick has been stretched accordingly over the door and the shutters. This was realised by gluing brick strips on the structure.

In order to emphasise the idea that the outer material is just a skin, the designers have kept it loose of the soil. Particular attention went into the transition from roof to wall. Rainwater is disposed of by means of a hidden gutter. This reinforces the concept of the archetypal basic shape. In the case of the lodges of wood and brick a slit in the roof was made on that spot, while at the one executed in ‘corten’ steel circular holes were cut there in the steel sheets. These ‘bullet holes’ further strengthen the reference to the military training areas.

At night the shutters in front of the panes of glass of the admission lodges are closed. Then the continuity of the material is complete. The humble dwellings are thereby transfigured into rough crystal-like shapes of steel, brick and wood. The shutters of steel and brick are raised during daytime so that they may function as an eaves. At the house of wood the shutters, built in a string of loose vertical slats, fold outward in elegantly pleated prisms.

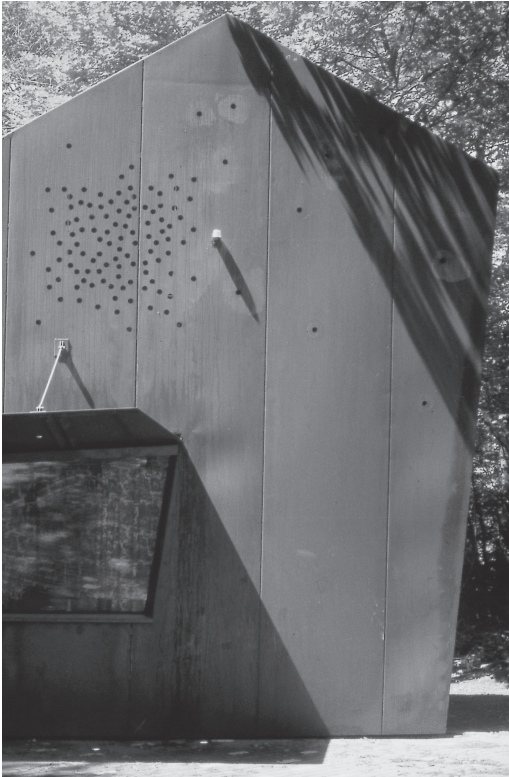


77 MVRDV, detailing of the admission lodges thrice: brick (left), steel (middle), and wood (right).

78 Richard Serra, composition of corten steel

79 Per Kirkeby, object in brick

80 MVRDV, detail admission lodge in ‘corten’ steel with holes for disposing of rainwater and ventilation (photographs 78-80 by author)



### 13.9 THE TYPE, THREE THEATRES AS EXAMPLE

As mentioned, we know from experience that certain forms, diagrams or models are more useful than others. In particular, in the case of repetition or precisely defined programmes (housing, theaters, prisons, etc.), one frequently sees that the same principles recur. With this sort of experience in mind, we now enter the domain of the typology. To illustrate the point, we show three theaters: the theatre in Genua by Aldo Rossi (19..), the *Stadtstheater* Essen by Alvar Aalto (1983-1988) and the *Danstheater* in The Hague by Rem Koolhaas / OMA (1980-1987). What do they have in common? The three architectures are so different that it can not be on the basis of the similarity. Closer study of the spatial arrangement of the three designs shows similarity in composition on two points. Firstly, in all three designs, there is a relationship between stage and auditorium via a 'proscenium'. From the auditorium one looks at the stage through a frame. A curtain can close the frame. In contrast to the classical Greek theatre, the spectator looks at the stage as at a show-box. A second similarity is the shape of the auditorium. Although the final form is different in each case, the three auditoriums have in common that the public is seated on a floor sloping upwards. The auditorium has a shell-shaped floor, allowing each spectator a good view of the stage.

