

42 CREATING SPACE OF THOUGHT

HERMAN HERTZBERGER

Too often we find the creative process of the architect depicted as a succession of flashes of inspiration which the privileged evidently receive as a gift and others wait for in vain, as though ideas are some kind of thunderbolt from on high. When you see architects continually out to trump one another with new ideas, you end up wondering at times just where the hell they get them all from!

That architects have to think primarily in forms is rooted in a mis-understanding. In the first place, they must have an idea of the situations as these affect people and organisations, and how situations work. From there concepts emerge: that is, ideas regarding these situations take shape. Only then does the architect envisage forms in which all the above might be cast. Surprising architectural responses are invariably the ultimate formulation of the results of a thought process. They did not appear out of thin air, as gifts from the gods for the particularly talented!

Architects, including the seriously gifted, construct their ideas, even if these are keys to utterly new insights, out of raw material that in one way or another had already to be present in their minds. Nothing, after all, can be born of nothing.

Designing is a complex thought process of potentials and restrictions out of which ideas are born along fairly systematic lines.

New responses issue from combinations and quantities other than those we already knew. We do things with what we have in our minds, and more cannot come out of them than went in. All neuro-psychological explanations notwithstanding it works the same as it does for the cook who can only use what he has in his kitchen when putting his meals together. Ignoring the fact that a good cook can do much more with his ingredients than a less gifted colleague, in both cases the point is to fill the pantry with as many ingredients as possible so as to have richer combinations, and thus, a wider range of possibilities at their disposal.

The ingredients the architect can draw from are the experiences he has had throughout the years, and which he can directly or indirectly relate to his profession. Considering that the range of his discipline is infinitely broad and is literally about everything, that means quite a host of experiences! So, it is important for the architect that he has seen and heard a lot in his life, and anything he did not experience first-hand he has a pretty good idea of, that is, he must empathise with every situation he has come across.

42.1 INGENUITY, CREATIVITY

A culture where conditions and values shift all too easily requires an unremittingly critical attitude towards out-moded concepts (and naturally towards new potentials too). In literally every situation you have to keep asking yourself whether the familiar path is still the most effective, adequate and/or advisable choice or that we are threatening to become victims of the daily routine and the straitjacket of existing clichés. Each design decision it seems, each choice we make, needs sounding out every time against changing criteria, but all too often inevitably calling for new concepts. This is why we need ingenuity and what we usually term creativity.

Put briefly, the beginning of the design process could boil down to the following: first, there is a task, clearly couched or making a first vague appearance. You are after an idea that will give you a concept you can use to further elaborate the design. Looking around you and drawing from your memory where the ideas you once thought interesting are stored, you head off in search of analogies that might well yield an idea. Though identifiable as missing

42.1	Ingenuity, creativity	389
42.2	Erasing and demolishing old clichés	390
42.3	The Eames House breaking the cliché	390
42.4	Jean Nouvel breaking the cliché	391
42.5	Change of context	392
42.6	Picasso's eyes	393
42.7	Dining table from a different context	393
42.8	Change of context in Maison de Verre	394
42.9	Change of context at a doll's house	395
42.10	Adapting to a new context	395
42.11	Education	396
42.12	Indesem	397
42.13	Take home assignments	397

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pieces of your jigsaw puzzle, these links are all too often transformed - disguised, in other words. The art then is, of course, to see through those disguises. We can assume that each new idea and new concept must be a transformation or interpretation, respectively, of something else, further developed and brought up to date.

There is no way of finding out how the idea came to you; was it there already, was it generated by old images or only strengthened, confirmed? This is a complex inter-action of suspecting, seeking and recognising, in the way where question and answer vie for primacy.

42.2 ERASING AND DEMOLISHING OLD CLICHÉS

To find new concepts as an answer to new challenges you first have to unmask the existing clichés. This means stripping the mainsprings of the programme underlying the architecture of the routine that has seeped into them by breaking open the programme and opening it up to new arguments. Whenever a programme is judged critically it transpires each time that it has lost much of its validity. This is why we must shift emphases and shake off ingrained habits. This is easier said than done. The issue is to demolish existing clichés.

