WORLD ARCHITECTURE

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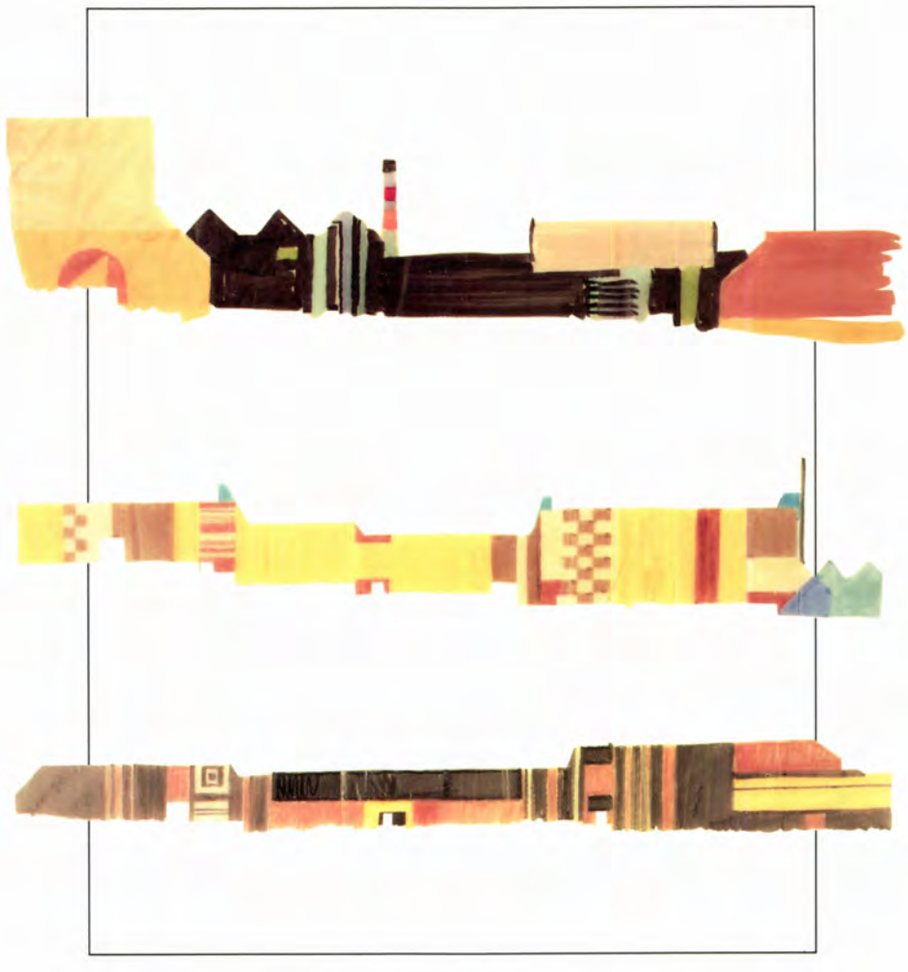

RALPH ERSKINE

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WORLD ARCHITECTURE

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WORLD ARCHITECTURE

The Nordic people have managed, through their ingenuity, talent and artistic commitment, to combine an interest in nature and the senses with a purposeful and practical rationality. What is more appealing than the free flowing curves of a bentwood chair, a glass bowl by Aalto, the controlled rhetoric of Asplund's slender columns or the dignity of a church interior by Lewerentz or Utzon? This handful of examples highlights the more human and much less ideologically hardline face of modern design: they touch the spirit in man.

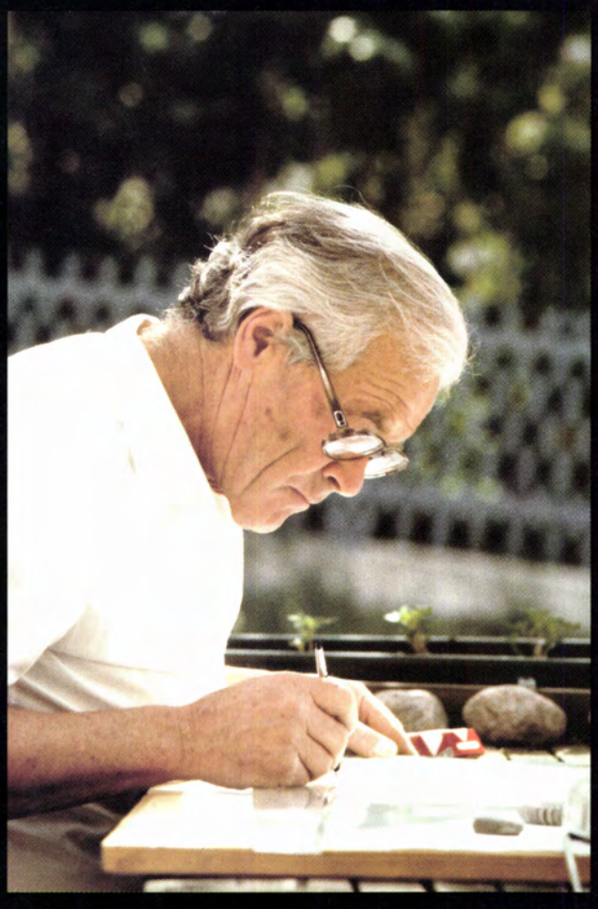
There are many shared characteristics in the regional architecture of Scandinavia. There are also common forms – some very original ones too – and well tried techniques and materials. Recently a growing acceptance of the richness of a revived architectural vocabulary has been demonstrated, and furthermore, this new language of forms is shared internationally. For example, it would be difficult, even absurd, to categorize Ralph Erskine's recent work as specifically Swedish, let alone as a regionally-based Scandinavian style. He is, after all, a British trained architect with years of experience behind him. Life was not without difficulties during his early years in Sweden, as he recalls in our interview with him for this issue. But the fruits of his experience as a designer place him firmly in the international camp, and examples of his work can be found in places as far apart as the Arctic Circle and Milton Keynes, England. But, like a good red cheese from Edam, there is no doubt from whence the flavour comes.

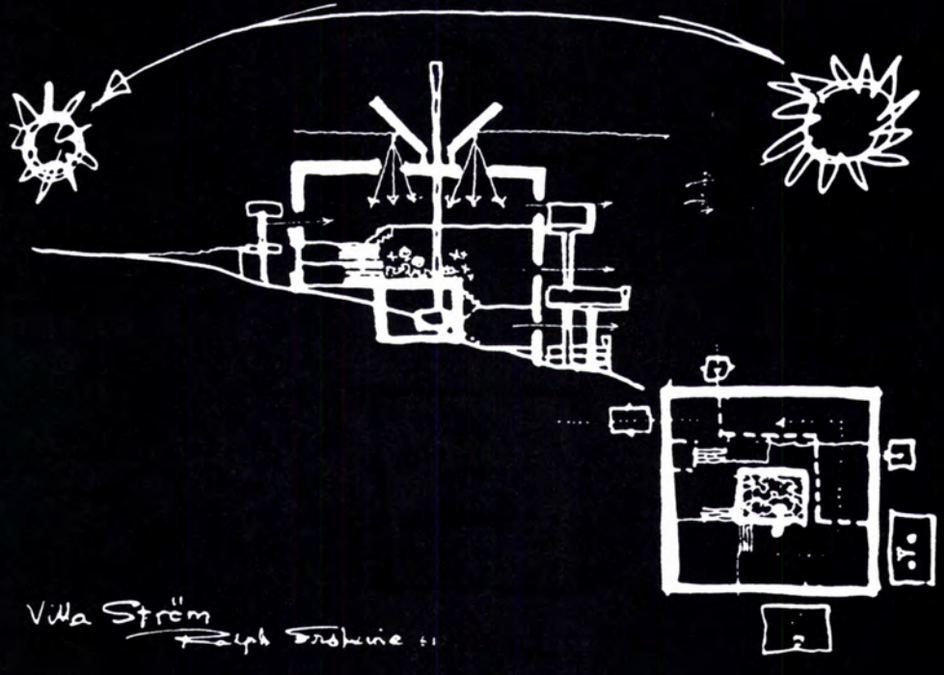
Erskine's recent work provides a summary of some of the tendencies of Northern European architecture. It is fastidious in its detail but never fussy, particularly the schemes for community housing. Erskine's participatory processes of community design involvement have proved to be successful tools. Out of these processes good schemes have emerged. Clearly they are derived in part from the strong tradition of collective and co-operative housing that Swedish architecture developed in the 1930s. This housing movement encouraged simple functional plans, featured efficient modern kitchen design and sun-seeking balconies, and combined these characteristics with a British sense of privacy for the individual and links with nature. Erskine linked it to a keen sense of colour and an almost obsessive interest in roofs, their protective shaping and symbolic significance.

This is all very encouraging. However, it should perhaps not be forgotten that in Sweden in the 1970s there was a specific attack on the values of postwar Swedish architecture, its drabness and "inhumanity".

At the Lillevachs Gallery, Stockholm, in 1980 the aggrieved organizers of an exhibition entitled *Unfulfilled Functionalism* assembled a rich collection of examples of traditional and contemporary international architecture. They were modest in scale, innovative in ideas, colour and materials and, above all, rich in the "spirit" of mankind. The exhibition attacked the lifeless, limp projects of repetitive blocks that were then going up in the centre of Stockholm. They poured ridicule on façades that might easily be peeled off to provide unmelodic scores to accompany the cacophony of noise arising from the traffic arteries that were being funnelled through the new concrete jungles. Pedestrians were simply regulated to underground warrens. □

RALPH ERSKINE





KEEPING OUT OF THE WIND

The following article has been printed with the kind permission of the publishers Byggforlaget of Stockholm. It is an extract from Mats Egelius's book Ralph Erskine – Architect, *to be published in English, later this year.*

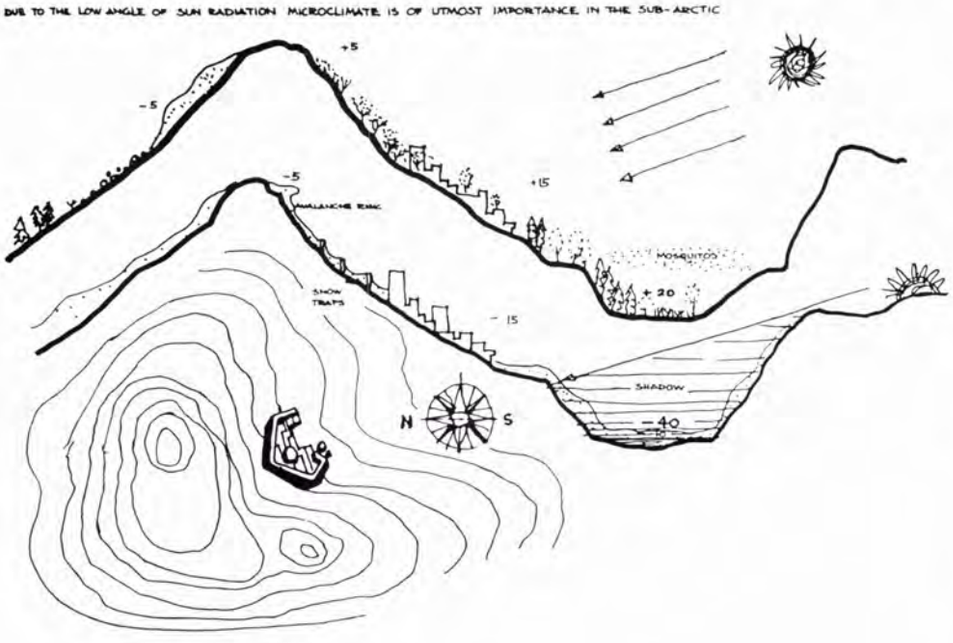
Ralph Erskine has constantly emphasized the function of buildings as climatic shelter, both in his designs and his writings.

Determining a site requires a balance between many different factors: local topography, existing buildings, service needs, planning regulations, fine views and climatic factors. In the North it is very important to avoid heat loss, so Erskine made wind protection and the receipt of sunshine a priority: "Here houses and towns should open like flowers to the sun of spring and summer but, also like flowers, turn their backs on the shadows and the cold northern winds, offering sun warmth and wind protection to their terraces, gardens and streets."

The most favourable position should be chosen, rather than trying to improve a poor position. To make use of as much warmth as possible in winter, a building in the cold zone ought to face south and the midday sun. In northern latitudes, where the winter sun is always low, the ideal town would be built on a south slope to get maximum sunshine.

Protection from the wind is of the greatest importance in the North, because of its chilling effect. A wind speed of 10 metres a second in a temperature of +2°C is the equivalent of −25°C with a wind speed of one metre per second. Human comfort is measured on an index of effective temperature that combines wind velocity, temperature and humidity. An awareness of this is clear in Erskine's ideal town, which shows that the place with the highest temperature is not necessarily best for buildings. Strong winds on the tops of hills and high humidity in the valleys must also be taken into account.

In the sub-Arctic, a town is best placed on a south-east slope, where it can make the best use of the morning sun (when the need for warming-up is greatest). It should lie half-way up the slope: too high, and the risk is of high winds and avalanches, while the valleys fill with shadows and cold air in winter, and with mosquitos in summer.



Form

In the "ideal project" and in regular commissions, Erskine has tried to arrange the buildings to make a huge sun trap, with the highest buildings to the north, up a slope. In giving the whole the form of an antique theatre that offers shelter from north winds, he makes it compact and its forms simple, and keeps windows small to keep down radiation losses. Thus his sketches of a housing area look like something in a Mexican *pueblo*, but if his buildings for a cold region resemble those of a village in a hot, dry zone, this is not really so strange because their problems are similar. *Pueblos* are massive collective soil structures with good thermal qualities that insulate their interiors from the sun. Erskine suggested the same concentrated form for his Arctic buildings, but to keep the heat in, not out.

If heat losses are to be reduced, then compact forms are preferable because buildings lose heat through their outer area, and the smaller the surface to volume ratio, the less the heat loss. But, unlike Mexico, a conflict arises in the Arctic, because Arctic houses must

absorb as much radiant heat as possible and, to avoid shadows, there must be plenty of room between buildings.

The unrelieved use of small windows only has been questioned by research which suggests that windows facing the sun absorb more heat than they lose. Nor is the town's rounded form ideal, because some parts are not orientated towards the sun and can cause unnecessary shadows.

A radical solution in the creation of these intensive communities is the wholly enclosed town, with a cupola or plastic bubble enclosing an artificial climate. Although he has made sketches of such solutions, Erskine is on his guard against them. His interest in climatic conditions has not caused him to overlook the psychological aspects of living in a totally controlled sphere, of making a sort of Arctic mole run.

Structure

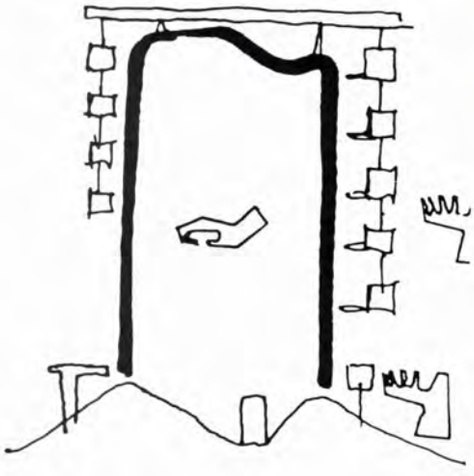
There are in principle two structural concepts that have been derived from climatic considerations: structural protection and structural separation. Both are based on the assumption that it is important not to pierce the structural envelope and so increase the risk of frost damage and conduct cold into the structure of the building.

Cold conduction occurs between the inside and outside of a building, as when a floor in a conducting material (steel or concrete) continues outwards to form a balcony. On account of this, Erskine separates outer elements, such as balconies and stairways, from the body of the building, by suspending them or making them freestanding. This is the strongest single element in his formal language: these detached elements on the building enrich its façade at a cost that is less than treating the façade itself in some way with a view to creating interesting forms.

Erskine's method simplifies the erection of the outer material of the building, in addition to its future maintenance.

Material

Erskine's knowledge of material for severe climates is something he has not turned into a strength. As he has seldom desigend luxury housing, he has mostly been content to use conventional material, often on economic grounds. In these cases, a strict set of norms for



Sketch of an idea and (right) plan for the housing area at Lassaskog, Växsjö. Balconies are suspended from the roof. Cold conduction is thus avoided, as floor elements do not project out into the cold as balcony floors.

Swedish Museum of Architecture

Swedish Museum of Architecture

Resolute Bay, Canada

building and his readiness to use bearing walls has guaranteed an acceptable insulating capacity. He has tried to use the good insulating effect of snow, arranging things so that it will lie on roofs and pile up against north walls. He chooses almost always to present a flat wall with few apertures to the direction of the prevailing wind; this has the additional advantage that the material is not so exposed.

He concentrates on form and appearance and trusts readily to colours that are dark and heat-absorbing rather than pale and reflecting. He selects material more for its plastic qualities than for its capacity to insulate or stop air leaks. Plastic form nevertheless helps to keep down heating costs in the sense that a cupola or rounded corners offer less wind resistance and expose a small surface area. Another advantage of these forms is that they convey a sense of protection. Erskine's solutions are often a symbolic gesture, but even if it must be said that he often devotes to form money that is more usually devoted to material, the result is often a saving of resources.