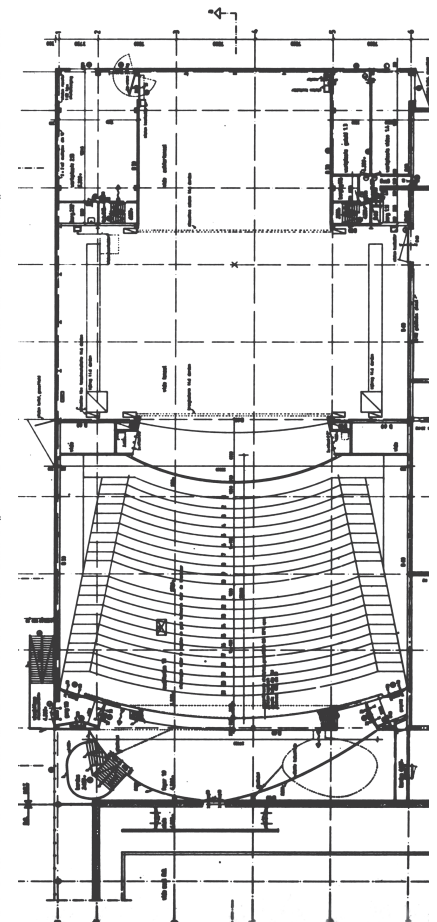
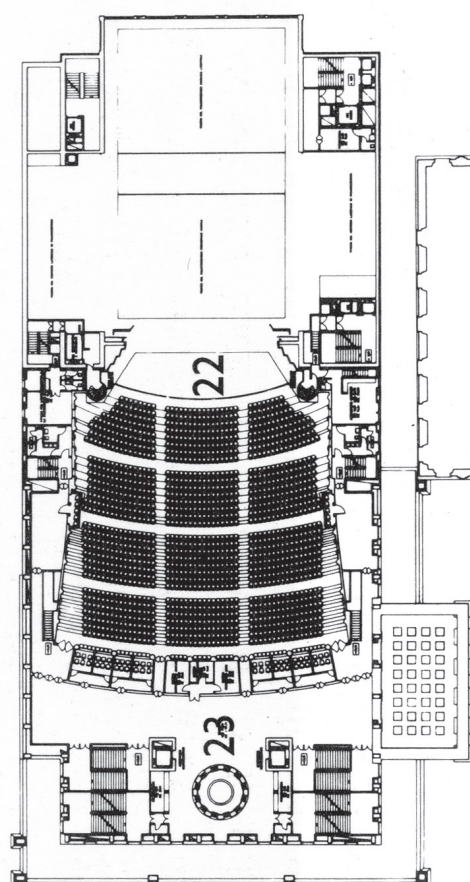
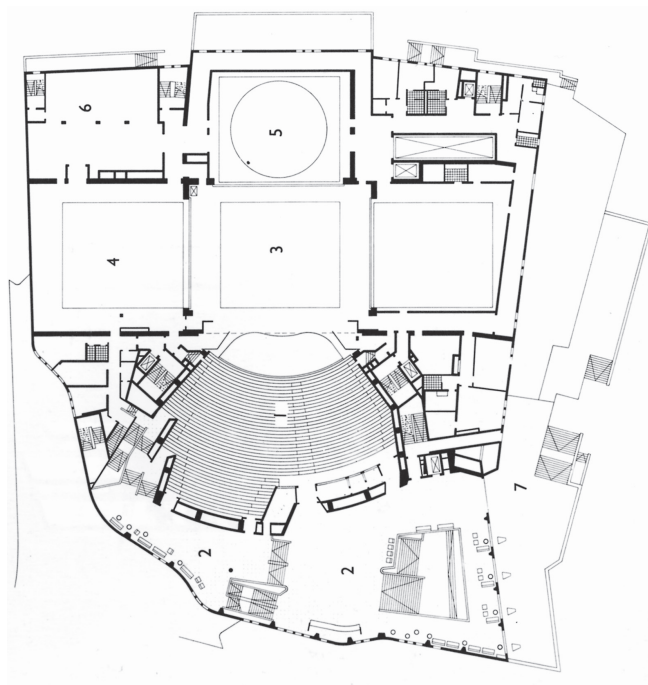
### 13.10 THE IDEA OF TYPE SHIFTS BETWEEN WORD AND DIAGRAM