A great deal has been written about creativity and how it might be acquired, invariably pointing out the importance of forging links with other things entirely. However, it is stressed far too infrequently that the difficulty of finding the new is mainly that of shaking off the old. Room for new ideas has to be conquered by erasing old ideas engraved in our minds. If only one could keep beginning with a clean slate, approaching each task as an unknown quantity, a new question that has yet to be answered. Unfortunately, this is not the way our brains work. Associations well up immediately, whether you want them to or not, major and minor skills nurtured by experience and developed by professional expertise, tried and trusted recipes that stand there in the way of genuinely new ideas.



391 Robert Delaunay *Eiffel Tower*, 1913

Ingenuity in finding new concepts is all too often seen as something exclusive, reserved for the few who are gifted in that respect. When the prime concern is indeed the ability to shake off existing clichés and face the task each time as an unknown quantity, the problem is mainly a psychological barrier that is going to need some demolishing.

If the old, well-known, part belongs to our familiar world, the new is basically a threat. Whether it can become absorbed, and, therefore, accepted depends on the associations it evokes and whether these are regarded as positive, or at least not as negative.

A child, then, may see a flash of lightning, whose dangers we know and to which we feel a certain ingrained fear, as a kind of firework with all the feelings of gaiety that brings. *“All I have done throughout my life is to try to be just as open-minded as I was in my youth - though then I didn't have to try.”*

When plans emerged to keep the Eiffel Tower after all - it had originally been intended to be temporary - a storm of protest blew up, most of all among intellectuals who saw the city disfigured with a monster culled from the hated world of industry. And that when in the very latest generation there was almost no-one to be found who was not inspired by it as a presage of a new world.

Whether you like a thing or not depends on the affection you feel for it. This is not only something you have or acquire later, you must have had it to begin with to have liked the thing in the first place; affection is as much a condition as a consequence.

42.3 THE EAMES HOUSE BREAKING THE CLICHÉ

The story goes that in 1946, when Charles and Ray Eames decided to build themselves a house and studio, they were forced to restrict themselves to steel beams and columns standardised for assembly plants and obtainable from a firm of structural engineers, as material was scarce so soon after the war. And if this were indeed true, you might wonder if they really felt restricted by the thus imposed reduction of their house to a pair of box-shaped

factory sheds, which they placed on the highest part of their eucalyptus-strewn site in a line along the property boundary.

These industrial designers, constantly alert as they were to everything that was new and potentially reproducible in series, sounding them out and absorbing them into their world, clearly saw this as a challenge. Typically, rather than feeling limited by having only those means at their disposal that industry allowed at the time, they were inspired by the possibilities this situation brought.

And so it was that the factory shed was transformed into a house with a form unknown before then. The point is that they saw the opportunity to look beyond the factory-building forms such as the prominent open-web steel joists and suppress those associations with others closer to the domestic ambience. Charles and Ray Eames succeeded in erasing the factory element by means of simple yet marvellous elevations, likewise composed of standard elements, with areas of colour and, on the inside, sliding light-absorbent panels, the effect being as much Japanese as Mondrianesque. Again, the tiled paths and planting right up against the elevations betray the sort of care that regrettably one only expects to find in dwelling-houses.

The basic, even bare, container aspect of the building is equalled only by the opulence of its infill and contents. This consists of an endless and varied collection of objects and artefacts from all over the world, brought back by the Eameses from their travels - fascinated as they were by everything made by human hand the world over in a never-ending diversity. And what better accommodation for all these items collected by those irrepressible souls than these pre-fabricated containers. These lent themselves perfectly to being coloured in and indeed to becoming part of the collection.

When Ray Eames laid the table for her guests, it was not with the obligatory tea or dinner service of so many pieces and accessories to match, but according to quite another principle. She went through the abundant collection of plates and cups-and-saucers, finding for each guest a set deriving from differing services, but combined to meet other criteria - a beautifully conceived combination of pieces chosen to match their user.

The familiar image of a table laid homogeneously yielded to a gay miscellany of colours and shapes, like a miniature *'musée imaginaire'*, of a new homogeneity, be it more complex and full of surprises.

Two arrangements, two paradigms, both with their attendant associations.