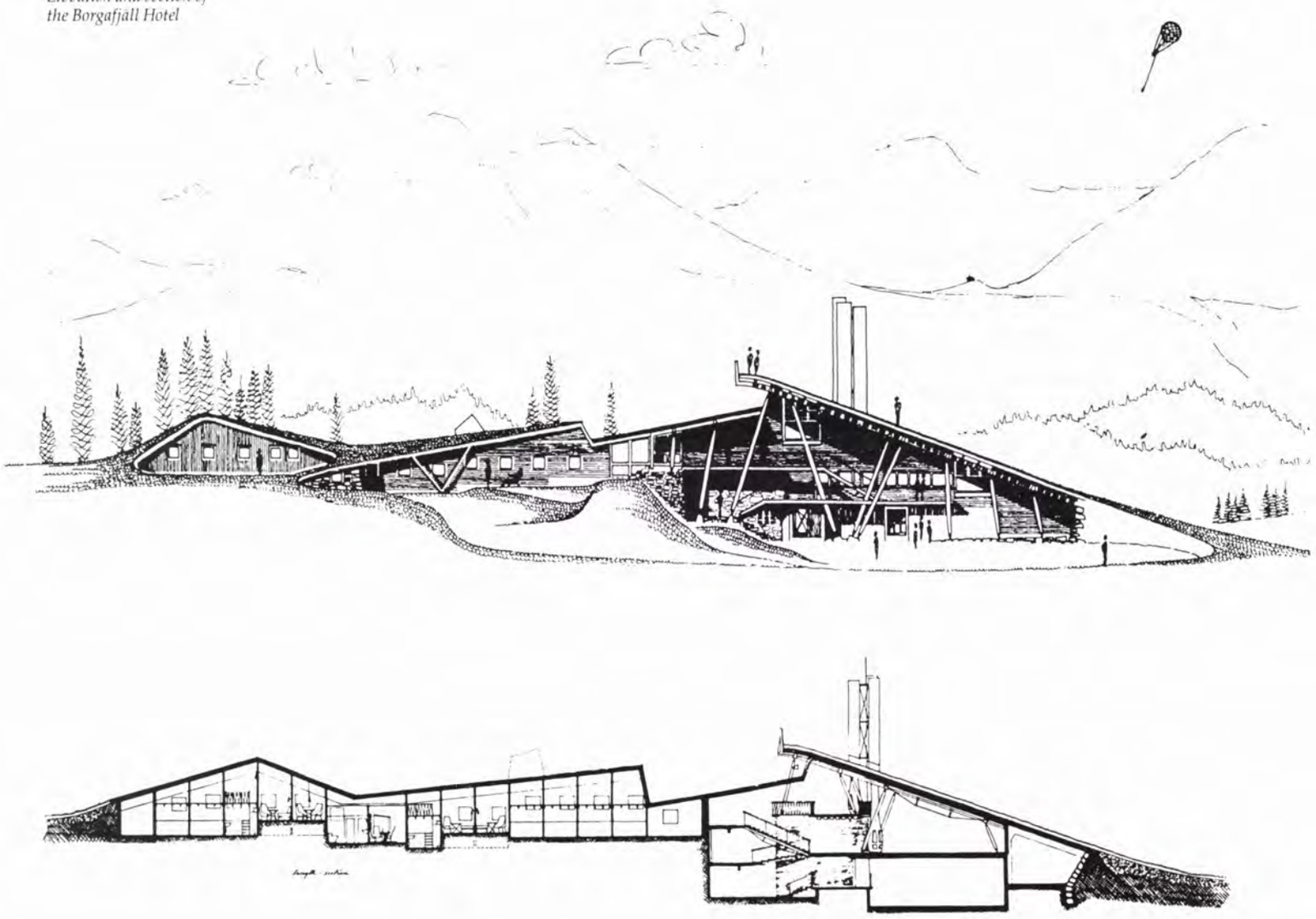
Parts of a building

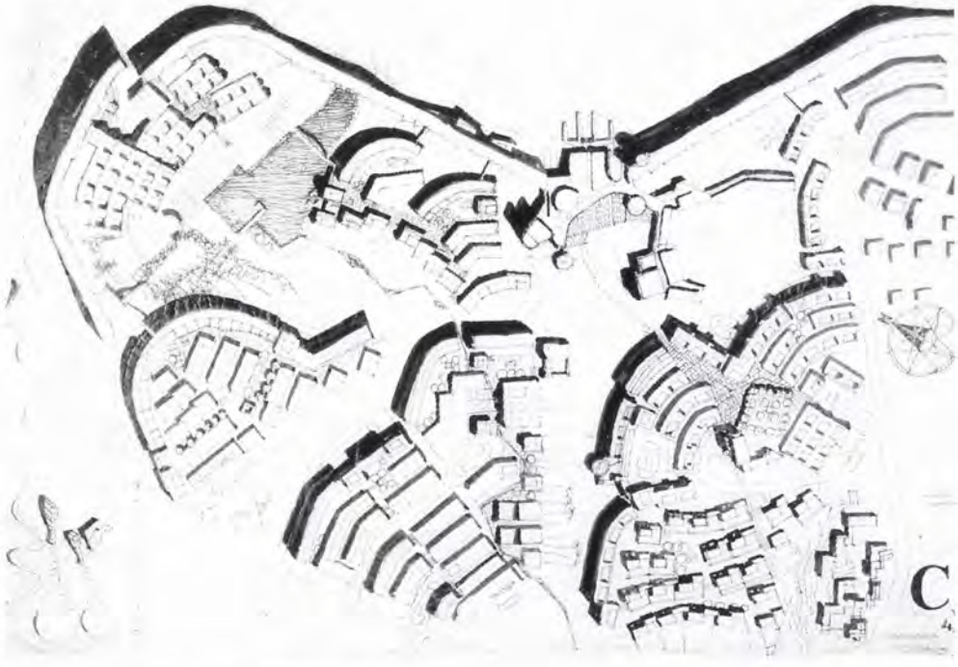
Erskine is very interested in the components buildings and, in contrast to many other architects, he has always been personally engaged in their solution. His interest in details has found expression in persistent work on his own inventions for new ski bindings. Often he develops an aesthetic quality in some detail, for example in placing outside a window a shutter or the like that can be adjusted to shut out the cold, or give protection against excessive heat or troublesome light. He thinks it is important to have insulating shutters.

Light is projected into a building by means of shutters and ceiling reflectors, inventions that suit especially deep buildings. Another typically Erskine arrangement, which also derives from his studies of climate, are ventilation scuttles on façades. In Sweden they have been used to shut out snow, and in England to damp down the intrusive noise from a motorway.

In an Arctic town, heavy drifts and accumulations of snow have to be anticipated. Accumulations in the lee of protective walls

Elevation and section of the Borgafjäll Hotel





Swedish Museum of Architecture

Svappavaara: proposal for a novel, small-scale town with a protective wall of buildings. Only part of the proposal was realized.

particularly have been the cause of several original arrangements. Snowdrifts have been stopped by *virvelkammare* or snow fences. Entrances have been protected by portals, while large roof hangings hinder snow from blowing down onto south-facing balconies.

In wondering how snow can be cleared in an Arctic town, Erskine has come up with some original suggestions. By building walls in a variety of forms, the wind itself can blow walkways and important places clear of snow. A more aesthetic use of the wind is, as at the Borgafjäll Hotel, to let it form sculptures of snow.

Buildings north of the Arctic Circle

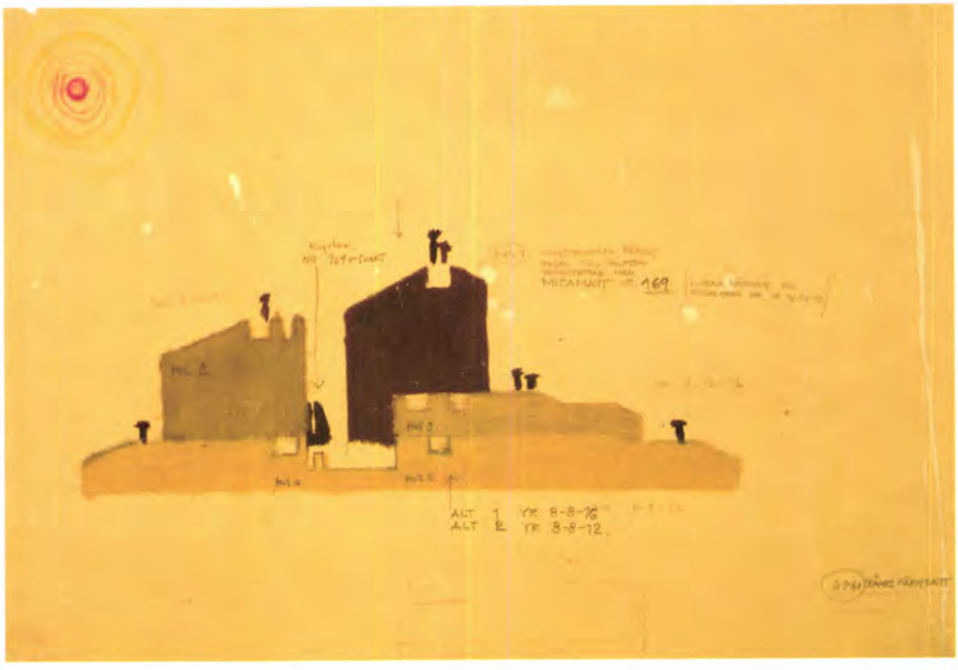
Erskine's studies of Arctic habitation were the basis for his much-discussed housing projects in the two Swedish mining towns, Kiruna and Svappavaari, just north of the Arctic circle. Each is wholly dependent on the iron ore mines that are state-owned through the company called LKAB. Besides dominating the local labour market, the company also decides on the welfare, housing and service levels of the entire community. In the early 1960s, mining operations expanded in Kiruna, and a new mine was opened in Svappavaara.

Since the mid 1950s, Erskine had been designing a new centre for Kiruna, on his own initiative. After putting forward a large number of proposals in 1961 he was asked to realize his original proposal in the part of the town called Ortdrivaren. Its central location made it necessary to use the land area effectively, and its financial stability was increased by including shops and offices; a nonconformist chapel was also included. This land use was justified by land prices and climatic conditions. Energy had to be saved, and short distances between buildings were necessary to keep down the costs of technical links and snow clearing.

What marks out this housing area is the slanted form of its roofs – a most un-Swedish sight. The reason for this form is that "south-facing façades are higher to absorb warmth and north-facing façades are lower to avoid casting long shadows". In this respect, Erskine succeeded in giving modern architecture a novel form, which derives from a fundamental functional analysis. In addition, he was guided by an intuitive feeling for form, as this project shows: in low buildings he reversed the slant, on climatic grounds but not the same ones, his purpose being to admit sunshine between the buildings.

Another characteristic is the beautifully rounded corners, which are economical in the sense that they reduce cooling effects. His interest in putting forward primarily rational arguments reflects more on the society he was living in than on himself: to win respect in a society that had steeped itself in scientific reasoning, Erskine felt obliged to adopt a tactical objectivity, but in drafting his designs he successfully retained his subjective, intuitive manner. He seems to have been able to produce an endless stream of concrete suggestions that modern technology made feasible; in choosing among them, he could employ an objective approach or simply rely on the client's ability to perceive the most rational solution.

Erskine has found it possible to keep a foot in both the objective and subjective camps without losing his balance. He has thus been able to work with artists, engineers and those who make the final decisions, including clients, who have often been relieved to find that Erskine can admit his feelings and those of others. His dualistic manner has enabled him to see the matter of building as a unity – which may be the definition of a good architect. □



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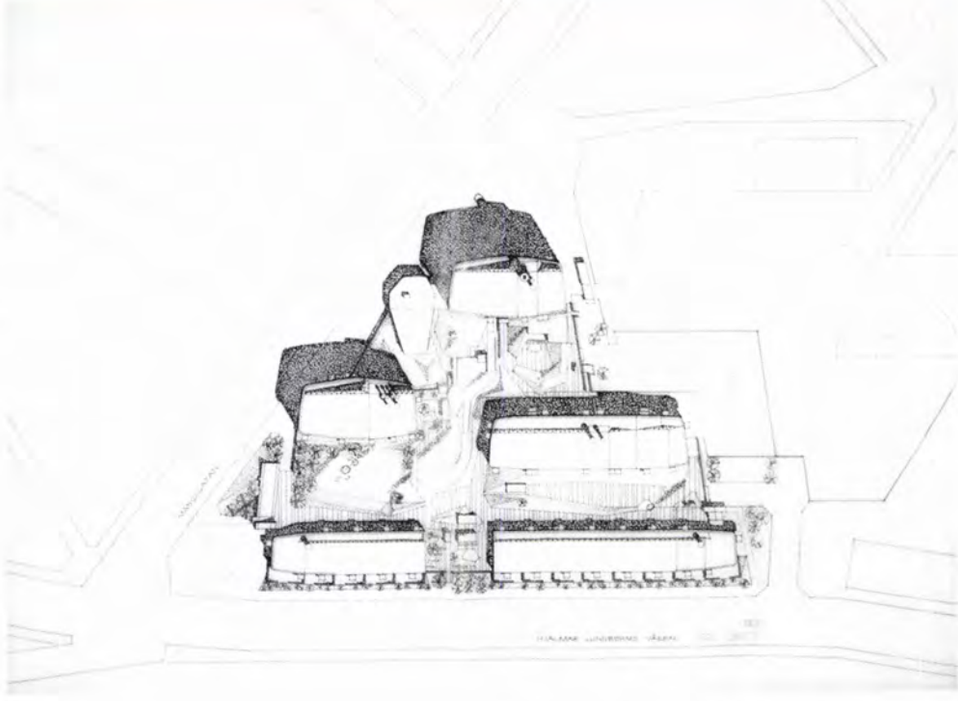


Swedish Museum of Architecture

In the centre of Kiruna, the Ortdrivaren quarter contains apartments, offices, shops and a chapel. It was planned as part of a large section of the centre, however only the part shown in the plan was built. The 10- and 13-storey blocks have roofs slanted to the north to reduce shadows. High buildings are preferable in these altitudes for, in winter, when the sun is low, apartments in conventionally designed buildings are often shadowed and dark.

THE IMPORTANCE OF BEING ERSKINE

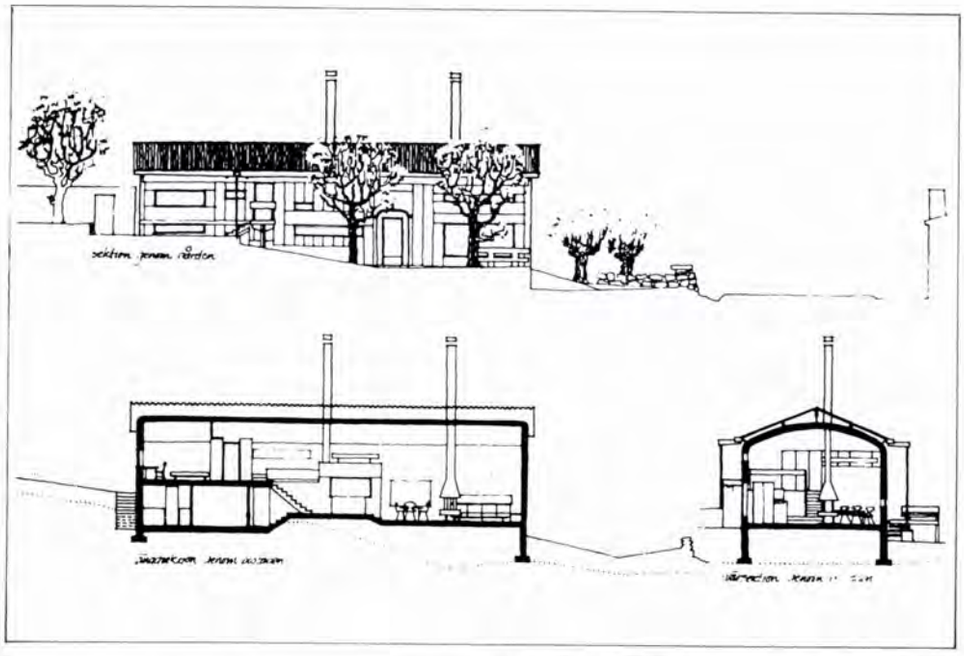
The Anglo-Swedish architect Ralph Erskine has gained a reputation as a good conversationalist as well as an original designer. In a recent interview held in Stockholm, with Dennis Sharp and Arne Klingborg, he spoke of many subjects making the following perceptive comments on urban design and the social and economic validity of the modern city.

It was a bright, warm afternoon in Drottningholm. Nothing remarkable about that you might think, except that this was early February. There had been no winter this year, no snow and precious little cold.

It had been a brilliant morning with a low sun casting long shadows across the green English garden outside the Royal Palace. It was damp and giving underfoot, quite uncharacteristic for the time of the year. The bold outline of the famous Baroque Theatre with its fine front and its great longitudinal neo-classical meeting hall for those who loved the opera and mingling with royalty, closed the view from the garden. It looked sombre in the quietness of the morning, a quiet punctuated only by the occasional crack of leather on the shingle as the royal guards' boots hit the ground.

Over the way, beyond the car park, is a fine terrace of eighteenth-century town houses. Behind them lies Ralph Erskine's modern house with its adjacent twinned office divided by a landscaped courtyard designed for outdoor living in the summer. The house and office fit snugly into the existing urban fabric. You can see right into the rooms of the studio. They are open, part of the public domain in a sense, without sound barriers and with a richness only revealed upon entry.

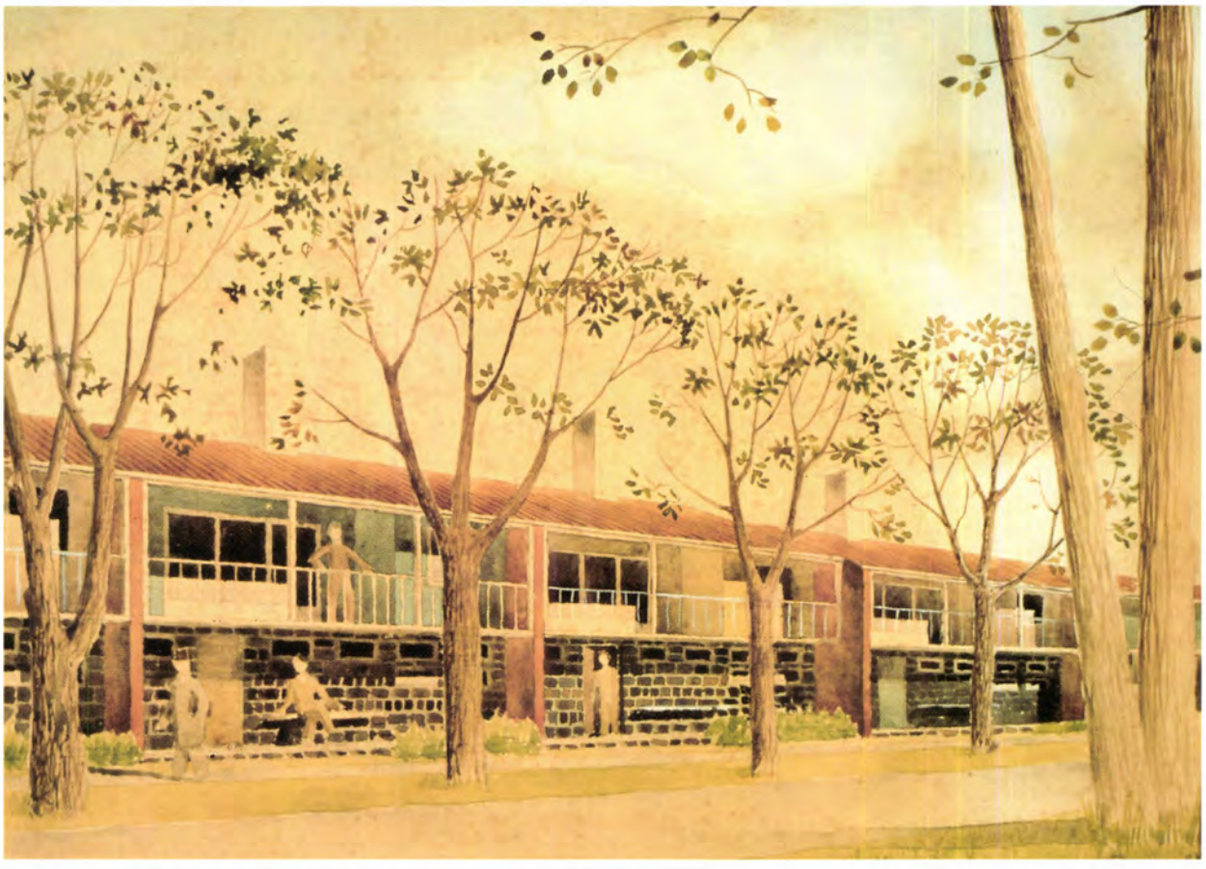
In the morning the house had been empty, Erskine was out. This cacoon of liveable space with the precise curves of a machine-made object is overhung by a floating roof that gives it an unusual air, a kind of neighbourly architectural grace and a gesture towards local conformity. Undisputedly it is an architect's house, but a residence fit for a king.