It might seem to be self-evident, but until Semper designed the *Festspielhaus*, Bayreuth, it went without saying that a large part of the public, and, in particular, those from the upper classes, were seated in the loges, boxes situated on horseshoe-shaped balconies around an auditorium with a flat floor. A number of these boxes were situated in such a way that occupants could more easily see each other than the actors on stage. Being seen was the primary reason for going to the theatre In the eighteenth and nineteenth centuries. What happened on stage was less important.

81 Aalto, Floorplan theatre in Essen.<sup>a</sup>

82 Rossi, Floorplan theatre in Genua.<sup>b</sup>

83 OMA, floor plan Danstheater, The Hague.<sup>c</sup>



- a Source: Archis (1989) nr.1, p.24.
- b Source: Archis
- c Source: AMC (1987) nr. Décembre, p.9.



Wagner finished off this principle once and for all when he commissioned Semper to build a theatre that would focus attention on the performance on stage. Since then, the shell-shaped auditorium has become an idea used many times, as in the theatres designed by Aalto, Rossi and Koolhaas. The similar spatial arrangements – the formal basic structure – we can also designate as examples of the concept of type. There are actually two types shared by the three theatres: the framed proscenium and the shell-shaped, or Bayreuthian auditorium. The similarities between these three theatres can be summarised in a diagram that represents the formal basic structure of the corresponding principles. Such a diagram we call a typological scheme. This scheme is a representation of the type; however, note that it is not the type itself. The concept type shifts between the schedule and the words – the language – in this case *the shell-shaped theatre and the framed stage*.

### 13.11 TYPE ACCORDING TO QUATREMÈRE DE QUINCY

At the end of the eighteenth century, the French architectural theorist and encyclopaedist Quatremère de Quincy gave a clear definition of the idea of type. He defined this idea by placing it in juxtaposition with the concept of ‘model’.

*“The word type is also used synonymously with ‘model,’ although there is between the two a difference that is easy enough to understand. The word ‘type’ presents less the image of a thing to copy or imitate completely than the idea of an element which ought itself to serve as a rule for the model... The model, as understood in the practical execution of the art, is an object that should be repeated as it is; the type, on the contrary, is an object after which each (artist) can conceive works of art that may have no resemblance. All is precise and given in the model; all is more or less vague in the type. At the same time, we see that the imitation of types is nothing that feeling and intellect cannot recognise, and nothing that cannot be opposed by prejudice and ignorance.*

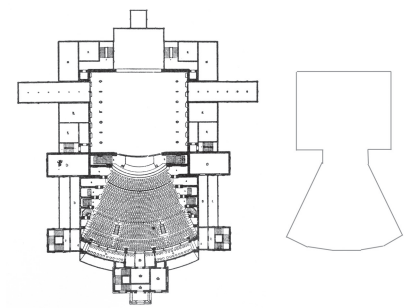
*This is what has occurred, for example, in architecture. In every country, the art of regular building is born of a pre-existing source. Everything must have an antecedent. Nothing, in any genre, comes from nothing, and this must apply to all of the inventions of man. Also we see that all things, in spite of subsequent changes, have conserved, always visibly, always in a way that is evident to feeling and reason, this elementary principle, which is like a sort of nucleus about which are collected, and to which are co-ordinated in time, the developments and variations of forms to which the object is susceptible.”<sup>a</sup>*

The Italian art historian G. C. Argan further elaborated upon Quatremère de Quincy’s definition:

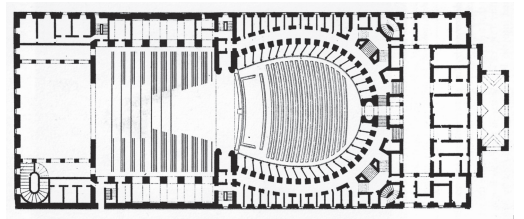
*“The second important aspect when designing from typologies is the relationship between design decisions. This brings us to the question of typological levels. A typological level can be regarded as a scale of planning in which the design decisions present a unified system of choices. The number of typological levels (or layers) in a design is not dictated beforehand, but can be specified according to the complexity of the object and the modus operandi of the designer.”*

Argan distinguishes three such levels in a building:

- the configuration of the whole building,
- the major elements of construction
- the decorative elements (façade, separating walls, stairs,...)<sup>b</sup>

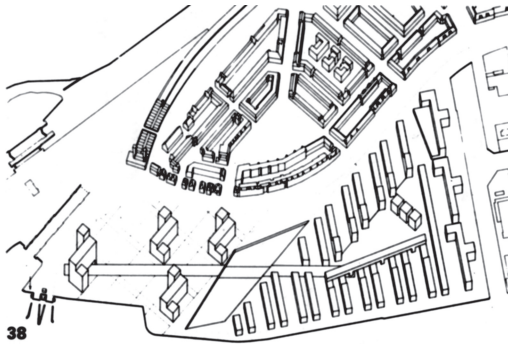


84 Semper, floor plan Festspielhaus Bayreuth and typological scheme applying to all of the four theatres.<sup>c</sup>

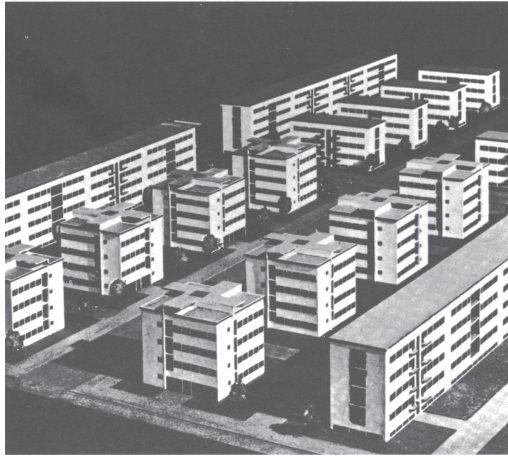


85 Floor plan of the Scala in Milan, an example of a nineteenth century theatre.<sup>d</sup>

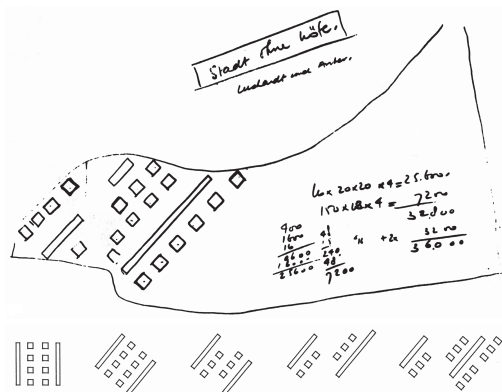
a Leupen, B.A.J. (1989) *Een nouvel concept*, p. 85.  
 b Argan, G.C. (1965) *Sul concetto di tipologia architettonica*.  
 c Source; unknown.  
 d Source: Pevsner, N. (1976).



86 OMA, axonometry of the IJ square.<sup>b</sup>



87 Luckhardt brothers, model 'Stadt ohne Höfe'.<sup>b</sup>



88 OMA, sketch for the IJ square, with adjustment to 'Stadt ohne Höfe'. Scheme of the transformations.<sup>b</sup>

### 13.12 THE TYPOLOGICAL TRANSFORMATION OF THE ARTICULATION OF THE SITE

The urban design of the Western part of the IJ square in Amsterdam-North of the OMA office (Koolhaas) is an example of deliberate manipulation and transformation from an existing type to a new type. A transformation on the level of the articulation of the site is crucial here. When during the first stage of the designing process high-rise building was banned, the designers were looking for a different form of site articulation, so that their initial point of departure – a view of the IJ expanse of water for everyone – might be realised. Selection was made of a type based on a design of the Luckhardt brothers for a residential neighbourhood in Berlin. This 1927 design – not realised – '*Stadt ohne Höfe*', is constructed out of two units of surface articulation: each time consisting of a long slab, flanked by a row of urban villas. This transparent type of articulation features a common green inner area, while access is positioned at the edge of the unit of articulation.<sup>a</sup>