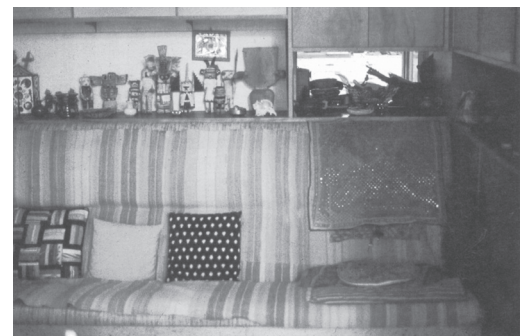
The so-many-piece table service stands for comfortable circumstances and ancient descent, for such services get passed down from generation to generation and only in the hands of an old and established, culturally developed family do they survive through the years unchipped and generally unscathed. Combinations of table services that are brought together from here, there and everywhere rather than comprising a set, are the province of the less well-to-do who can afford less and cannot boast an illustrious past.

The infinitely varied collection of Ray and Charles Eames represents the cultural élite of the small group that expresses its passion for exploring the world, with its great diversity of cultures and customs, in a collection as precious in its heterogeneity as the family table service is in its homogeneity. Once the question of what you can or cannot afford has been dispensed with, respect for the past acquires another value and another form.

This example shows that old values, however interesting historically these are, are all too easily clung to against one's better judgement; and that suppressing and replacing such pre-conceptions creates new space, new room to move.

42.4 JEAN NOUVEL BREAKING THE CLICHÉ

These two all-metal blocks, set at right angles to a provincial feeder road to the city like some means of conveyance - more bus or train than ship - amidst a development that is more rural than urban, sit surprisingly well in their context. This is because we have become oblivious to the metal boxes of every imaginable shape and size setting the scene in increasing numbers



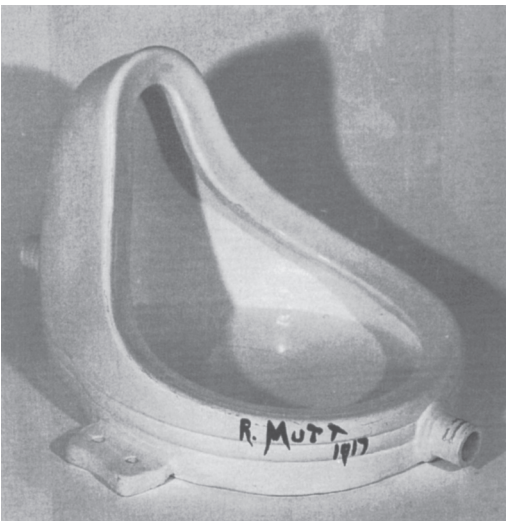
392 Charles and Ray Eames, *Eames House* (Los Angeles, 1946)



393 Jean Nouvel; Jean-Marc Ibos, *Nemausus Housing* (Nîmes, France, 1987)



394 Doormats



395 Marcel Duchamps, *Fontaine*, 1917

a Arman, Y. (1984) *Marcel Duchamps plays and wins / joue et gagne*.

throughout our cities and landscapes. But, it is certainly also because of the magnificent way these two lock in from either side of a strip of gravelled parkway flanked by plane trees as if they had always been there. The *allée* of slender planes continues to dominate the picture, visible from all sides as the housing blocks ‘hover’ on posts that are more slender still. Here Le Corbusier’s *pilotis* principle is applied so convincingly *après la lettre* that one cannot help but be converted.

Other than in the *Unité* whose heavy columns all but blocking the view generated an inhospitable no man’s land, these buildings stand on stilts in scooped-out, and, therefore, sunken, parking strips so that the parked cars do nothing to obstruct the view through.

Apart from the eye-level transparency on the ground plane this response is also a brilliant natural solution for the problem of parking which, although not new in itself, is here as open as it is objective through the minimal and simple response without balustrading or concealing walls to block the view.

This project also stands out in that everything is done to provide a maximum of space. Its access galleries are as broad as station platforms from which you enter your home with as little fuss as possible, much like entering a subway train, efficiently, but anonymously. Only the doormats identify the entrances as front doors and these ultimately are more image-defining even than the loud-and-clear graphics consistently derived from the world of transportation and including the numbering of the apartments.