Elevation and Sections of Erskine's own house, 1963.

Later in the day, as the light faded, we reapproached this fiefdom. It was now more animated. The lights were on, the front door slightly ajar. Erskine was there. Soon an open log fire in the living room was lit. We could now begin the interview. It was not going to be an inquisition but a dialogue, a triad in fact, as with us was an old friend of Ralph Erskine's, the Swedish painter and guru, Arne Klingborg, who is the *éminence grise* behind the community experiment at Järna carried out by another colleague of Erskine's, the Danish architect Erik Asmussen.

Klingborg, a valued companion, has lived his whole life in or near Stockholm and knew architects such as Gunnar Asplund and



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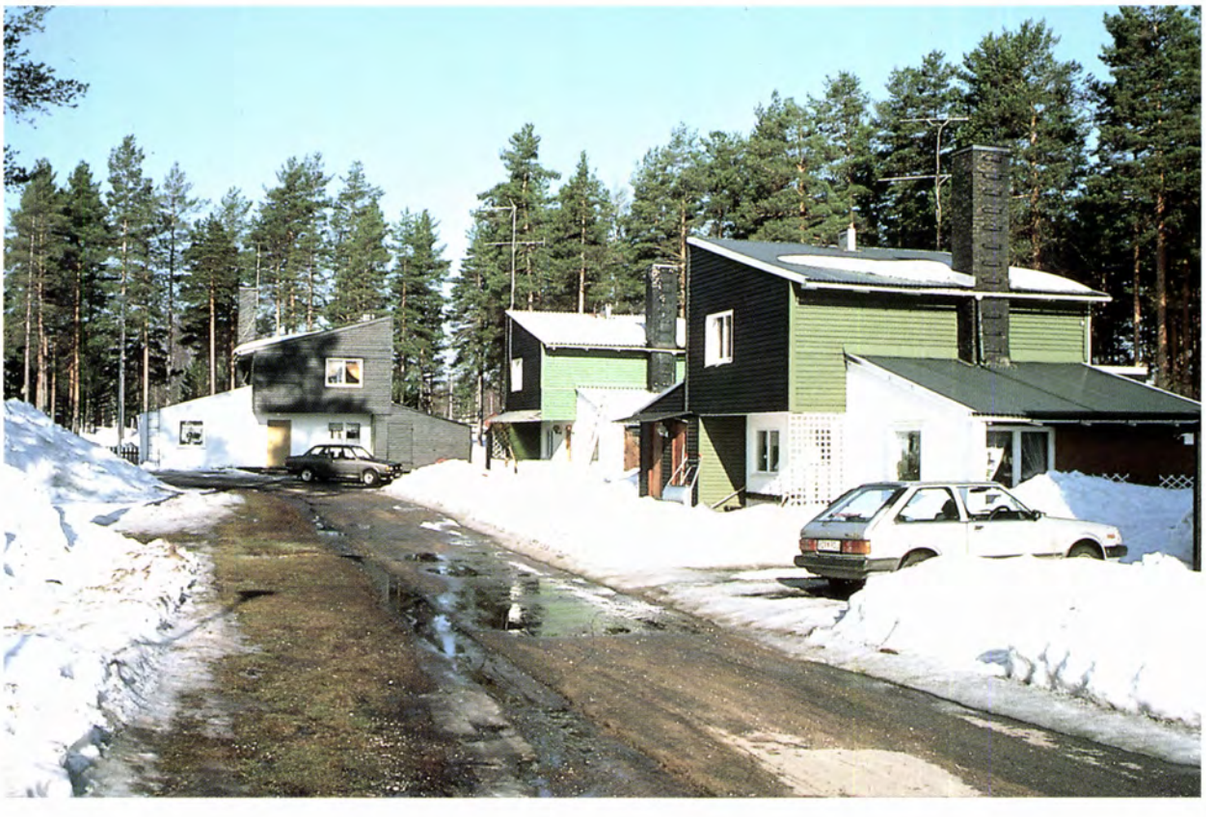
Workers' Row Houses, 1963.



Karin Winter/Swedish Museum of Architecture

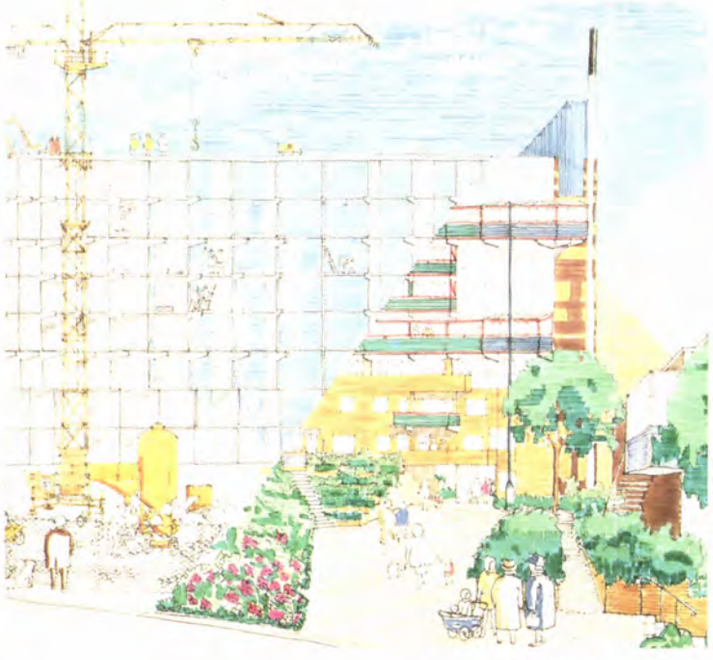
Housing at Jadraas, 1951.

City of Newcastle upon Tyne

Left, aerial view of the Byker Wall, Newcastle upon Tyne, England (1969-81).

Below, concept drawing for Byker Wall.

Bottom, the interior, south-facing side of the Byker Wall showing the virtue of the intensive planting scheme which has both softened the design and acted as a barrier against vandals. Litter, however, remains a problem.



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City of Newcastle upon Tyne

Swedish Museum of Architecture

Chapel in Avasjo.

Paullson. He attended the Stockholm exhibition of 1930 and has intelligently observed the major changes of over a half century in his country.

Both Klingborg and I had vowed to try to keep to the point. Let's get Erskine to talk about the Sweden he came to as a young man from England in 1939. Let us ask him about his philosophy and the ideas that underlie his open, pluralistic and individualistic architecture, and let's talk about urban life, the city, its problems and influences, people and architecture, and the future and life . . . and so on! We did all this, and more.

Anyone engaging Ralph Erskine in discussion must understand that even the most hardened interviewer will find it difficult to map out any real conversational route. One has eventually to accept a pathway through the words hoping to reroute the conversation into a clearing and to understand the issues raised. Thus it was that we found ourselves dealing with a lifetime's ideas in less than five hours.

We covered aspects of the second world war and the change from a traditional and indigenous society, with its own distinct social and democratic aims in the area of education, housing and city living, to the consumerist internationalism of the present day. And of course to classicism and the northern traditions, the regional climate and the *forces majeurs* of professional life. Ralph Erskine, now into his mid-seventies, knows all about these things. He has done it, seen it, and changed things. He has reinvented many wheels.

Much of what he speaks about acknowledges the strength of traditions and the continuities of cultures and their common characteristics, particularly in the urban sense. "Cities are the most fantastic artefacts and works of art that human beings have made . . . in them we move together for common interest, to exchange ideas . . ." he said, in a discussion about a scheme he had done with other international architects in Florence. "I had done a sketch of Florentine streets, squares and shops whereas Richard Rogers collected all the things together in one building, a super shopping centre; he even put a bank on top of it . . . I took the characteristics of Florence and I sketched out the scheme. There was a central park with streets and squares, a common function, the weave of the town." Erskine showed his fellow architects his scheme and they called it "nostalgic".

Defending his ideas he said: "You would expect to express the common characteristic first. There would be a basic characteristic even in the aesthetics and then endless variations. This is like all old towns, all the buildings are different from one another but the concept of the city has a common character except for the churches and the King's palace . . . Florence has the same characteristics. They kept talking about *Il Duomo* and Brunelleschi. I said there is one *Duomo*, and one or two other churches.

Dennis Sharp

Dennis Sharp

University of Stockholm, Frescati, 1987.

Even if you look at the palaces here, you have got the *Pitti* and the brutalist palace like *Palazzo Vecchio* – a very good investment! Several hundred years old and still useable, now the town hall. Many of the palaces in Florence just form part of the street, they have common characteristics and they are a bit more refined in detail than the less wealthy houses, but they form part of the street, part of the city and then you get these exceptional buildings for exceptional functions. It is the same in Siena where I also did a scheme that was looked upon as 'uninteresting'."

During our conversation Erskine claimed that a "feeling for a common identity is not very popular in the new liberal situation we find ourselves in . . . the central part of Stockholm has got on very well because they have maintained city blocks".

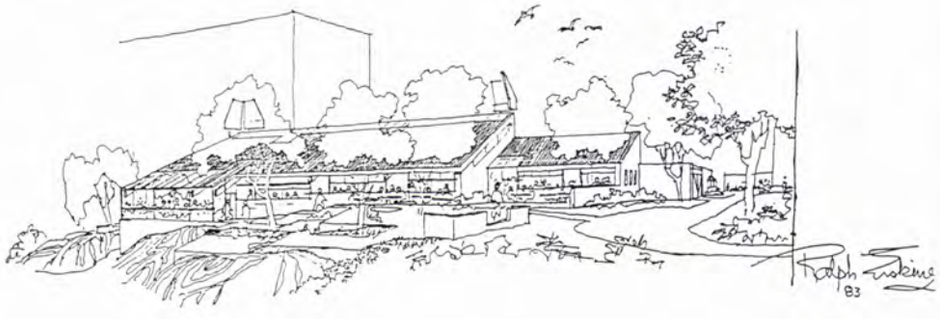
Warning about the chaotic nature of modern cities, particularly in Japan but also Holland, he spoke of the symbolic nature of towers in the city which he reckoned, "should only be used when expressing something of common interest, a town hall or, in the old days, a church, but not a company". Arne Klingborg interjected a remark about the new company buildings and towers that can be seen on the journey to Stockholm centre from the airport at Arlanda. Erskine replied: "At one time I played with the idea of putting a high building there. That is the old city entrance, you know", referring to the new interchange bus station and railway link building he has recently designed with colleagues. "I sat on the island at the south side of the city", he continued, "and I looked over the whole silhouette of Stockholm. It goes up and down, presumably one or two storeys higher than it was before but still with the same buildings stacking up, one or two of which are still relevant and one or two which are not. This we felt should be defended and we scrubbed the idea of a tower. We would not have been allowed to put it there and a good thing too". He then demonstrated through a recent town centre project, the new pressures on modern urban planning which reflect a new liberalism and a dogmatic attitude to the market place: "It has become a religious thing as most economies are religious. It is not a natural phenomenon."

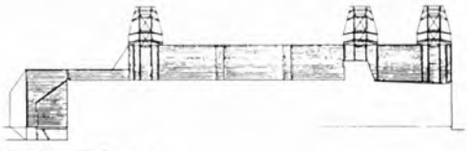
Erskine recalled a time when he was working on a scheme for Milton Keynes and the conversation he had with a librarian, "who believed that a mixed economy was a very good idea. Business is very good at producing things; it is very good at choosing what to produce. It produces things that pollute . . . It is the public role to actually set up the parameters, but then you have to assume that

SAS Building, Bromma 1983.

St Görans Matsal 1985-6.

Dennis Sharp





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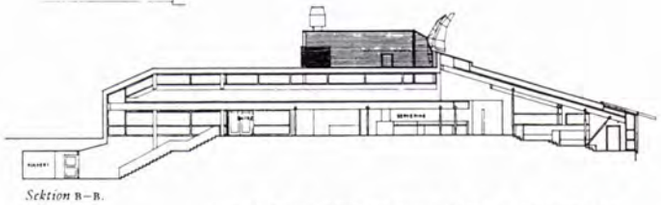


Sektion B–B.

Early sketch and elevations of St Görans Matsal.

you have good leaders in the public sector. That was his theory: the public sets up the parameters, business can compete according to the capitalist system as long as there is not too much corruption." This has its effect on urban planning, even down to – as Erskine himself demonstrated – the positioning of bus stops in a town centre which then influence the way people move through a part of a town, to the shops or the housing. They can easily be guided into impulse buying and into "stressful and polluting activities" and "sometimes debt". (Perhaps it is worth recalling here that when Erskine went to live in Sweden only 40% of the population lived in cities. In 1937 only three cities had populations over 100,000.) "When I am building a township with people working, living and shopping I put the bus stops in one way. If I am building in the interests of commerce I build them in other places."

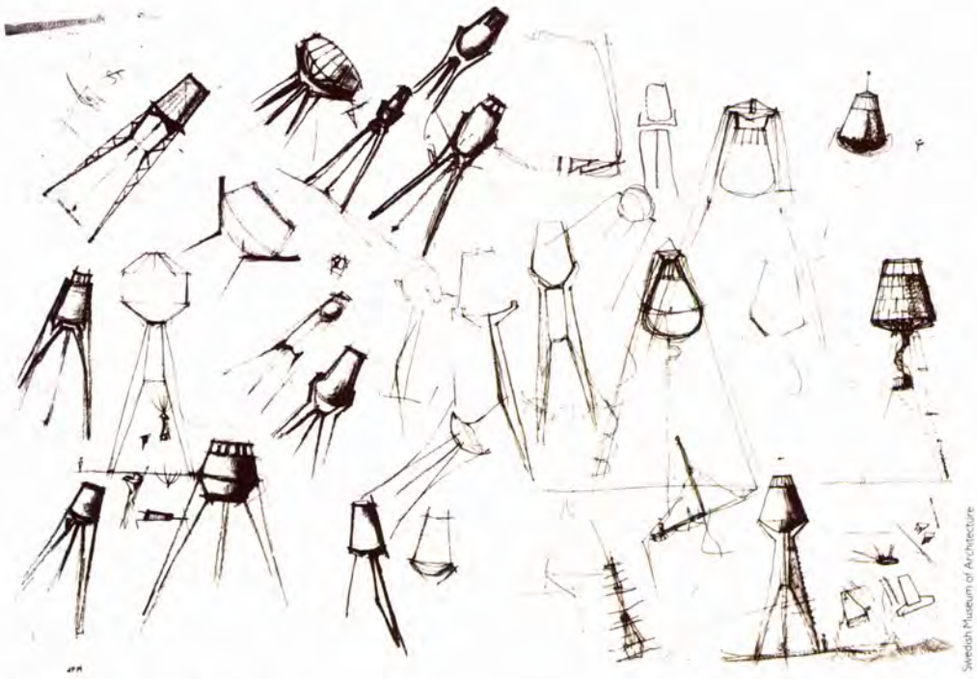
The conversation soon shifted back to Stockholm, the city that has been referred to as an urban park by the sea. Erskine maintains that over the past few years it "has become a much more exciting town. We are part of the international world . . . The youngsters here still go out into the forest because it is convenient but there are a lot of city dwellers like in New York." He expects that the American narcotics curse may follow in a few years, as well as that growing "anonymity of larger cities". People are clearly getting anxious. Arne Klingborg spoke of the negative influence that the environment can have: "Can't the environment have a positive influence too . . ." he asked, "we have to cultivate nature . . . architects are all sitting in their offices and they are working for their clients but they are not struggling for social ideals anymore . . ." Erskine replied: "It is not a matter of giving up the fight but of realising the difficulties. One of the important influences in Moscow is that McDonalds has come there. Hundreds of metres of queues. It is this business of belonging to the world culture."

Another thing has happened: "The Leaders get concerned about pollution when the shit falls in their own garden and that is beginning to happen . . . the problem is that the whole culture has shifted and the artist has shifted with it as well as the politicians and business people. This country when I came here was inordinately honest. Today everyone is tricking each other like mad, from directors to road sweepers . . . the media is one of the problems but here it is not too bad . . . but we have the apparatus selling the alternative life style . . . it is the easy sell that dominates."

"How does the architect relate to this philosophy?", I asked. He replied: "I think it depends on the architect. There are many roles for architects. Some are business people. Some are earning their living, some are trying to get a bigger car, some have got ideals and are battling along but they cannot get their ideas through . . . as Overstreet says in his book *The Mature Mind* everything works for maturity in the human being and everything works against it. The thing to do is to strengthen that which works for maturity and judgement and choice."

Ralph Erskine: A Chronology

1940-41 Two Houses, Djupdalen
Traditional timbered style.
1942 Own house (The Box), Lissma
One room 6 × 3.6 m. Built in wood clad with panelling. For RE &·family. Reconstructed in Drottningholm 1989.
1942-43 Lida Leisure Centre, Tullinge
With Gustav Birch-Lindgren and his assistant Aage Rosenvold. Traditional timber style.
1942-43 Houses, south of Stockholm
Houses and *stugor* (small houses) in traditional timber style, planned together with Karl Daniels, a builder.
1943 Fredholm House, Saltsjobaden
1945 Gyttorp, Vastmanland
Dwellings in lightweight concrete and plaster in strong colours.
Shops and heating centre.
1947 Karlberg House, Fagersta
With Aage Rosenvold. Two-storey house with a brick façade.
1947 Molin House, Lidingö
With Sören Wimmerström. In lightweight concrete and plaster.
1947-8 Erskine House, Lewes (UK)
With Norman Foley. For RE's parents.
1947-8 Nilsson House, Gastrikland
With Ake Malmin. In wood, with frame of modules.
1947 Westblad House, Sollentuna
North of Stockholm.
1947 Barregärd House, Tyreso
1947-8 Mattress Factory, Köping
With Sören Wimmerström and Uffe Olrik. Factory, store, offices and staff restaurant. Frame of concrete pillars, brick-clad façade, shell design concrete roof.
1947 Norrsundet, Gastrikland
With Aage Rosenvold and John Morton. Dwellings, paper-pulp store, factory, workshop and offices. Rebuilding of workers' dwellings in apartment buildings done in 1951.
1947 Avasjö Kapell, Borgafjäll
With Sören Wimmerström and Uffe Olrik. Wholly in wood, shingle roof.
1947 Hammarby, Gästrikland
With Aage Rosenvold, Lennart Bergström and Sören Wimmerström.
Urban plan for industry, dwellings, shops, premises for meetings, leisure areas.
Dwellings 1948. Family housing in freestanding, row and continuous-terrace houses in lightweight concrete. Plastered and panelled façades: the first instance of ER seeking future residents' views in his design work.
Old-peoples dwellings.
1948 Parish Hall & Residence, Stockholm
1948 Hotel, Åre.
1948 Nilsson House, Saltsjö-Duvnäs
With Sören Wimmerström. In lightweight concrete and brick, plastered façades.
1948 Ski Hotel, Borgafjäll, Avasjo
With Aage Rosenvold, Lennart Bergström and John Staalehoef. Built in material available or prepared locally: rough-sawn timber, stone, brick, telephone poles. Traditional grass-sown roof later converted to metal sheeting.
1949 Bäge House, Lida
Walls in natural stone. Walls and ceiling of interwoven birch bark.