Guided by an analysis of the OMA design sketches one may explore how the transformation of the Berlin type lead to the rise of the western part of the IJ square. Transformations both on the level of configuration of the blocks and on the one of surface and access manifest themselves.

On the level of the configuration of blocks the Berlin design may be reduced to two rows of cubical blocks with two slabs at both sides. The internal shape-structure may be rendered by the typological scheme 'eight cubes and two beams'. The first transformation to which this scheme is put, is a rotation in order to adjust to the situation. In this rotation two cubic blocks are omitted. Next, an important step: the two halves of the configuration of blocks are shifted *vis-à-vis* one another. By shifting the two halves, the urban villas become free in space. At that moment a transformation of the type occurs and a new type is born, constructed from a row of urban villas positioned before a slab, functioning in it as a backdrop against which the urban villas show out as loose objects.

The next imaginary step concerns lengthening the long block at the right and adding two rows of three separate blocks at the free side of this lengthened block. By locating the urban villas as much as is possible opposite of the large spaces the spatial effect of the urban villas before the slab is exploited to the maximum.

On the level of surface and access a complex process prevails. What it boils down to, is essentially that the original typology of access – as an open building block opened cluster of a beam and four urban villas – has been given up by OMA and is replaced by an access that has been made subservient to the architectonic furthering of the western part of the plan. Whereas with the Berlin plan a systematic change of street – block (open) inner area – blocks – street reigned, OMA deals with these parts as autonomous elements in a composition organised in bands. This positioning of the elements is much more determined by the will to create a montage of zones with distinct atmospheres on the surface than by the need to make public (street) and semi-public (inner areas) spaces. In this new positioning the street ends up between the long block and a row of urban villas. With this, the original access typology is turned inside-out, resulting in a new relation between public and private on the ground level.

a Leupen, B.A.J. (1989) *Een nouvel concept*, p. 27.

b Source: Leupen, B.A.J., C. Grafe et al. (1993) *Ontwerp en Analyse*.



### 13.13 TWISKE-WEST, THE TRANSFORMATION OF A RESIDENCE TYPE

Liesbeth van der Pol designed a residential neighbourhood with round urban villas for the area Twiske-West (Northern Amsterdam). It has two parts. One comprises a double ribbon with residences positioned around some ten courts. At the court-side these residences are three stories high. At the backside they slope down with a parabolic roof to one story. At this side, the one of the garden with water, the living-rooms have been situated. They have a special spatial signature since Van der Pol continues these spaces to the parabolic roof.

The other half of the plan is the zone where the round urban villas have been situated. Each of them contains seven apartments. The small buildings have been positioned like an autonomous sequence of objects between the street and the water. The square building-lot on which the round buildings have been placed is divided into seven gardens. The separation between the gardens is emphasised by the arched storage units on ground-level hugging the round drums.

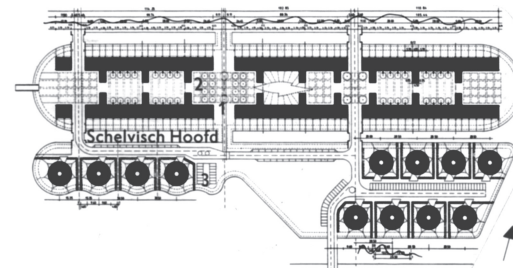
All apartments have their entrance at ground-level. Six out of seven front-doors are situated on the small central open space in the middle of the drum.