The balconies have perforated forward-tilting sheet-steel spandrel panels which give the building its unmistakable, elegant, appearance, but behind which an utterly different and more varied character emerges through personal use. Each component has a certain over-measure seldom encountered in housing, which may be why it gives off such a strong sense of space. The inhabitants respond with an almost un-French eagerness with additions of their own. Perhaps it was the restrictions imposed out of considerations of architectural purity - such as the architect’s ban on adding to the crude concrete walls worked by an artist, and the metal grid landings between bedroom and bathroom - that in a presumably unintentional paradox were the very reason why tenants responded with all kinds of crazy modifications. These additions are nowhere to be found in articles about the building, yet it is these that best illustrate the space opened up by that construction.

42.5 CHANGE OF CONTEXT

Looking at the task before you in another light is the same as looking at another task, and for that you need other eyes. The problem is that everyone is constantly searching for recognisable patterns that are interpreted as rapidly as possible, in other words, that gain a place in our familiar world.

And the more familiar our world, the way we have built it piece by piece, the more trusted insights we have at our disposal and the more difficult it is to avoid them.

Inventiveness is in inverse proportion to knowledge and experience. Knowledge and experience keep forcing us back into the old grooves of the old record of meanings, the way a knife keeps returning to the original striations in a sheet of cardboard. Finding new concepts would not be difficult if only it were easier to shake off the old ones.

The first of Marcel Duchamp’s ready-mades, dating from 1913, showed that presenting an ‘everyday’ object as a work of art could turn it into something new. He placed them in an utterly different context where something else was expected of them, so to speak, without him having changed or added anything (save for the customary signature of the artist). “*That Mr. Mutt* (Duchamp’s pseudonym in that circumstance) *made the Fountain with his own hands or not, is not important. He CHOSE it. He took a common object, placed it so that its functional significance disappeared under the new title and the new point of view - he created for this object a new idea.*”²

A bicycle wheel or urinal it seems can lose its original purpose and meaning and take on another. This process of transformation evidently enacted in our minds is nowhere more clearly revealed than in the art of the twentieth century. By being able to perceive a thing differently, our view of things changes and the world changes with it.

A mental clear-out, making space in our minds by ridding them of so much ballast that once meant something to us. And if anyone was familiar with dis-assembling and clearing out associations, meanings and values, it was Picasso.

42.6 PICASSO'S EYES

Picasso's 1942 combination of bicycle handlebars and saddle as a bull's head is, after Duchamp's ready-mades, one of the most miraculous and meaningful art works of the twentieth century.

While a 'normal' collage draws a new narrative from disparate components each with its own story, here two parts of the same mechanism combine into a single new (and different) mechanism that inevitably and inescapably calls to mind the head of a bull. Indeed, so strong is this association that it is difficult to continue seeing anything of a bicycle in it.

The bike is forced into the background by the bull. Theoretically, at least there must be a transition point where the components are so caught up in each other's new sphere of influence that, in a sort of magnetic impacting of meanings, the bull all at once appears or disappears to be replaced by the bicycle, or a notion of bicycle. It may resemble the conjurer's disappearing trick, but there is a touch of magic here too! Picasso himself considered this work complete only if someone, the thing having been thrown out on the street, were to convert it back into a bike.

Yet the artist must have originally seen the animal parts in the cycle parts; he evidently saw them less strongly anchored in their original context. This then is the lesson we can learn from it: new mechanisms can ensue from another assemblage of parts freed from their original context by taking them up in a new chain of associations.

That Picasso was persistently able to see forms in their 'autonomous' - unsignified - state, loosed so to speak from the relationship they formed part of when he came across them, is clear from his studies of eyes that seemingly change into fish and then into birds without effort.