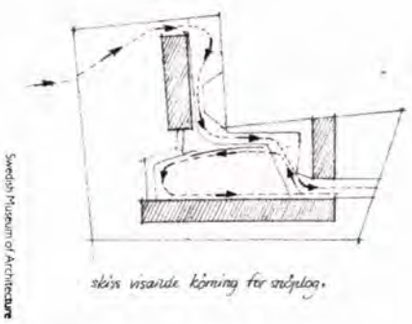
Sketches for water towers 1955.

1950 Chemical Facotry, Gnesta
With Sören Wimmerström. Factory, offices and warehouse. Plaster façades, shell design concrete roof for the factory.
1950 Lea, Uppsala
With Sören Wimmerstrom. Offices and warehouse for a wholesaler of domestic goods and foodstuffs. Façades in yellow brick.
1950-3 Fors, Avesta
With Sören Wimmerström, Beres Wilcox, Birger Nygell, Janos Kleineisel, Lennart Bergström.
Cardboard factory: Frame in cast pillars, façades in yellow brick.
Dwellings: Extended-terrace houses, linked by walls and sheds; built in brick. Two-storey attic-passage houses, four-storey point blocks.
1950 Nordstrand House, Storvik
1950 Clothing factory, Upplandsbodarna
With Sören Wimmerström. Façades in red brick.
1951 Haaland House, Stavanger (Norway)
With Aage Rosenvold.
1951 Jädraås, Gästrikland
With Aage Rosenvold.
Dwellings for forestry workers.
1951 Standard house in timber.
1951 Industrial building, Stockholm
With Sören Wimmerström. Cosmetics laboratory and offices for Enequist, Holme & Co.
1952 Johnsson House, Saltsjobaden.
1953 Möller House, Ekerö.
1953 Summer house, Gilleleje, (Denmark).
1953 Housing area, Frösö.
1953 Factory, warehouse, offices, Södetälje
With Lennart Bergström. Frames and factory roof in reinforced concrete, walls in lightweight concrete. Windows and frames in wood. Skylights in factory roof. (Known as Ostermans.)
1953 Detached houses, Avesta
With Sören Wimmerström.

Swedish Museum of Architecture

Sketch for a tourist hotel at Borgafjäll 1948.

Sketch to show how to drive a snowplough in the grounds of an old people's home.



Swedish Museum of Architecture

1953 Shopping centre, Malmö.
1954 Tesdorpf House, Skövde
With Lennart Bergström.
1954 Shopping centre, Luleå.
1954 Rented apartments, Lassaskog, Växjö
With Aage Rosevold. Six seven-storey blocks, an early instance of prefabrication with concrete elements lifted into place by crane. Balconies suspended on cables hung from projecting roof cantilevers.
1955 Central buildings, Kiruna
With Peer-Ove Skånes. Proposal for a plan of new construction in this Arctic town.
1955 Old peoples' home, Kålltorp
Near Göteborg. With Gösta Wiman.
1955 Shopping centre, Linköping
Apartments, Kiruna
With Yngve Fredriksson. Buildings with four apartments on each of three floors.
1955 Påhlsson House, Malmö
1955 West Hotel, Stockholm
1955 Hotel, Leksand
1955 Office & Warehouse, Stockholm
With Yngve Fredriksson.
1955 Sailing Vessel Verona
English east-coast sailing barge converted for use as an architect's office afloat.
1956 & 1971 Coffee roaster's premises, Stockholm
With Nicke Anckers, John Elliott and Jane Erskine. Offices, roasting facilities and warehouse for coffee.
1956 Waterside hotel, Mariefred
A project for boating enthusiasts.
1956-1990 Tibro, Västergötland
With Aage Rosenvold, Yngve Fredriksson and Herbert Scheiwiller.
Dwellings and shopping centre, Vallmon
Housing area, Brittgården, 1959-69
Central facilities, 1961-65
Urban plan, Skattegård, 1963-65
Housing area, Sprättebo, 1961-69
Communal building, 1969
With Bengt Ahlqvist. Featured light reflectors on roof, to catch low-angle Northern light.
Urban plan, Häggetorp, 1970-76
Shopping centre, Tibro, 1972
With Herbert Scheiwiller.
1957 Offices and laboratory, Sollentuna
With Nicke Anckers and James Codrington.
1957 Airport, Märsta
A proposed international airport.
1957 Arctic town
An ideal, climatically-suited community.
1957 Moutka House, Jukkasjärvi
With Alfred Andersen.
1957 Farmhouse, Ringsrum
1958 Holiday house, Shaeffer, Ohio (USA)
1958 Leisure centre, Västerås
1958 Housing area, Forsacka
1959 Summer camp for boys, Stegeborg
1959 Detached bell tower, Lovö
1959 Housing area, Sutton Benger (UK)
1960 Church, Segato (Zimbabwe)
Exterior intended to look like a trditional African meeting place.
1960 Bakery and offices, Malmö
With Nicke Anckers, Vernon Gracie, Mike Linnett, Jane Erskine and Arne Nilsson. For a family company called Pågens.
1961 School, Gyttorp
With Mike Linnett, John Elliott and Peer-Ove Skånes. Each classroom giving onto its own outdoor place.
1961 Gadelius House, Lidingö
With Peer-Ove Skånes and Mike Linnett. The roof has been covered with earth and planted with greenery.
1961 Ortdrivaren housing area, Kiruna
With Peer-Ove Skånes.
1961 Ström House, Stocksund
North of Stockholm. With Mike Linnett and Nicke Anckers.
1961 Church, Storsäter
1961 Sub Arctic town
An ideal project for a community in a sub-Arctic climate.
1962 Nordmark House, Södertälje
With Vernon Gracie and Nicke Anckers.
1962 City-centre plan, Cambridge (UK)
1962-68 Barberaren housing area, Sandviken
With Aage Rosenvold, Bengt Ahlqvist, Peer-Ove Skånes, Janos Kleineisel and Jane Erskine.
1963 Housing, Svappavaari
With Aage Rosenvold and Peer-Ove Skånes.
1963 The Erskines' own house, Drottningholm
In prefabricated lightweight concrete planks; roof in black corrugated metal sheeting.
1966 Les Crosets (Switzerland)
With Andrews, Emerson and Sherlock.
1968 Men's hostel, Sandviken
With Aage Rosenvold.
1968 Clare Hall, Cambridge (UK)
With Mike Linnett, Bengt Ahlqvist, Jane Erskine, Tony Smith and Ken Twist of Twist and Whitley.
1968 Killingworth, Newcastle (UK)
With Bengt Ahlqvist.
1969 Studlands Park, Newmarket (UK)
With Klas Tham and Pehr Tham.
1968-70 Släggsmeden, Sandviken
With Aage Rosenvold, Janusz Haliciewicz and Bengt Ahlqvist.
1969 Esperanza, Landskrona
With Aage Rosenvold and Mike Linnett.
1968-82 Byker, Newcastle (UK)
With Vernon Gracie, Roger Tillotson, Bengt Ahlqvist, Mike Drage, Pär Gustafsson, Trevor Harris, Per Hederus, Dave Hill, Gerry Kemp, Mike Linnett, Ken McKay, Arne Nilsson, Tony Smith and Nils Viking.
Urban area built in stages. Row houses in an area screened by Byker Wall, a long building of varying height on a curving plan containing smaller apartments. Screened area divided into smaller units with open spaces, playgrounds and squares. Brick and horizontal wooden panelling on

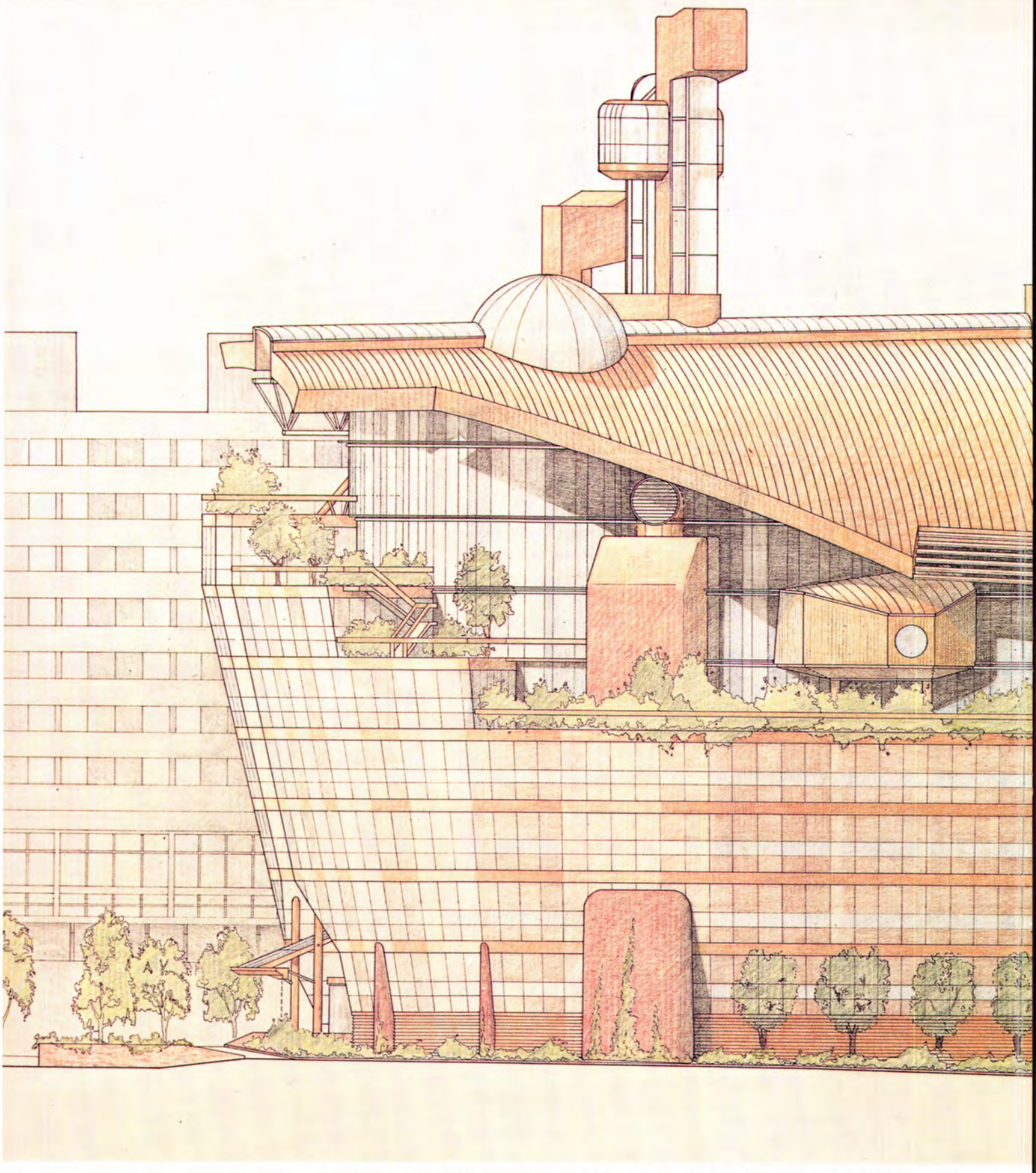
façades, strongly coloured wooden battening on balconies and galleries. Schools, shops and old peoples' housing.
1971 Town centre, Västervik
1972 Steninge, Märsta
With Bengt Ahlqvist and Torbjörn Einarsson.
1973-8 Nya Bruket, Sandviken
With Aage Rosenvold, Janusz Halkiewicz, Mike Linnett and Torbjörn Einarsson. Dwellings (750) in buildings with galleries and balconies, grouped round rectangular common courtyards; excepting a screening three-storey building to the north, all two-storey buildings.
Day-care centre, old people's home and sporting facilities. Vigorously coloured horizontal wooden panelling on façades, horizontal wooden battens on balconies.
1973 Eaglestone, Milton Keynes (UK)
With Klas Tham, Pehr Tham, Mike Linnett and Malcolm Andrews. Car-free area of small houses on narrow streets, alleys and small open spaces of greenery. Two-storey detached, semi-detached and terraced houses around courtyards. Façades variously in brick and horizontal and diagonal wooden panelling in strong colours.
1973 Resolute Bay, North-West Territories (Canada)
With Peer-Ove Skånes, Boris Culjat and Ian Elmes. Community for Eskimo and immigrant people in an extremely cold climate.
1974-81 Frescati, Stockholm
Student building for Stockholm University. With Bengt Ahlqvist, Peer-Ove Skånes and Erik Mulbach. Over a triangular building, an irregularly and softly curving roof, its southern edges being supported with inclined wooden posts. Similar to RE's earlier climatically adapted buildings. (Known as *Allhuset*.)
University library. With Bengt Ahlqvist, Peer-Ove Skånes and Erik Mulbach. Quadratic form, great internal volume, one bay giving onto a group of oaks. Massive freestanding balconies linked to the main building.
University sports hall. With Bengt Ahlqvist and Nina Jansson. Glued-timber beams. Façades of wooden panelling, multi-directional on gable ends. RE's typical light reflectors over the roof.
Law students' building. Roofed similarly to the main student building.
1977 Vallhov, Sandviken
With Aage Rosenvold and Janusz Halkiewicz.
Dwellings in single- and two-storey buildings along irregular pathways and open courtyards.
1977 Shop interiors
With Pehr Tham.
1977 Leisure centre, Vattnan
In Härjedalen. With Pehr Tham and Lars Estlander. Small groups of leisure houses around an open courtyard.
1977 Leisure centre, Lindö
At Vallentuna, north of Stockholm. With Peer-Ove Skånes, Pehr Tham and Ingemar Fundin.
1977-85 Myrstuguberget, Huddinge
South of Stockholm. With Klas Tham, Torbjörn Einarsson and Ingemar Fundin. On highly uneven terrain, a housing area comprising a high screening building, with a characteristically uneven roof profile. Patterned brickwork on façades; row houses to north with façades in *Falu* red wooden panelling.
1977-79 Södra Lina, Södertälje
With Nils Viking and Lars Estlander. A housing area on a slope stretching down to the canal.
1978-81 Tapetseraren, Sandviken
With Mike Linnett and Lena Påhlsson. Dwellings and offices in central Sandviken occupying almost an urban block, terraced with balconies and areas of greenery; open concrete stairways and red brick façades.

Kv Barberaren housing development at Sandviken 1962-64 and 1968-70.

Swedish Museum of Architecture

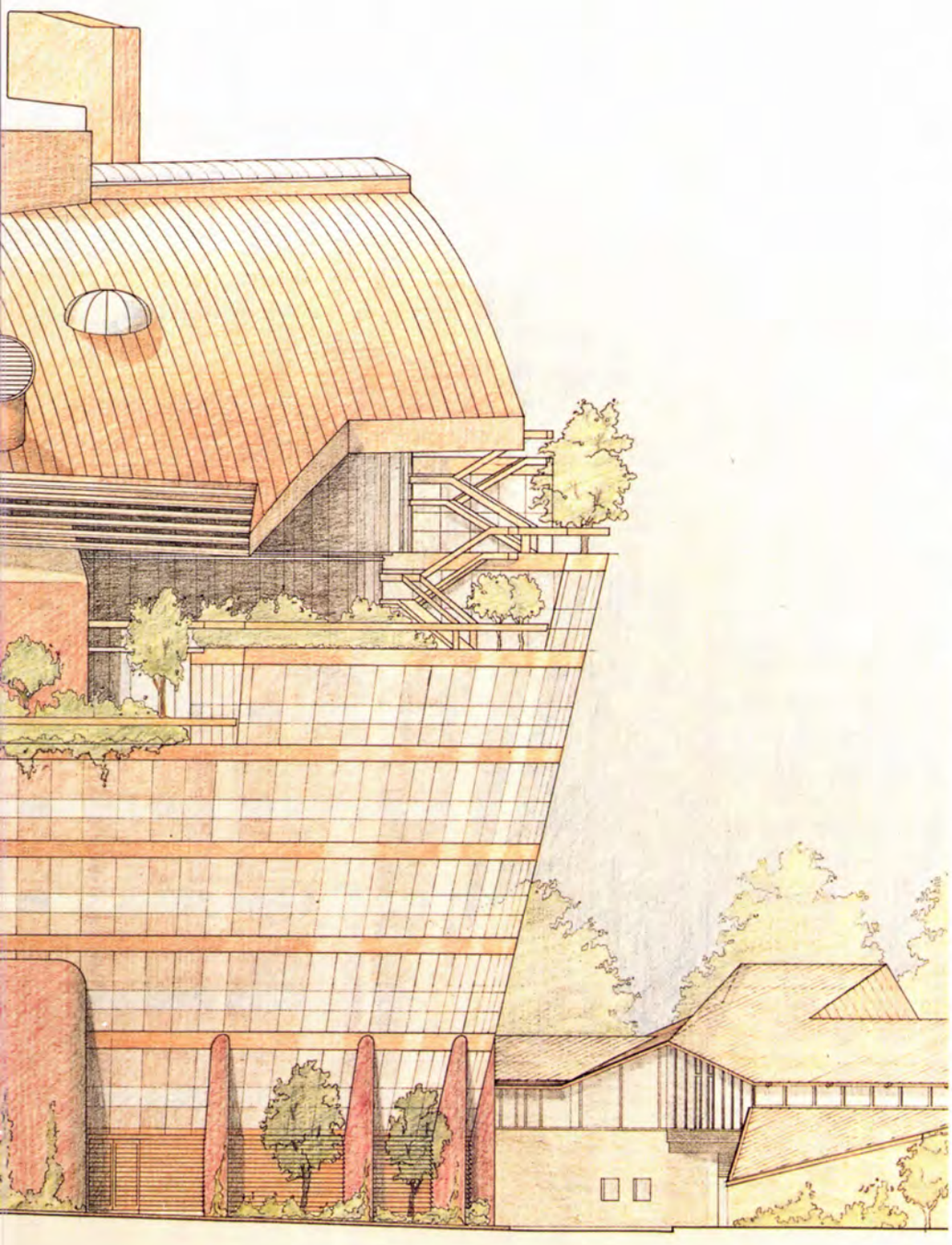
1979 Jochberg Hotel (Austria)
With Klas Tham and Bengt Ahlqvist.
1979-83 Östra Steninge, Märsta
With Klas Tham and Torbjörn Einarsson.
1979-81 Östra Öringe, Tyresö
With Klas Tham and Nils Viking. A housing area of row houses.
1980 Moliets-et-Maa, (France)
With Peer-Ove Skånes and Roland Larsson. Proposal to extend leisure village in a wooden region of Côte d'Acquitaine.
1980 Utkiken, Södermalm
With Bengt Ahlqvist, Lars Estlander and Ingemar Fundin. New and rebuilt dwellings.
1981 Docksta, Framfors
With Arken Arkitekter. Tourist and conference facilities.
1981 Öbacka, Umeå
Illustrated urban plan for an area of rental premises and row houses by a river. VAB Callander designed what was eventually built.
1981-86 Malminkartano, Helsinki (Finland)
With Boris Culjat, Hannu Kiiskilä and Aage Rosenvold. Housing area of row and access-gallery houses encircled by terraced buildings.
1983 Office building, Bromma
For SAS. Space between this and existing building to be glazed, former hangars to become offices and aviation museum.
1983-89 Ekerö centre, Tappström
With Ingemar Fundin and Rodica Uschersohn. An area of dwellings and commercial and cultural premises built in stages.
1983- Housing area, Graz (Austria)
With Hubert Reiss. Some 600 apartments for a public service housing company. Commissioned after an invited competition.
1984 Westerberg House, Nyköping
With Nina Jansson.
1984 Vasa Terminal, Stockholm
With Arken Arkitekter, Ahlqvist and Culjat Arkiteter, and Tengboms Arkitektkontor. Bus terminal and offices built on decking over platforms of Central Station.
1986 Ice skating rink, Märsta
With Ingemar Fundin.
1986 Office premises, Göteborg
On the harbour front at Lilla Bommen in the town centre. With White Arkitekter AB. Includes a 22-storey block.
1986-90 Måsen, Ejdern and Duvan, Umeå
With Jonas Claeson, Lena Andersson, Tomas Eriksson and Riksbyggen Konsult. A housing area of 230 rental apartments in buildings, with red brick façades; the names mean Seagull, Eider Duck and Dove respectively.
1987-90 Gustavalund, Ekerö
With Johan Claeson and Kristina Henschen. Area of row housing with 180 apartments and day care centre.
1987-90 Badedammen, Stavanger (Norway)
With Vernon Gracie, in co-operation with Aros Arkitekter, Norway. Competition entry with Arken Arkitekter.
1987-90 Urban renewal, Novoli (Italy)
1988 Hammersmith, London (UK)
Offices. With Vernon Gracie.
1988 Nebb, Oslo (Norway)
Dwellings.