Typologically these residences are very interesting. Each apartment uses the three tiers of the drum, divided in seven segments. By stapling the apartments spiral-fashion each time, each of them always occupies three of the seven segments. This way Van der Pol ensures that those at the north-eastern side also catch a sufficient amount of morning or evening sun.

The structure of the drums may be regarded as a typological transformation of two peculiar buildings. The way in which the circle has been sub-divided recalls the servants' home on the site of the former sanatorium 'Zonnestraal' in Hilversum. Where it comes to the stapling of the apartments a similarity suggests itself with the small dwelling of the partial plan East III on the IJ square in Northern Amsterdam designed by OMA.

### 13.14 THE COMBINATION OF TWO RESIDENTIAL TYPES

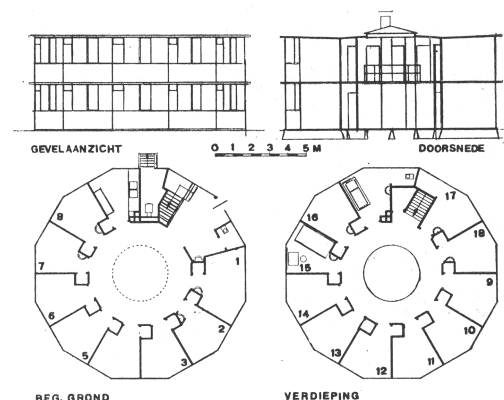
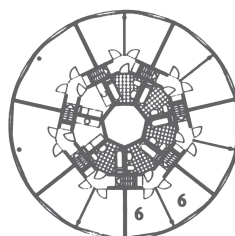
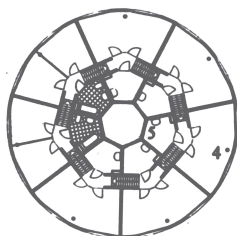
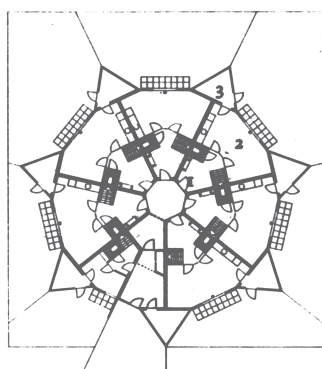
Just like the drum residences of Van der Pol the floor plan of the servants' home at 'Zonnestraal' may be understood from the division of the circle. In the case of the servants' home the circle is divided into twelve segments; geometrically a plausible number. By off-setting the radius of the circle against the circumference it is divided into six equal parts. Halving them results in a dozen. The division into fourteen segments of the drum residences (each dwelling segment being constructively split into two by means of a wall or a column) is not aligned to any geometrical operation and may be realised only arithmetically: which means that one must calculate the measures of all sides of the triangles determining the floor plan before the design can be drawn up on the drawing-board or on the site.



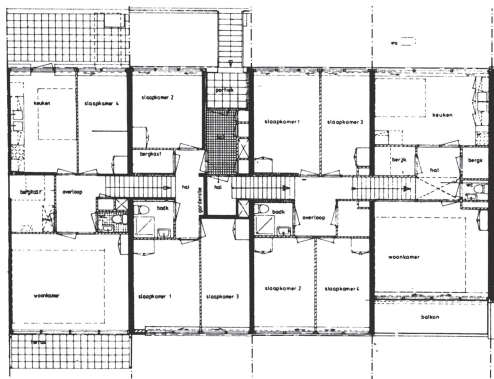
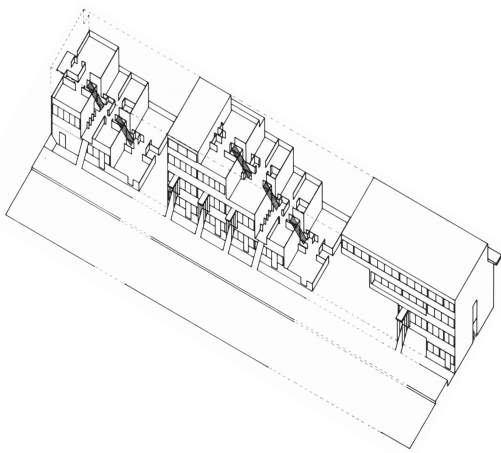
89 Liesbeth van der Pol, Twiske-West, urban plan and drum residences.<sup>a</sup>