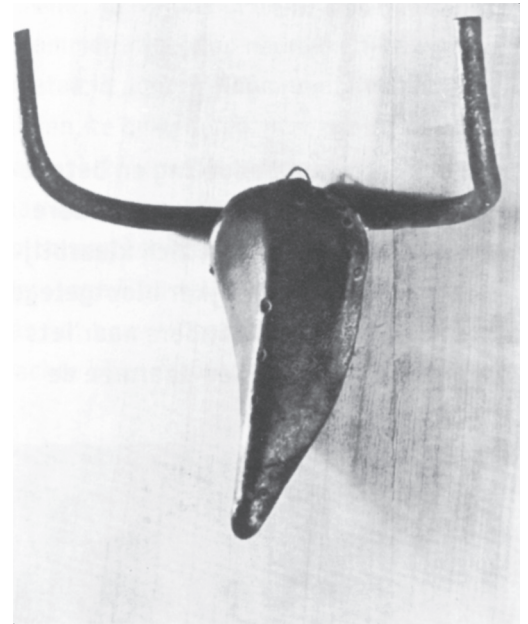
Forms for him - and materials too! - were clearly free and stayed that way until engaged, temporarily, in a particular chain of meanings, or rather, 'system of significations'.

On further consideration we can well imagine that for Picasso it was but a small step for a dish to very literally signify a *corrida*. The fact is, he was obsessed with bullfighting and it was one of the themes that haunted him the way another might see the arena as a well-filled dish.

42.7 DINING TABLE FROM A DIFFERENT CONTEXT

Le Corbusier's table, consisting of a thick cantilevered marble top on two steel legs, found many times in his work and used by him in his own house in the Rue Nungesser et Colli as a dining table, can be regarded as a new 'mechanism'. While not all tables were wooden and had four legs, this had been pretty much the norm, and it was simply accepted that at times the legs would get in the way even when located at the corners (such as when tables are combined to accommodate a larger gathering).

The steel central legs of Le Corbusier's table with their weighted feet allowed a reasonably stable top to cantilever on all sides, giving free leg room all round. A drawback of this solution (one that has to be put up with) is that the enormous weight establishes a place-bound quality. So there are disadvantages as well as advantages. It all depends on circumstances, but it is certainly a novel idea, which makes it interesting to find out how it was arrived at.



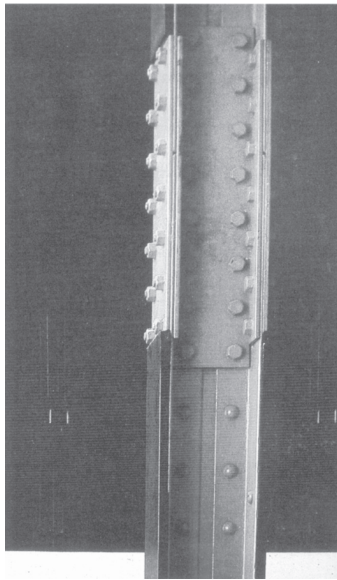
396 Pablo Picasso, *Tête de Taureau*, 1942



397 Le Corbusier, *Dining Table* (Paris, 1933)



398 Pierre Chareau; Bernard Bijvoet; Louis Dalbet, *Maison de Verre* (Paris, 1932)



399 Tie plates and rivets, flanges with slate panels



400 Stylistic amalgam. Bear steel column, a nineteenth century grand piano and art deco furniture

On visiting a hospital one day Le Corbusier saw a dissecting table, being used for anatomical purposes, according to Maurice Besset, making the purely functional advantages mentioned above all the more logical. To see the thing as a dining table was a particularly blunt transformation, one that obviously did not bother Le Corbusier, either when he was designing it, or when it was used daily by himself and his wife. Evidently he could banish the visions of cadavers from his mind and even the channel meant for running off blood is by no means an unpractical consideration for a dining table.

Bizarre though this example may seem, it once again shows that forms are able to change their meaning. But, it also shows that Le Corbusier was able to see this particular form distinct from the chain of associations originally linked with it and slip it into a new chain. The form was freed, so to speak, of its meanings and the framework once containing them, to be given a new infill, 'signified', with other meanings in another context which it was now at liberty to accept.

42.8 CHANGE OF CONTEXT IN MAISON DE VERRE

When it proved impossible to acquire the upper apartment in the courtyard in the Rue Saint-Guillaume, it was decided to remove the entire lower three floors and slip a new house into the existing building. Then a problem arose: the steel columns that were to shore up the remaining portion suspended like a stone bridge in the sky, could not be brought into the building in their complete state. As a result, shorter lengths consisting of sundry steel sections were combined and assembled on site using tie plates and rivets. So ultimately the solution was all-technical in the spirit of the bridge constructions of those days, which for us at least, used as we are to welded joints, have a nostalgic air about them.