Hammersmith offices currently under construction.



THE COVENANTED ARK

This page and following four pages, office building for Ake Larsen, Hammersmith, West London. Work started autumn 1989. Dennis Sharp argues that it is ark shaped and praises its novel, organic design. Drawings and model photographs supplied by Rock-Townsend Partnership.



Last October work began on Erskine's new office building for Ake Larson in London. The new project is on an island site situated in Hammersmith. It is shaped like a traditional version of the ark Noah was supposed to have built. But this part of West London is no Mount Ararat and the design has clearly emerged as a protective cacoon against the modern forces of traffic pollution, noise and dirt as much as the flagship of Larson. It provides some 21,000 square metres of office space.

It is a startlingly original building. It is as expressive and strong in its beached maritime symbolism as Fritz Höger's enormously successful *Chile Haus* built in Hamburg in the 1920s and recently refurbished. "Erskine's Ark", as it has already been called, is perhaps more in line with the Viking mentality than the rich merchants of the Hanseatic League. It is moreover covenanted to modern ideas that occur with modern office uses. It creates a sealed, spacious internal environment of its own in an undistinguished part of London that is characterised by hideous developments, underground trenches and traffic roundabouts.

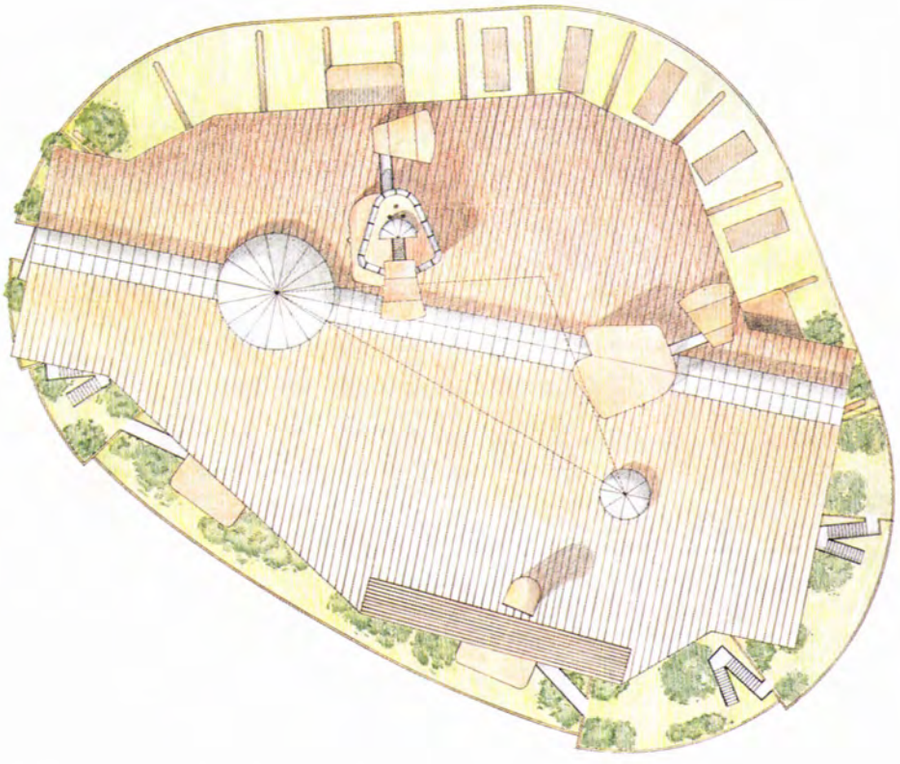
Nevertheless, Erskine has taken up a few local signals in the shaping of his complex of controlled environmental spaces. He introduces nature to neutralise the interior areas of the atrium and allows his planting and landscape treatment, in which a free-standing element is now to be placed, to flow out onto the descending roof terraces that follow the line of the curved edges of the upturned frustum plan.

The building reaches up to nine floors on the northern part of the site that faces the banal façades of a nearby building, thereby effectively blocking out its frontage. It then drops down to a fifth level on the southern and sunny part of the site.

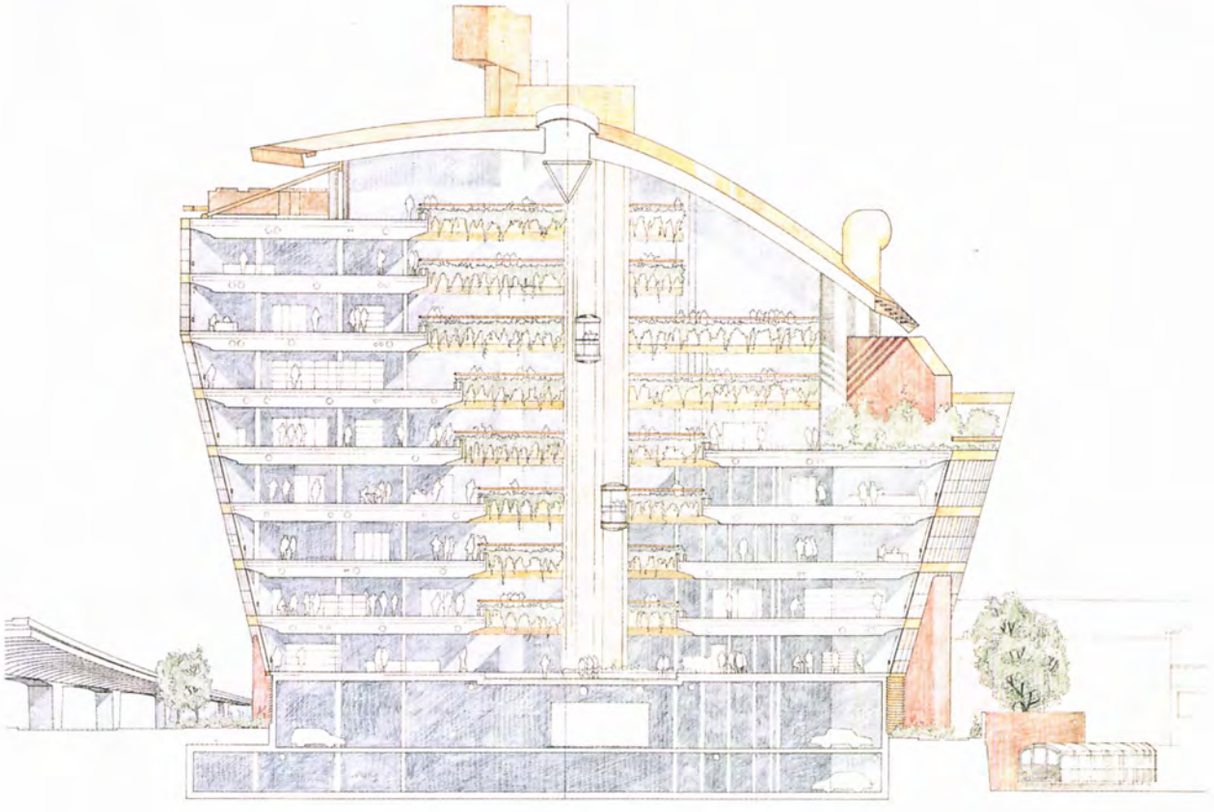
Erskine's architectural vocabulary is always expansive and many of the ideas he is known for are taken up again in this project: the open interior is planned with common characteristics almost like those to be seen in medieval town centres; although bulbous in outline, the building has a distinct silhouette and can be viewed as a project that is aware of the contextual as well as local relationships. Somewhat akin to the projects of the romantic expressionists of an earlier time, it is a complete artwork in which a single shape predominates. This shape controls all the minor aspects of the scheme. In this case a charming and very Scandinavian design for an archive and borough community centre, *Lilla Huset* (Little House), lies below the great ship of commerce set comfortably like a long tug against its side.

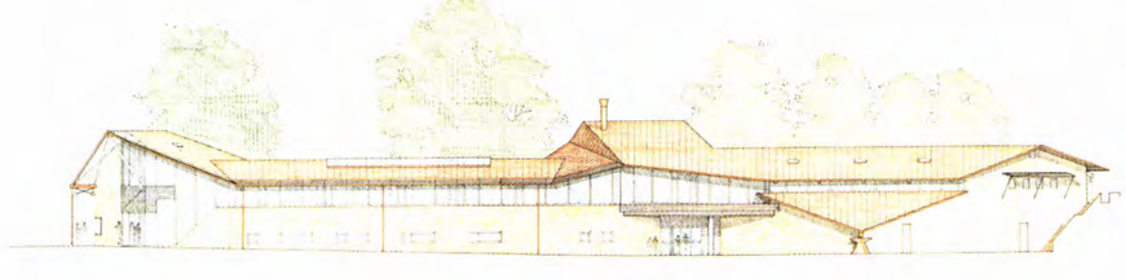
The building itself takes on an almost sculptural quality with its well modulated, great curved and inclined walls. These rounded façades serve to minimize the reflective noise and shadow effects of the nearby motorway, and prevent a canyon effect in the streets surrounding the complex. The building was designed from the inside out to create a kind of protected office oasis. It also promises a wide variety of office arrangements and not just great areas of open space with adjoining service facilities. It should be a place of activity but with a calm, controlled atmosphere conducive to social.contacts and quality of life. It will certainly be welcomed for its fresh architectural presence in an otherwise sterile environment.

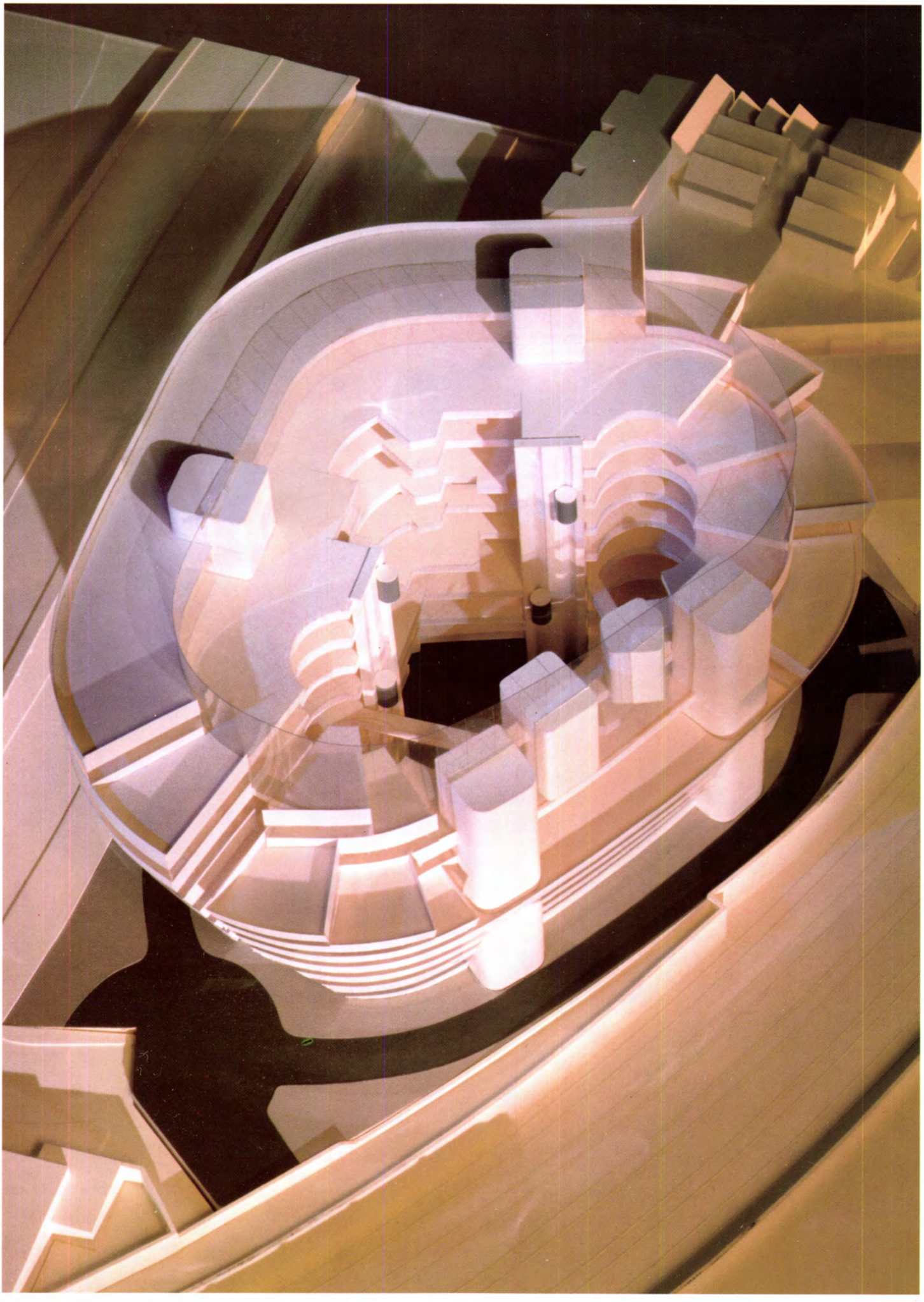
The scheme was designed by Ralph Erskine in conjunction with British architects Rock Townsend and Swedish consultants Lennant Bergströms Arkitektkontor. □

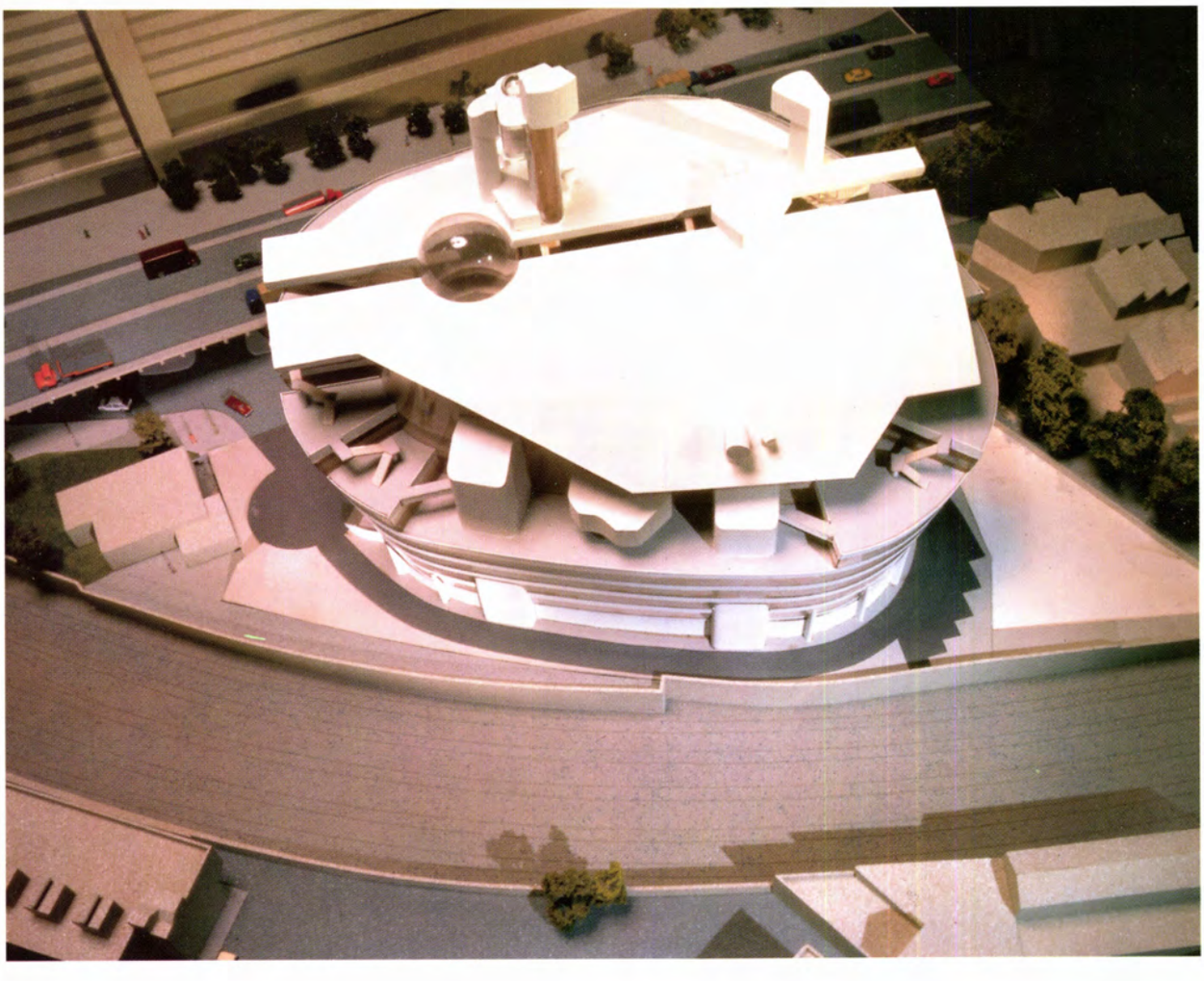



FROM WEST
FROM EAST
TAGARTY ROAD
HIGH LEVEL PROMENADE
ACCESS CAR PARK
ACCESS LOADING BAY
L.B.T. PROPERTY









MORE HOLISTICALLY THAN THOU?

Erik Asmussen has attempted to shape his buildings so that they express the inner spirit of the functions they contain as well as supporting in a practical way all the activities that go on within them.[1] *Gary Coates and Susanne Siepl-Coates explain Asmussen's architecture at Järna.*

Asmussen has been inspired by the buildings and ideas of Rudolf Steiner. Hagen Biesantz and Arne Klingborg, authors of *The Goetheanum: Rudolf Steiner's Architectural Impulse,* describe Steiner's approach to architecture as "spiritual functionalism".[2] Steiner said the task of spiritual functionalism is to find for every structure a unique form which makes perceptible the essence of the building's function while sustaining in a practical manner every activity that takes place within it. "Spiritual functionalism" requires a form-language which grows out of and expresses the same dynamic principles by which living forms in nature are created. It gives rise to organically expressive buildings which sustain the life they contain and express their relationship to the landscape out of which they arise.