90 Liesbeth van der Pol, blueprints of the drum residences.<sup>b</sup>

91 Duiker en Bijvoet, servants' home of the 'Zonnestraal' sanatorium.<sup>c</sup>



a Source: Brouwers, R. (1996)  
b Source: Archis (1994) nr. 6, p.23  
c Source: Forum (1962) nr.1, p.40



92 OMA, block on the IJ square. Opened out axonometry en floor plan.<sup>a</sup>

In the case of the servants' home the façade consists out of a number of flat surfaces determining like twelve facets of a diamond the angular shape of the modest building. The ground-level of the drum residences has been shaped similarly, as long as the arched storage units are not taken into account. With a rising on this kind of floor plan the designer has in principle the option to place the walls rectangular to the front or on the corner point of the fronts. The first one has the merit that the angles of the space stay orthogonal – often to be preferred when it comes to putting pieces of furniture where they may serve - ; particularly when small spaces are involved. With the servants' home this solution gets an additional dimension because of the angle between the fronts in the middle of the outer expanse of the room. While standing on this spot behind the transparent front one has the feeling of standing in a bow outside the surface of the façade. Because of the positioning of the storage units this effect does not apply in Van der Pol's work. On the higher levels Van der Pol has opted for a circular façade. The diagonal trimming in wood, an echo from the craft of ship-building, strengthens the effect of a drum.

The spiral elevation of the apartments has been derived undoubtedly from the small block of the partial plan East III on the IJ square. The essence of the stapling of this block is that the living of one residence is situated above the bedroom floor of the neighbours: a stapling enabled by straight flights of stairs perpendicular to the wall; and passing it. This stapling results in a very compact internal circulation within the apartment. By this step-wise rising the designer is obliged to invent at the beginning and at the end of the block special solutions. On the IJ square this was realised by situating there HAT units. The other side of the block is finalised by means of a large dwelling unit for mentally handicapped living independently.

With the drum residences Liesbeth van der Pol manages to have the snake bite its own tail, so to speak. This way the step-wise ascending end is shifted over the step-wise descending beginning of the stapling. In her work the only particularisation in the system is the entrance. On this spot she can not realise an apartment with a kitchen on ground-floor level. There she situates a different type with a kitchen on the third floor; another illustration of the flexibility of the stapling she has chosen

### 13.15 RELATION BETWEEN TYPE AND CONCEPT

Finally, there is the question as to the relationship between type and concept. As stated in the introduction to this Chapter, the notions of concept and type are linked to different phases of the design process. Looking at it like this, the two notions do not seem to be related at all. However, it is certainly possible that the choice of a particular type is actually part of the concept. This is, among others, the case with the concept that MVRDV use in their design of the three porter's lodges. The archetype house is, in this design, a basic part of the concept they used. It is also possible that the choice of the type is a direct consequence of the concept. In some cases, the borders between type and concept cannot be sharply defined. In this context, the Unité as a building is an object situated somewhere on the border between concept (a housing estate placed on its side on pilotis) and a type (a slab shaped building on pilotis). The first description is more abstract and does not yet indicate a formal spatial arrangement, in contrast to the second description. For the slab shaped building on pilotis, the formal spatial arrangement can be defined and, if so wished, can be schematised.

<sup>a</sup> Leupen, B.A.J. (1989) IJ-plein, Amsterdam een speurtocht naar nieuwe compositorische middelen: Rem Koolhaas / Office for Metropolitan Architecture