Was it originally the intention to clad these columns, thrusting up resolutely through the tall space, so as to mask at least something of their explicitly technical look? We shall never know. What is certain is that the columns as rendered in the well-known perspective drawing contain nothing of this turn of events, germane as such developments are to the practice of building, though generally unexpected.

There must have been a moment when the architects, reviewing the whole in the light of the overall formal world they had generated for the house, decided that it was complete at this stage. And not just that, they had it painted in two colours in such a way that the technical build-up in parts would be more prominent still.

Chareau must have been taken with these columns, unexpected images as they proved to be, fully regaled and free-standing in the space. For aside from the black and red-lead colouring he clad the flanges at places with slate panels. This is something only an artist would think of, one with his roots in Art Deco as evidenced by the innovative use of materials and joints at so many places in this house. So we see Chareau uniting the redolence of disparate worlds into an amalgam with its own individual aesthetic. Add the furniture which together with the steel structure presents a kind of biotopic unit, and it then becomes clear that our acceptance of this aesthetic is grounded not in some law or precept that guarantees beauty, but entirely in the positive associations that each of the components present here evokes in us.

Clearly then, forms and colours (and of course words) change when lifted from their original context and placed in another setting. Extricated from their earlier system of meanings they are now free to take on a new rôle.

Place things in another setting and we see them in a new light. Their meaning changes, and with it, their value, and it is this process of transformation as enacted in our minds that gives architects the key to creativity.

42.9 CHANGE OF CONTEXT AT A DOLL'S HOUSE

In the competition held in 1983 by the magazine AD to design a doll's house (of all things), the submitted plans gave the expected broad spectrum of reductions of contemporary dwelling forms, in the way that doll's houses through the ages were for practical reasons invariably cutaway models of usually well-to-do houses from particular style periods.

Jean Nouvel (of all people) submitted a design and won. And although by no means the greatest of his designs it is certainly one of the most remarkable. Who would have thought of a toolbox as a space for accommodating your childhood memories? Dolls instead of steel implements, one could scarcely imagine a greater contrast. But the oblong terrace-like collapsible drawers unfold their contents so that at least everything is there at hand, a lot more clearly organised than most traditional doll's houses. Although not directly a model of a house that we know, you could well imagine it as such. And although not a reflection of an existing type, it does give an illusion, an idea, of a house.

Do children really feel the need for a reduction of a literal house, where you always have too many corners that are inaccessible, and with the frustration that you cannot really get inside it and always feel shut out as a result? Here in this toolbox your things are always safely stashed away and it is made to carry around.

Come to that, you can imagine Nouvel returning to this idea sooner or later (just think of the 'pull-out' stands of his super-revolutionary competition design for the St. Denis stadium).

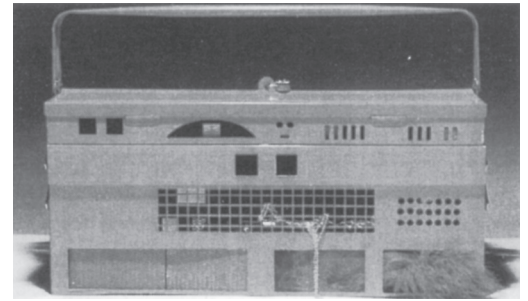
This concept breaks dramatically with the customary doll's house cliché. Not just in terms of the outward appearance and how it fits together, it also shows a revamping of ideas about what it is that children might want from a doll's house, taking note of the fact that they have less need of something representing a literal reality. With their capacity to think conceptionally, they are content with merely the idea of a house.

42.10 ADAPTING TO A NEW CONTEXT

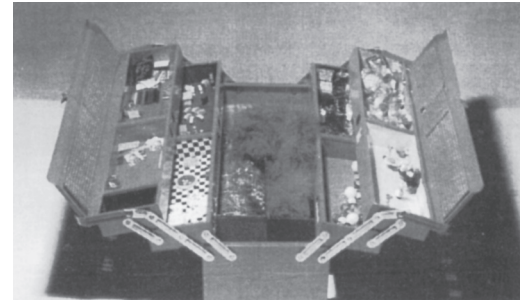
Forms and things can apparently adjust to a new situation and be primed to accommodate a new and opportune purpose. Looked at this way, creativity is seen to originate in an extreme capacity to adapt, in the sense that not only are you adapting to the potentials of things but at the same time those things are adapting to suit you.