Steiner believed that in nature there is a necessary and non-dual unity between form and function, and that the architect should achieve a similar unity between form and function in a building. Asmussen tries to design his buildings so that they fit their intended uses in the way that the nut-shell fits the kernal of the nut.

The Principles of Colour Luminosity and Colour Perspective

Upon entering any Asmussen building one feels immersed in a subtle world of light-filled, transparent colour. Using natural vegetable and mineral dyes in a casein and beeswax medium, the paints are applied in many thin, transparent layers to impart qualities of luminosity and warmth similar to that of human skin. By comparison, opaque colour can seem disspirited and lifeless. Opaque colour hides the material which it covers, making it impossible to tell whether a surface is sheetrock, concrete or wood.

Asmussen's use of architectural colour can awaken and educate the users' capacity to experience what Steiner describes as the objective reality and soul-nurturing presence of the living world of colour. Steiner suggests, for example, that when we sink ourselves objectively into the colour red we will come to feel that

Portrait of the architect, Erik Asmussen.

Overleaf, Ormen Lange, *the student dormitory has a form that is unfolded, opening outward with a circulation realm sheltered underneath the hanging roof.*

Below, Max Plunger's photograph captures the poetic interplay between the colour of the buildings and the colour of nature. The frisson between natural and man-made excited Steiner's sensibilities.

Bottom, the library at Järna.

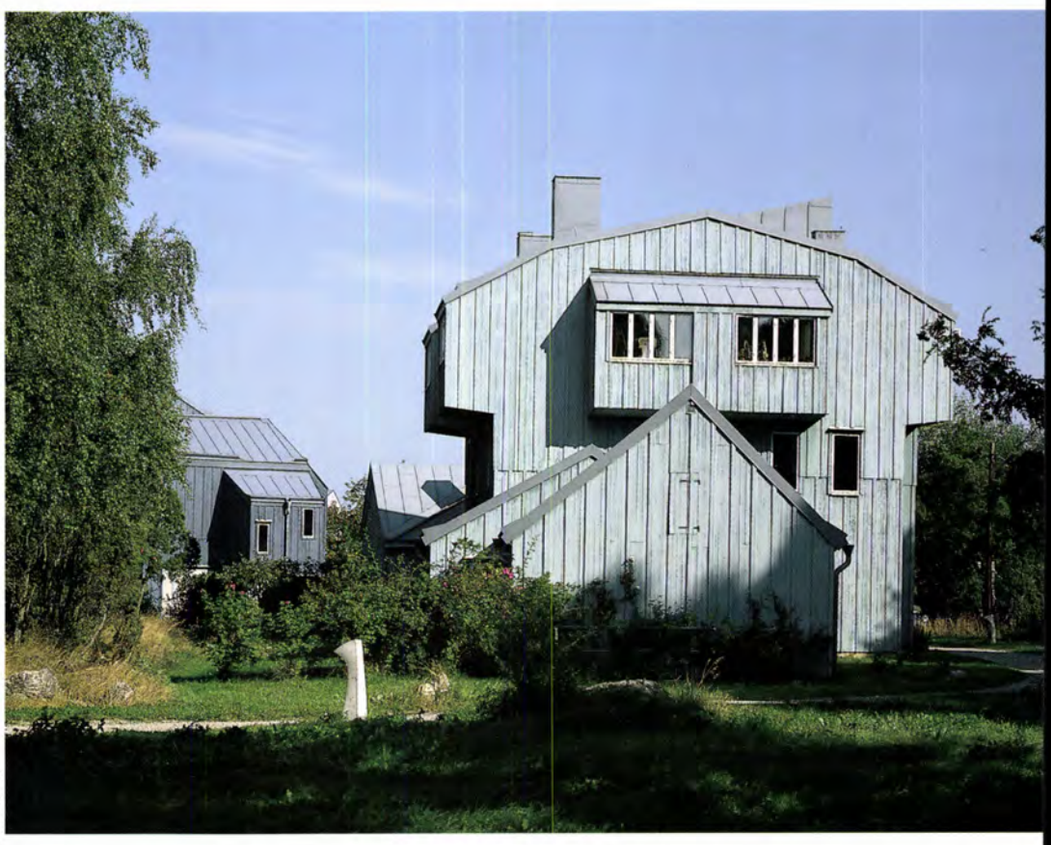
there is something aggressive in it, something that advances towards us. When we meet blue, however, we feel that it recedes from us.[3] If this experience continues to deepen, it will be discovered that colour moves, that red and blue, for example, enter into a relationship. A kind of dance emerges between warm-advancing red, and cool-retreating blue, and the two colours begin to revolve around each other with one colour moving toward the viewer and the other away from him or her.[4] In this experience, according to Steiner, the reality of colour "meaning" and colour perspective emerges. The meaning of colour is never abstract or symbolic but is contained in the very nature of colour itself.

The dialogue between red and blue is the basis for the exterior colour scheme for the main buildings of the *Rudolf Steinerseminariet.* Exterior colour is used to make visible the inner quality of a building's function and to reinforce the form-gesture of the building as an object in the landscape. The major public functions of the "blue buildings" *(Almandinen),* require concentration and focus.

These three buildings have compact forms and the plastically formed walls seem to bend without a break to form the roofs. The forms suggest that what goes on in these buildings is inward, retiring and self-contained. *Ormen Lange,* the student dormitory, balances the blue buildings by having a form that is unfolded, opening outward, with the wall scooped out to create a highly visible public balcony and circulation realm sheltered underneath the overhanging roof. While the rooms themselves are private, this particular dormitory expresses the social purpose of community life. The balcony-corridor looks out towards a meadow and the blue buildings beyond. *Ormen Lange* is extroverted, its energy expands outward. It is painted a cream white and a warm orange-rose and these colours, which tend towards red, reveal its function within the cluster of buildings of which it is a part.

The form-gesture of these buildings is also the gesture of their respective colours. By defining the boundary to a common meadow and orchard, the blue buildings and *Ormen Lange* create a space in which

Max Plunger

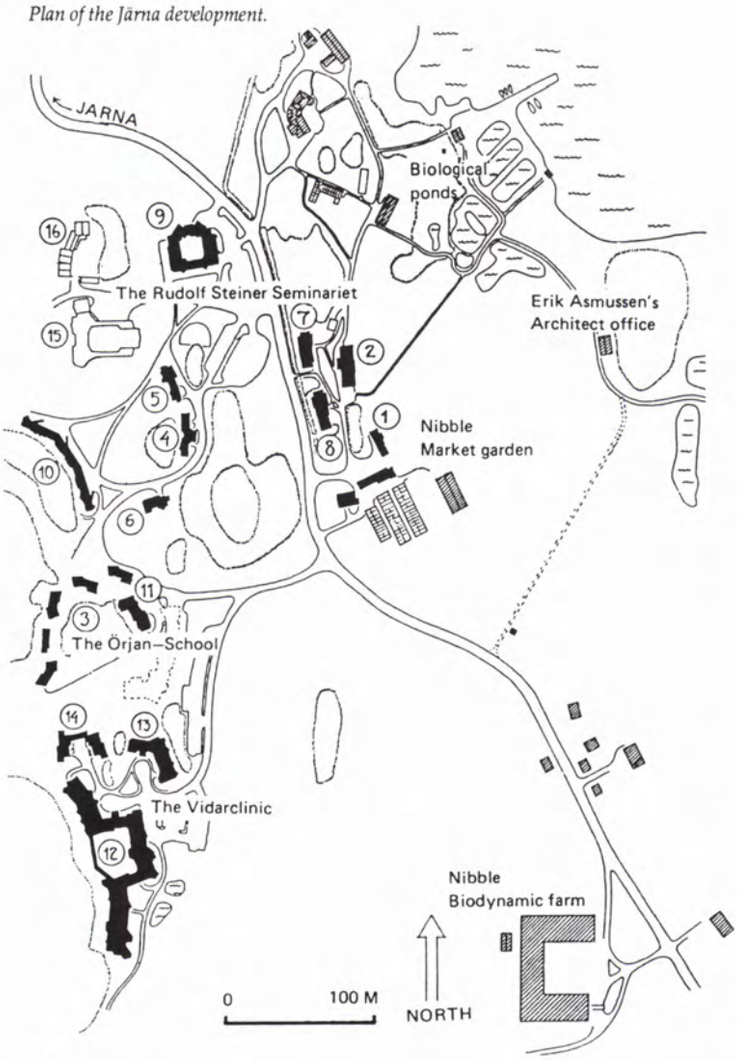


Max Plunger

Max Planger

Concept drawings by Erik Asmussen for Järna.

Plan of the Järna development.



The hall at Järna (presently under construction).

Nibble Market Garden
1 Karlssons villa

The R.S. Seminariet
2 Tallevana, students hostel
4 The library
5 The Eurythmy house
6 Almandinen, music-house
7 Anapesten, students hostel
8 Terrakotten, students hostel
9 Robygge, kitchen, dining hall, etc.
10 Ormen Lange – The Serpent, students hostel

The Örjan School
3 School pavillions
11 Handicraft building

The Vidarclinic
12 The main building
13 The admissions department, patients hotel and lodgings
14 Dwellings for co-workers at the Vidarclinic

15 The hall (under construction)
16 Proposed workshops

the polarities of red and blue, expanding and contracting form, are brought into the harmony of a larger whole. In terms of colour, the neutral green of the meadow mediates and harmonizes the red and blue of the buildings.

The Principle of the Living Wall

In modern architecture the wall is often an insubstantial filler between monotonously repeating elements of a structural grid. Asmussen attempts to create walls as living membranes. Outside or inside, Asmussen's plastically continuous walls express the play between up and down, inside and outside. In the Eurythmy house, *Robygge* and *Vidarkliniken,* for example, walls and windows make visible the forces of downward bearing load and upward striving support. In the rhythmically alternating play of convex and concave forms in the walls of these buildings it almost seems that Asmussen's buildings are breathing. Treated as plastic surfaces which grow out of the unity of the whole building envelope, the walls of Asmussen's buildings can be seen as "living" in the sense intended by Steiner describing his own buildings in Dornach: "The wall is not merely wall, it is living, just like an organism that allows elevations and depressions to grow out of itself."[5] Thus Asmussen achieves the impression of plastic continuity in the walls of his buildings, despite working in the angular medium of traditional Swedish wood, brick and plaster construction.

The Principle of Metamorphosis

The principle of metamorphosis is a difficult principle to understand in Asmussen's architecture. It helps to look at Goethe's vision of the metamorphosis of plants. For Goethe (1749-1832), as well as Steiner, nature constantly forms and transforms itself. Goethe shows how an entire plant can be seen imaginatively as the metamorphosis of the leaf: during the growth of the plant, each part arises from a more or less similar bud. However, depending on the location of the bud and the age of the plant, these buds develop into different forms to fulfil different functions. Thus, during the process of growth from seed to leaf to flower and again to seed, the various parts of the plant, such as seed-leaves, stem-leaves, calyx, flower, and fruit, can be seen as transformations of one another. Seen thus in Goethe's way, the growing plant is a single unified process in time. Each organ is a spatially and formally differentiated part of the whole that is related in a lawful and systematic way to every other part. Indeed, in a sense, there are no separate parts: every part is a kind of hologram of the archetype of the whole.[6]

Perhaps the best way to begin to understand metamorphosis in Asmussen's architecture is to look at the relationship between the forms of *Ormen Lange, Tallevana, Robygge* and the blue buildings. Each of these buildings is comprised of a low part, which is always used for living accommodation, and a higher part which contains rooms for communal use. By analogy with Goethe's description of metamorphosis in plants, this pattern of low volume/private, high volume/public comprises the basic leaf archetype, which is continually transformed into different forms expressing varied building functions and use. Thus each building can be recognized as a metamorphosis of the same archetypal pattern, just as the parts of a plant are all the metamorphoses of the pattern of relationships that we describe by the word "leaf".[7]

The principle of metamorphosis is present at all levels in Asmussen's architecture, from the overall building form to recurring building motifs such as stairs and circulation elements, and to smaller elements such as entry overhangs.

The Principle of the Dynamic Equilibrium of Spatial Experience

Nearly everywhere in Asmussen's buildings one has the spatial experience of movement-in-rest and rest-in-movement. This paradoxical quality can be experienced in spaces such as the promenade-like corridor surrounding the courtyard at *Vidarkliniken.* There is an experience of a rhythmic movement between the polarities of path and place as one moves within a continuity of differentiated and functionally expressive space. It is possible to walk and sit, to stop and talk as one spends time in this ever-changing corridor without ever becoming bored. In an uninterrupted flow the corridor swells and contracts, reaches up to the sky for light, and then dips low to create more intimate places, cupping itself into alcoves for sitting alone or with visiting others. To walk the circle of the path around the courtyard is also to experience "colour" as the varied colours of the rainbow follow the walls in their many movements up and down, in and out. Constancy and change in sensation, symmetry and asymmetry, sheltered intimacy and expansive openness are held here in a delicate and shifting balance created by the experience of movement and rest. Yet, whether in motion or at rest, there is always a sense of equilibrium in which the seed of the next possibility is contained within the present moment.

In interior spaces such as those of *Vidarkliniken,* the principles of dynamic spatial equilibrium, the living wall and luminous colour, combine to create a very strong experience of the action of the will in determining the quality of spatial experience and the direction of future choices. The strengthening of the will is an essential part of the process of self-healing that anthroposophical medicine attempts to make possible by helping the whole person to regain equilibrium and balance. Thus, the nature of spatial experience in *Vidarkliniken* can be seen as an active part of the healing function of the building and not just a "symbolic" design expression.

Summary and Conclusions

Asmussen states: "Architecture is not one of the free art forms. It is tied to its primary function of creating an environment for one or several activities. As we understand it, the goal for anthroposophic architecture is, through design and the whole form-language, to strive to create a stimulating environment, which, through its special atmosphere, can act as an inspiration to the activity for which the building is intended."[8]

Asmussen attempts to create buildings which reveal and express the life they contain. His notion of function is enlarged to include the building's role in serving the whole person, as a being of body, soul and spirit. Spiritual functionalism is an attitude toward design which speaks to our need to

Dennis Sharp

The music hall, Järna.

Left, the Mill, below, external and internal views of Robygge *social and community centre.*

Dennis Sharp

Max Plunger

Max Plunger

External and internal views of the Vidarkliniken.

Gary Coates

Gary Coates

Gary Coates

see through appearances and to find ourselves once again at home in human community and in the natural world. He makes visible the invisible forces present in a building. Thus the unseen spiritual dimensions of function become for Asmussen a creative, generative source for an architecture that serves the purposes of life. The wellspring of his art is found in the practical, mundane activities of life which his buildings seek to serve.

Whether dealing wtih colour, surface, form or space, Asmussen strives always to achieve a harmonious, rhythmic relationship between the polarities of life. There is a striving to find the balance between up and down, in and out, darkness and light. By containing the polar extremes within the embrace of a larger unity, Asmussen's architecture can help us to realize our human potential for free action. It might be said that this experience of freedom, and the responsibility that such a freedom implies, is the larger function of all of Asmussen's buildings.

Asmussen has had the luck to work for clients who share his view of the world. He has lived out the ideas from which he has designed. His architecture has emerged out of a creative collaboration with clients, artists and craftsmen who share his conception of life. Indeed, in Järna, Asmussen is a member of the anthroposophical community for which he designs.

Asmussen points a way towards an architecture that is modern yet rooted in the archetypal principles that underlie the forms and processes of the natural world. His work can be criticized, and in many cases it fails to realize the intentions behind it. But there are many instances in which Asmussen succeeds in creating an organically alive architecture. We can learn much from both his successes and his failures about how to explore the unfulfilled potential of functionalism in architecture.

Beata Bergström

Beata Bergström

Two views of Stathoga School, Norrköping.

Below, Erik Asmussen's studio at Järna.

Notes

1 Erik Asmussen was born in Copenhagen in 1913 and educated at the Technical College and the Academy of Art in Copenhagen, and learned the basic tenets of the emerging functionalist architecture of the modern movement. In 1939 he moved to Sweden and worked primarily for Nils Tesch and studied buildings by Erik Gunnar Asplund and others in the early 1960s.

Asmussen received a commission to design the new campus for the Stockholm Waldorf school. This was his first commission as an independent architect and he was influenced by the buildings and ideas of Rudolf Steiner. Steiner, an Austrian philosopher, artist and spiritual scientist, was the founder of anthroposophy and the Waldorf school movement. Asmussen has since practiced architecture within the framework of anthroposophy and has designed only for anthroposophical communities in Scandinavia, West Germany and England.

For the past twenty years Asmussen has primarily worked for the anthroposophical community of Järna, Sweden. Järna is a village of about seven thousand people south of Stockholm near the Baltic sea.

The anthroposophical community in Järna is made up of bio-dynamic farms; curative homes for children and adults in need of special care; a Waldorf school; holistic healing centre; and the *Rudolf Steiner Seminariet,* a college with programmes of study in education, agriculture, drama, painting, sculpture and eurythmy (a form of dance intended to make speech and tone visible). There are also businesses producing furniture, paints, toys, medicines and small musical instruments.

To date Asmussen's buildings in Järna include: *Robygge,* the main social centre of the community, which includes a co-operatively managed kitchen, dining room, family residence, offices, two eurythmy practice rooms and a retail outlet for the sale of books and products of the many community businesses; *Biblioteket,* a library with an adjoining painting studio and residence; *Almandinen,* a music building with an attached dwelling; *Ormen Lange,* a dormitory with 38 rooms; *Terrakotten, Tallevana* and *Anapesten,* three small house-like dormitories for students; *Vidarkliniken,* the healing centre comprised of a cluster of buildings including a 74-bed hospital, housing for doctors, and a building with doctors' offices for outpatient care; and *Salta Kvarn,* the bio-dynamic granary, mill and bakery.

2 Hagen Biesantz and Arne Klingborg, *The Goetheanum : Rudolf Steiner's Architectural Impulse,* (London 1979)

3 Rudolf Steiner, *Ways to a New Style in Architecture,* (London: 1927) page 55

4 *Ibid.* page 54

5 *Ibid.* page 21

6 For a lucid explanation of Goethe's way of seeing and the metamorphosis of plants, see Henri Bortoft, *Goethe's Scientific Consciousness,* (Kent, England: Institute for Cultural Research, Monograph Series, No. 22, 1986).

7 See: Introduction by Brian Goodwin in Jochen Bockemuhl, *Dying Forests, A Crisis of Consciousness,* (Gloucestershire, UK 1986). See also, Jochen Bockemuhl, *In Partnership with Nature,* (Wyoming, Rhode Island: Bio-Dynamic Literature, 1981) for a more complete explanation of metamorphosis in plants.

8 Erik Asmussen, *For all the Senses – the Form Language at the Järna Seminary* in *Arkitektur,* special issue on Erik Asmussen, Vol. 6 July/August 1984, page 44

Dennis Sharp

INTERNATIONAL FORUM OF YOUNG ARCHITECTS PUBLICATION

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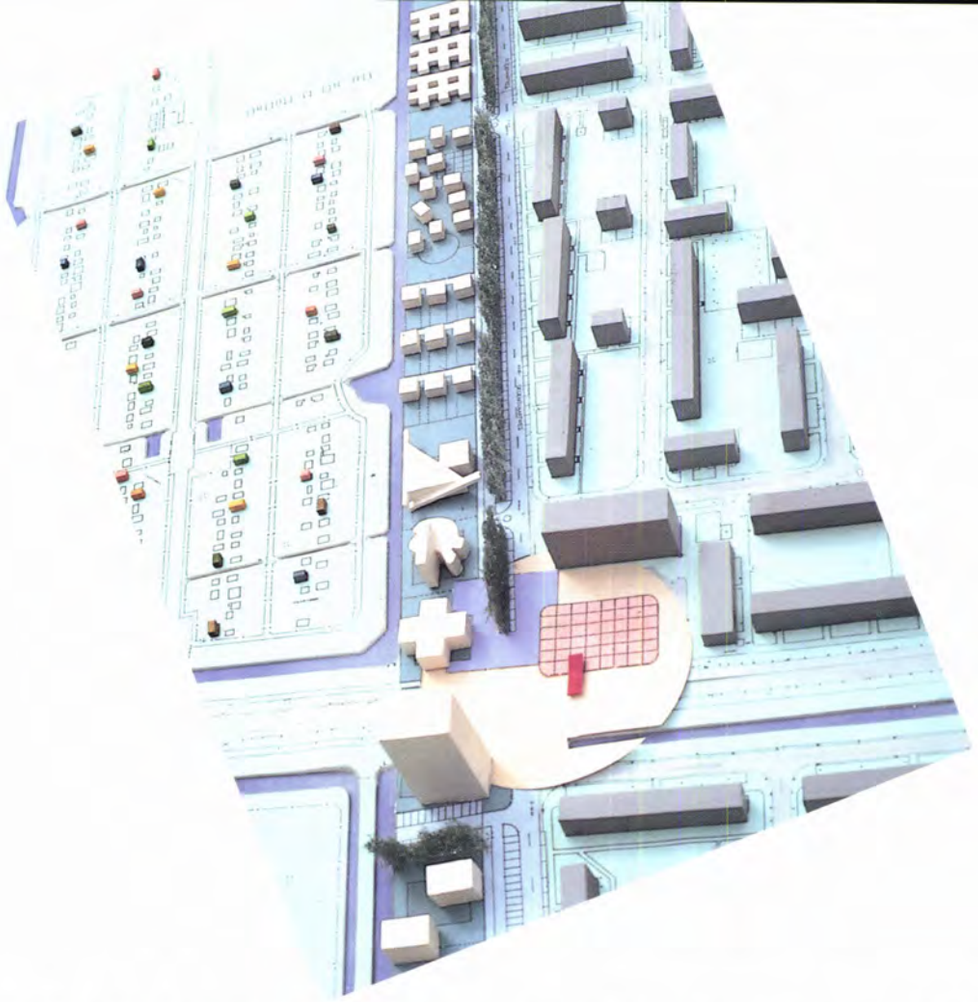
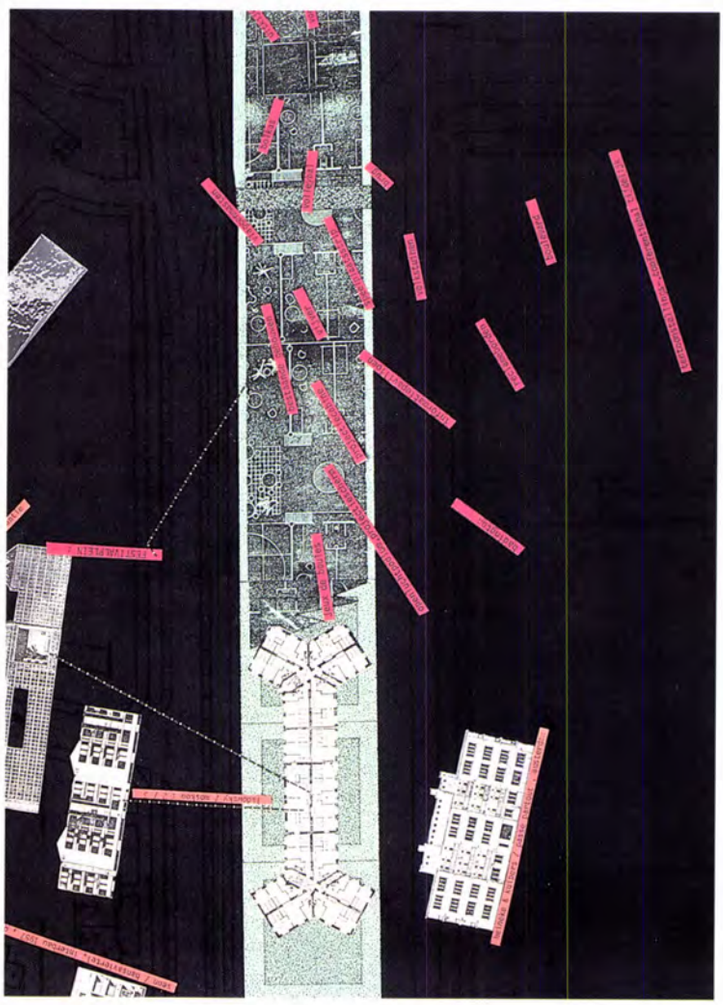


CREATING CONDITIONS FOR FREEDOM

MANIFESTO KEES CHRISTIAANSE

Kees Wijnand Christiaanse was born on 14 May 1953 in Amsterdam. He studied architecture at the Technical University at Delft, worked as architect at the Office for Metropolitan Architecture at Rotterdam from 1980 to 1989, since 1983 as partner and Director. As of September 1989 has own office "Kees Christiaanse Architects & Planners".

Major works: 1980-1989
1980-1989: Y-Plein Amsterdam-North, housing project with 1375 units and urban facilities; Waterfront projects, Rotterdam.
1982-1983: *Competition Parc de la Villette,* Paris, 1st prize (with OMA).
1985: Building complex Byzantium Amsterdam.
1986: Social Housing Festival, The Hague.
1988: Revitalisation of the *Barrio,* Guadalajara, Mexico; Villa "On Wings of Art", Rotterdam.
1988-1989: Study "The Netherlands in 2050".
1989: Urban design GEB-driehoek, Rotterdam; Urban design masterplan City-Oost, Rotterdam; Housing De Hunze, Groningen; Apartment Building K25, The Hague; Urban design Sandtorharbour and Grassbrookharbour, Hamburg.
Miscellaneous: President of the International Forum of Young Architects, member Architecture Section Rotterdam Art Foundation.



Above and Below
Project for the Social Housing Festival, The Hague 1986
Fragments

Planning
The modern cosmopolis is seen in this randomly chosen illustration from a French-Canadian journal; modern eurocities of Western Europe are superimposed on the area of medieval Lotharingen.

Next we have an illustration from the book *In Search of Space for Living,* published in 1965 and depicting the population density of Europe at that time.

As you can see, the Netherlands are black, and a dark outline moves along the Rhine to the south. The eurocities in the Lotharingen of tomorrow form a kind of Milky Way, where the distinction between town and countryside slowly fades out.

Solitary pulsars like Paris, London, Moscow, Berlin and Mexico city are undergoing an explosive expansion of their peripheral zones, as can be seen in the picture of *La Defence* below. In these modern cities the utopian schemes of the avant-garde have long been realised: Le Corbusier's plan *Voisin* and Melinkov's parking garage across the Seine (shown below) have in fact been built.

At the beginning of the century, Malevich adopted the concept of New York through fixing one of his architectons on this postcard, and proclaiming – along with many others at that time – that the image of the city can no longer be perceived as a harmonious organic totality, but rather as a chaotic accumulation of a thousand different cultures.

In the context of everyday life, and with the exception of some urban planners and architects, this has become – perhaps not always consciously – an accepted reality, as seen here in Rotterdam.

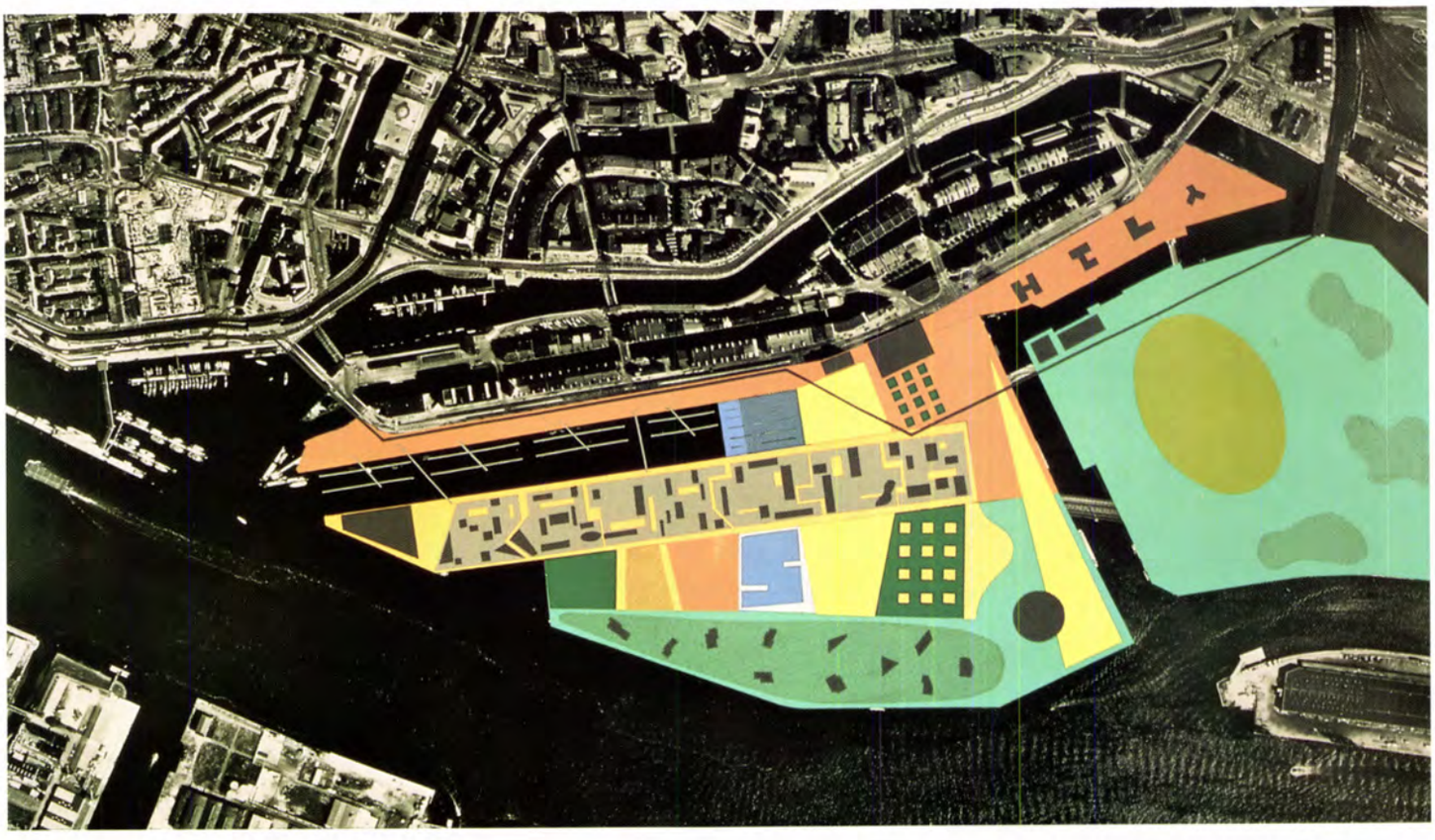
In the city, buildings are sometimes more important as communicators of information than as architectonic objects.

Between the cities and the peripheral zones, and at a certain distance from the inner cities, suburban monocultures of Anglo-Saxon domesticity are arising in every urban agglomeration – in this case, St Quentin.

Nobody can really say whether these photos have been taken at St Quentin, Almere or Milton Keynes.

Subcentres in the periphery and suburbs have taken over the functions of the city and lead to uncontrolled decentralisation and spread. The edges of the inner cities, dating from the nineteenth century, undergo impoverishment, traffic congestion and infrastructural decay.

The problems of large agglomerations



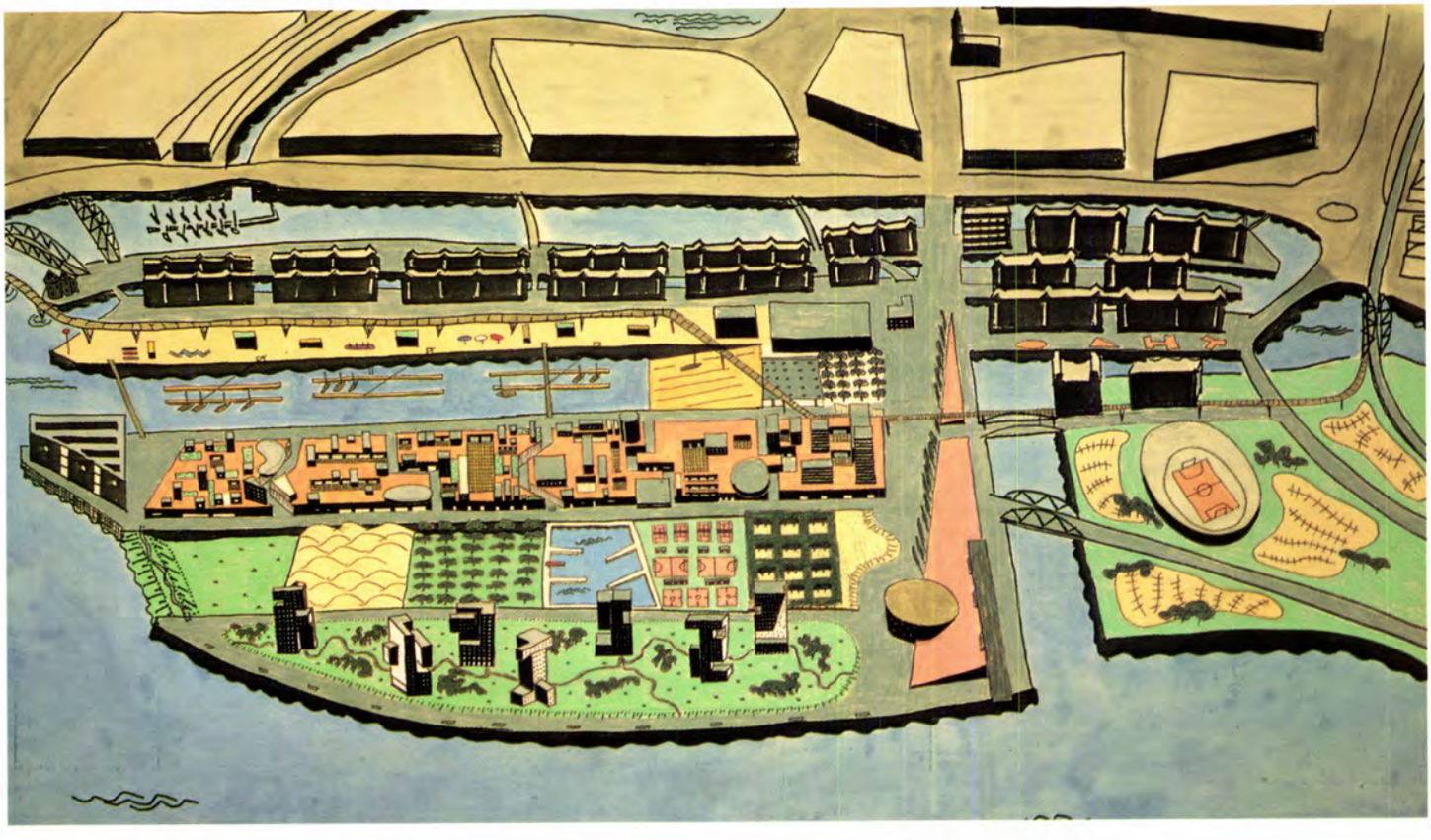
Hamburger Bauforum Project, 1989
The harbour of Hamburg lies directly in front of the city. The area urgently needs an urban concept and, because it can be developed only step by step, a scenario for these steps, a transformation concept is a must.

Our proposal consists of a functional and formal urban zoning plan, based on minimal, self-evident interventions. Our guideline is "town planning is not doing anything, architecture is doing everything"; with this we mean to say that the urban design creates overall organising and zoning conditions which guarantee maximum freedom for both the programme and the architecture that will fill it.

The buildings of the *Speicherstadt* serve as a horizon, a beautiful silhouette for the project area. To preserve this for the whole area, the part between the *Sandtorharbour* and the *Speicherstadt* remains relatively unbuilt. The *Sandtorharbour* will be transformed into a marina with a big slipway at the end. For the *Sandtorquay* we propose – also because of the horizon effect – relatively low buildings of high density.

The *Grasbrookharbour*, already partially filled up, becomes a park and a recreation area, divided into various compartments, each of which has a different character: a dutch polder, a dune landscape, a wood, a fishpond, sports fields, parks etc.

Along the Elbe could come a screen of idiosyncratic high buildings, which means that these buildings must be tower-like and must reflect in their form the curious appearance of the harbour cranes on the other side of the river. These buildings are planned as mixed functions again, so that there does not arise a monoculture in terms of a dormitory or office town.



demand new visions and concepts – ones that also leave the old, rural landscape in tact. There is no longer a place for harmonious centralism, nor for modern *laissez-faire*.

Randstad Holland is both a positive and a negative example. The concept of "concentrated deconcentration", where rural life (farms and meadows with cows) exists alongside urban areas of the highest density is, as we see here, a delicately balanced affair.

Although it is not possible to theorize generally about practicing urban design in large agglomerations, the following statements are an attempt to reveal my vision.

Urban design and the modest attitude

Above everything else, the urban landscape needs to be self-evident. Its underlying organising structures are the result of functional zoning and cultural-historical tradition, as shown below.

The explosive and partly uncontrolled developments over the past 50 years have put an abrupt end to this.

Structures have been pasted over structures, developments have been started and then abandoned. Razor-sharp divisions have been generated between different areas.

Therefore, the modern urban designer needs to balance between the remnants of different structures: between a refuse dump of urban ideologies and an archeology of valuable elements.

From a careful inventory and identification of urban characteristics, the urban planner extrapolates a dynamic balance in which freedom and flexibility exist without the loss of context.

Good urban design therefore often looks as if it is almost "doing nothing".

Islands and corridors

The cities themselves increasingly become conglomerates of islands of different urban character dating from different epochs, separated by corridors of residual space and infrastructure.

These islands, and for example the postwar centre of Rotterdam dating from the 1950s, should be considered as "positive ghettoes"; in other words, just as "China town" in a modern occidental city is more or less an autonomous island, so are many districts more or less explicitly autonomous in activities and in urban form. Here I rest my case with the aerial photo of the centre of Rotterdam.

The identification of the characters of these islands, their reinforcement and change leads to their polarisation. Therefore for every type of district, specific planning concepts and building regulations can be formulated.

Multi-coloured combinations of areas of different character are generated, in which modern urban man chooses his favourite ambiance.