"As far as the form of the granito washbasins we wanted to build-in at various places in both the Centraal Beheer building and De Drie Hoven, I got no further than a list of conditions that this form had to satisfy, such as filling watering cans and washing hands. The dimensions were in fact already fixed seeing that they needed building-in to the brickwork, and they had to be cast in concrete. But, what on earth was the form going to be? I tried to impress my thoughts on the others and demonstrated the movement you make when washing your hands by describing circles in the air. Everyone knew that there was only enough money for something very simple and square at the most. It was clear that this rectangular form was completely at odds with the flowing movement I had outlined and would be impossible to keep clean besides. Until, all at once, a polyester hard hat appeared before us on the table. Someone's straying eye had seen it lying in the cupboard. The perfect oval form, exactly the right size, ideal as a mould, simple to install and obtainable for free from the contractor." (1986)

The theory is as follows: new organisations/mechanisms/concepts are found by stepping outside your task and relating it - i.e. by association - to other known tasks and applying them to your case. The difficulty here is the usually limpet-like adherence of these known tasks to their 'original' meanings, something like a chemical compound with a strong affinity, making it difficult for us to conceive of them as freed and interpretable. The space for creativity lies in managing to forget, in demolishing foregoing prejudices and above all in an ability to un-learn. A matter of learning to unlearn, then. The age-old question, which inevitably looms up here as elsewhere is this: Is creativity something you can acquire or is it entirely a question of



401 Jean Nouvel, *Doll's house*, AD competition (1983)



402 Toolbox of childhood



403 Hertzberger *Washbasin*, Centraal Beheer (Apeldoorn, 1970) and De Drie Hoven (Amsterdam, 1974)

aptitude? And, although without aptitude you will obviously make little headway you could still say that the easier it is to pull apart forms and meanings, the greater the potentials for creativity; this means seeing forms more as self-sufficient phenomena, open to more and ever new meanings. Which brings us back to Picasso's ability to see the handlebars of a bicycle as form distinct from its meaning. The question now is whether you could cultivate this potential, and if so, how.

The pre-condition for creativity is that only the smallest amount is fixed for you, meaning that the largest amount is open-ended. The more doubt you have about the fixed meanings and established truths imprisoning you, the easier it is to put these in perspective and the more curious you need to become about other possibilities, other aspects.

Creativity depends on the ability to open your eyes so as to see things in other contexts and in particular beyond the restrictions of the arguments in the closed circle of the 'architectural world'.

It is more a question of mentality than of insight and teachers should perhaps do something about this by stopping scaring students with all that discipline-bound information and instead use the time to challenge students to enlarge the circle of their interest, to see more, to bring in other aspects; to arouse their enthusiasm, receptivity and curiosity, that they ask more questions than they expect answers to, that they experience more of the world, that they widen their frame of reference. Education, and this includes education of architecture students, should, before anything else, unfold mental space so as to explore the unknown, the new, the other and put it within their reach instead of filling the space in their heads with what we know already.

Make them hungry instead of nourishing them with information.

42.11 EDUCATION

The climate at the university is overly determined by fear. Fear on the part of the professors that students will not get a thorough training, and the students' fear of failing to satisfy the expectations of the professors. Yet the two parties agree on one count: it has to do with being able to think about your subject of study, the rest is a question of looking things up. Because you are only able to think when you get pleasure from thinking, it is 'the pleasure of thinking' that should colour every task you are set. The best tasks I know of in this respect are the following:

1. Comparative analysis (introduced by Kenneth Frampton at the Berlage Institute) of buildings. This involves carefully choosing a number of objects that have to be of one type per analysis (i.e. railway stations, residential areas, schools) and expressly suitable for comparison. Groups of students (this can only be done in groups) try to assess, on the basis of what are initially self-imposed criteria, the extent to which the different objects satisfy those criteria and which score the most points. They, therefore, have to think about how a building fits together, why this is so, and whether this really is the case. The basic conditions that projects have to satisfy are exposed together with whatever unexpected and exceptional spatial discoveries they may prove to elicit.
2. Once again, by dint of comparison, a number of preferably large buildings or structures, whose construction was of decisive influence on the underlying concept, are examined to ascertain the degree of influence the form had on the construction or indeed the construction's influence on the form. The exercise gains added depth by the inclusion of examples from the past as well as the present, such as the Hagia Sofia, the Gothic cathedral and the Sagrada Familia, thus presenting quite differently grounded relationships of form, material and ways of spanning. Without referring to history as such, various eras and their specific possibilities can then be compared, thereby laying low the unspoken but generally prevailing prejudice that there is no place for the past in the maelstrom of the present.

42.12 INDESEM

Indesem is a two-yearly International Design Seminar. A short-lived school of architecture held at the Faculty of Architecture in Delft, it is an explosion of learning without education. This time it is the students that decide which teachers they want to hear and what the subjects are to be. Students themselves are one hundred per cent responsible for everything and it is they who see to it that the technical and academic staff warm to the idea of breaking plenty of rules for a week. And you should see what happens when you do! Work continues into the early hours and the building is turned inside out to get at its hidden qualities. The daily routine is disrupted and the cleaners are made aware of their importance.

Spectacular though the week of the seminar undoubtedly is, it is merely the tip of the iceberg of preparations attendant on each new INDESEM when twenty or so individuals are kept busy for at least nine months. Each time a group of students comes together to perform the Herculean task of getting this event off the ground, their own regular studies largely left to one side for the duration. It is only much later that they realise just what they have received in return when, their studies over, it transpires that designing and realising a building demands an identical attitude where it is again all down to anticipating, deliberating, seeking out conditions, making (and keeping) appointments.

The task is enacted in the city. It is not primarily about building itself but about what building in the city does to space.

Those taking part come from all over the world, perhaps initially attracted by names and by the Netherlands, but also for the thrill of actually being able to meet and talk with so many others in the same boat. The task is no more than a pretext and catalyst for coming into contact with others and having something to discuss with them.

No-one really believes that a week is long enough to do more than make a start on a barely under-pinned plan, nor is that the prime reason for INDESEM. The idea of results is chiefly to drive the process. The performance that needs generating is to get a group of complete strangers, almost all of whom are obliged to try to express themselves in a language other than their own, to formulate and present an idea and go on to defend it against all others.

42.13 TAKE HOME ASSIGNMENTS

Part of the curriculum of the Faculty of Architecture at Delft consists of so-called 'take-home tasks': written assignments that students come and collect. These are to be completed and handed in fourteen days later, after which there is a discussion involving the teacher who set the task and those who took it on.

The essence of the task is that you can only resolve it properly through a combination of perspicacity, empathy and enthusiasm. It entails a written rather than a drawn situation; much like the physics problems you get at secondary school. It is a situation familiar to everyone, as intriguing as a puzzle you feel obliged to solve if only to keep up with the others.

These assignments never involve problems, they are challenging more than anything else. They call not for diligent draughtsmanship, but for an idea, a brainwave-in-miniature, and are expressly aimed at bringing out the assignee's own ideas, interpretation and choice of site. Thinking up a problem is possibly just as mentally taxing as thinking up a solution. As a teacher you have to extricate yourself from all the stuff that constitutes ninety per cent of the architect's practice and that you are all too readily inclined to immerse your students in, to show them just what a difficult business it all is. Instead you should be looking for the exciting, challenging and, most importantly, the fun sides to architecture that will arouse interest and hopefully curiosity too.

Looking through the results of the take-home exams, a coherent image has taken shape through the years. There are always a few who get totally stumped and a large group of boring,

decent, reasonable students clearly divided into those who went out of their way to resolve the task and those who ploughed through it with an often remarkable dexterity. But there is also a select band whose responses are frequently surprising and at times even astonishing.

*“The artist doesn’t make what others regard as beautiful,
but only what he considers necessary.”*

Arnold Schönberg

“It is easier to pulverise atoms than prejudices.”

Albert Einstein