Between these islands lie corridors which often have originated from the presence of water, railway tracks, defence walls etc in the past. These spaces increasingly call for our attention. They are the only places in the city where an exchange can take place between the growing large-scale functions and the small-scale activities of city life (shown below). In these corridors, new forms of urban spaces, new forms of buildings with new programmes and eventually new forms of city life will start. The Berlin wall is a thought-provoking illustration of this.

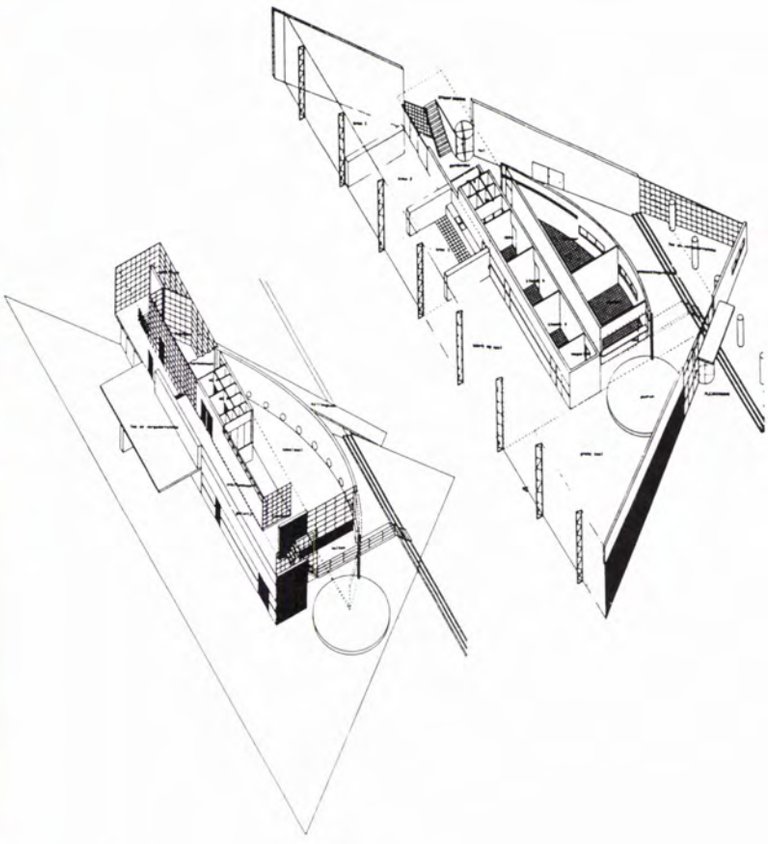
To design is to organise

To design is to interpret information in the fastest and most efficient way in order to achieve a certain goal. Designing is an organising activity, a methodology of organisation – in this case of all aspects of society. The axiom "to design is to organise" indicates that to design (apart from associative short-cuts and cultural recycling) is not a romantic activity, but a logical rational process that consists mainly of taking decisions and making choices.

Dealing with repetition and tension between the rule and the exception plays an important role.

In order to survive, our society is forced to organise itself in detail and to a very high level of abstraction. Our metropolitan areas are a 100% man-made environment.

In particular, the traditional Dutch polder landscape shown below, being since the Middle Ages a 100% man-made environment, has proven, in the course of its development into one of the most densely populated landscapes in the world, to be a structure that is able to accommodate different exchangeable programmes.

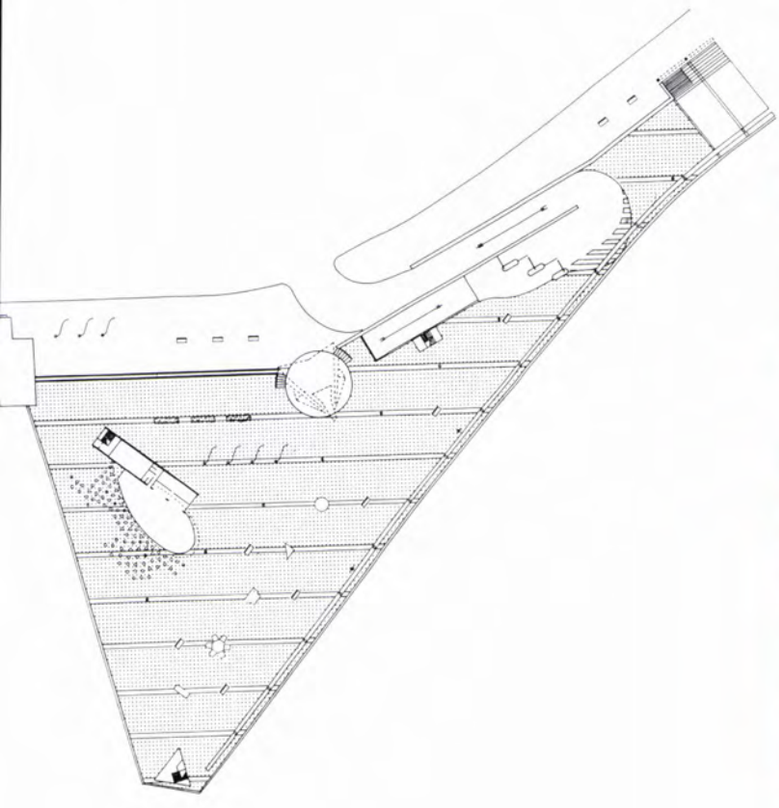


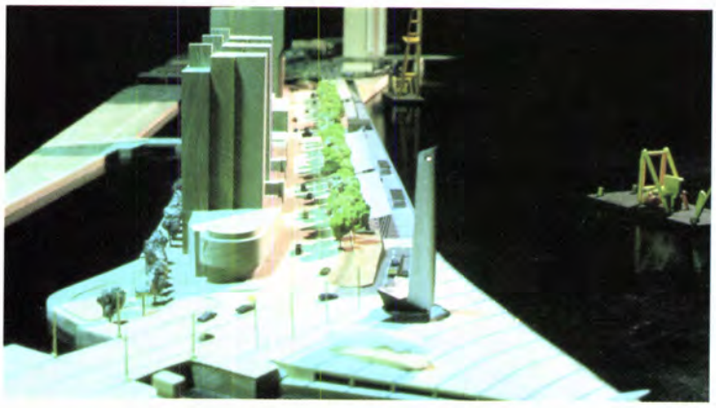
above –
Community Centre, Amsterdam – North
A building in a building. Like a nightmare you enter and you are on the outside again. The external walls isolate the interior from the public realm. But inside, new walls isolate the service-functions once more into a building: the main activities take place in the intermediate zone.

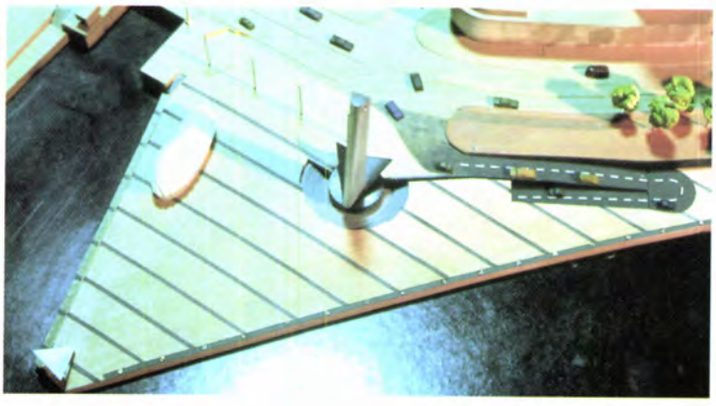
Where the inner building breaks through the outside wall an entrance is generated, and where it breaks through the roof, a children's crèche with sun terrace is formed.

below –
Boompjesboulevard and Parking Garage Zeuvehoofd, Rotterdam
The *Boompjes* is the conjunction of three important harbour entries. From the city a number of connections come out at the *Boompjes* and the river. These connections must reinforce the context between river and city. They have different characters: metropolitan, informal and recreative. The *Boompjes* is allocated as the events area of the city on the riverside. The alternative utilisation of the quay will be emphasised. Sometimes special ships can be launched here, or events can be held, along the pier. The alternating utilisation must be reinforced: an articulated platform for a mixture of activities. For this reason the parking areas on the quay are shifted into a parking garage. Along the quay a sequence of facilities is created.

On the *Leuvehoofd* a sloping parking garage will be constructed under a sloping square. The advantage of this solution is that a ceremonial space is created, forming at the same time a transition from the footpath at the boulevard level to that at quay level.

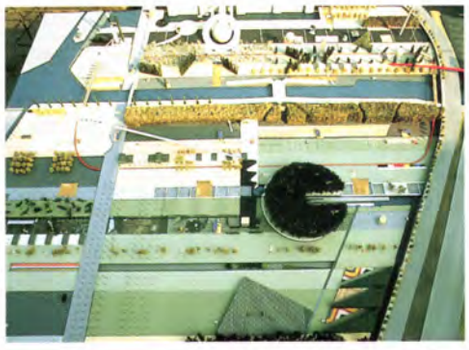






The rational layout of the polder strips with a minimal set of elements (rows of trees, dikes, canals) forms an indestructible spatial concept, which I have utilised several times, for example in the design of the riverfront of Hamburg.

In OMA's design for the competition for the *Parc de la Villette* (1983), the principle is exploited to its limits: every strip offers a new, exchangeable programme. The user can move lengthwise and occupy himself for sometime in the same programme, or cross the park across the direction of the strips, and experience the total scope of programmes in a matter of minutes. Repetitive elements like bars, toilets, picnic places and others are distributed with a certain frequency across the site; every type of function, as shown in the illustration below, has its own distribution formula.



Our proposal for the World Exposition 1989 in Paris was not even a design, but merely a concept for the organisation of a replica of the world. A traditional World Expo consists of a park in which the pavilions of the participating countries are solitary places like pieces of cake on the lawn.

Our design consisted of a minimal set of rules that had to be respected by the participating countries within the site of the Expo. There was no park, but a virginal piece of land. Every country had a maximum allowance of surface, height, building volume, green and water, light, sound, and odour production.

Under the watchful eye of the Almighty (in this case, ourselves), a continuous landscape of participating countries was to be generated where the visitor moved across the site as a globe-trotter, continually crossing real borders.

The model that we made of this project can only be seen as a diagram of the concept.

It was a decisive moment in the development of a vision of the relationship between architecture and urban design: "Urban design, as the organiser of the common, should observe a high degree of neutrality towards architecture that may flower in a thousand blooms".

Urban memory, a new attitude toward history

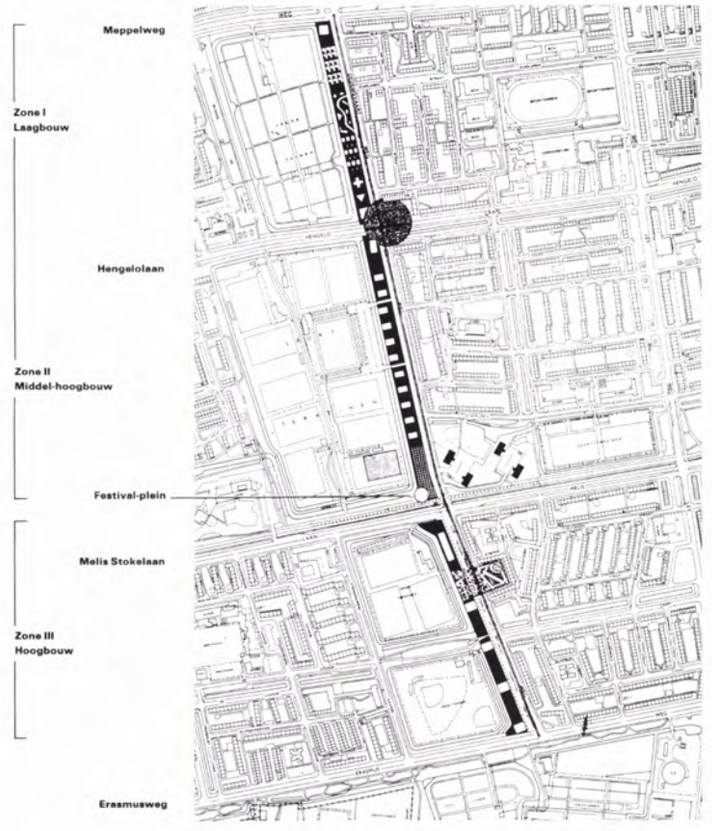
The urban landscape demands a new attitude toward history. The sharp edge between fragments from different epochs makes the history of the city conscious and manifest.

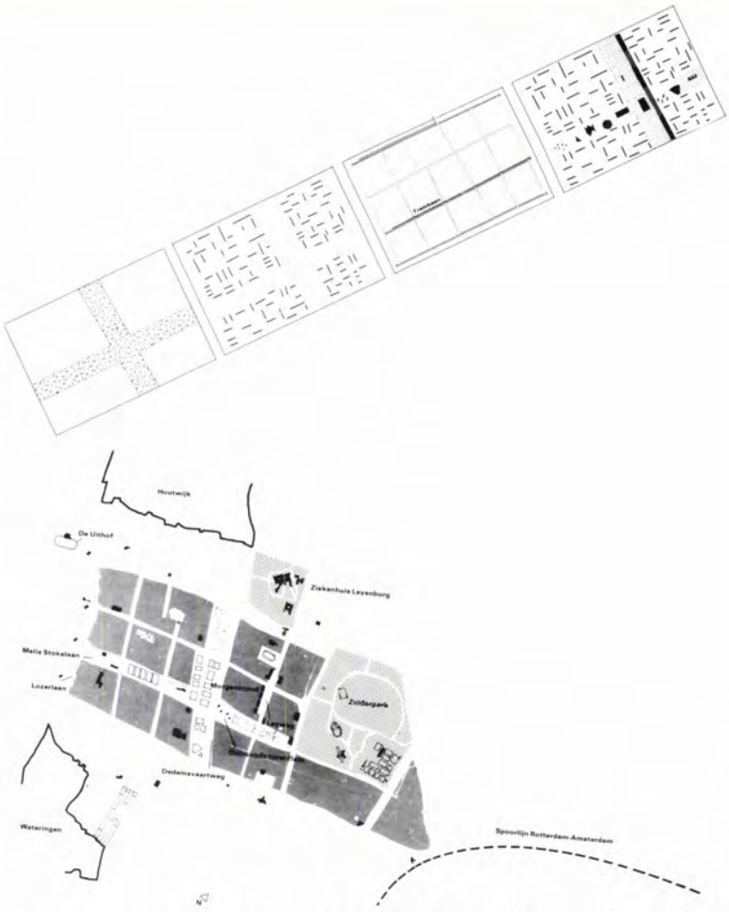
There is no longer a place for harmonic or adapted design. The contribution of buildings and neighbourhoods from different times to the image of the city, make that city alive. The mutual contrasts are essential. The urban designer is an archeologist who brings fragments to the surface, covers up others and adds some new ones.

Building or architecture

The attraction of the architectural profession in relation to the other fine arts lies in the tension in the way the architect has to operate simultaneously on the pure level of conceptual thinking, and to build under the most banal practical circumstances. A good architect loves this tension. He is continually forced to test his hypotheses against reality. The struggle that he has to undertake to convince the world and realise his ideas sharpens his inventiveness in order to find solutions without compromising. Compromising does not exist. The realisation of a design is a process, an expedition continually coming up against barriers and impossibilities. The architect finds his way like a guerrilla going through the jungle.

The modern architect is modern. This means that, as at the time of the "Modern Movement", the emphasis in designing lies on programme and function. This generally leads to a form that is reduced to essentials, and provides the user with a frame for individual freedom.





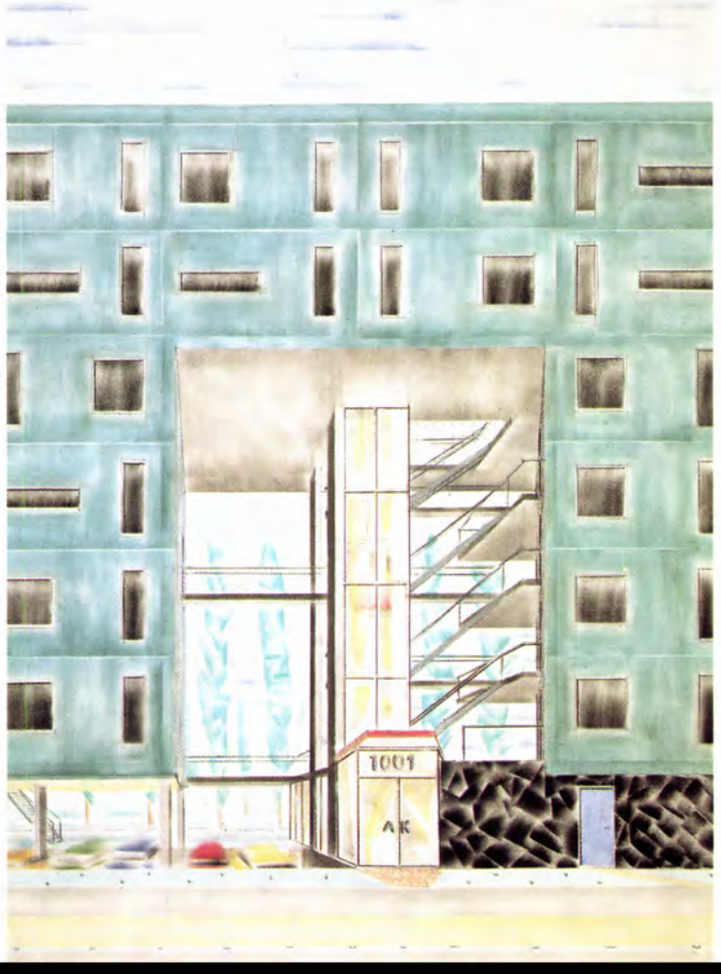
above –
Social Housing Festival, The Hague
In 1989 the 200,000th flat will be built in The Hague. On this occasion the community organises a social housing festival in the form of a special housing area along the *Dedemsvaartweg*. This area will consist of an exhibition of different types of social housing with different types of flats: a social housing exhibition on a 1:1 scale.

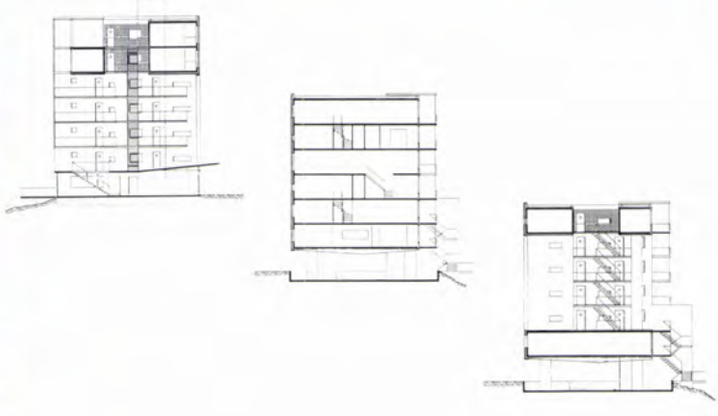
The exhibition shows new developments in architecture and housing, a panorama of different building types. The buildings will be distributed on three parts of the *Dedemsvaartweg*, for each of which a different kind of building is intended.
Free-standing and clustered buildings are intended for Zone One; buildings with four to five floors for Zone Two; Zone Three is appointed for five apartment towers at great distances from each other.

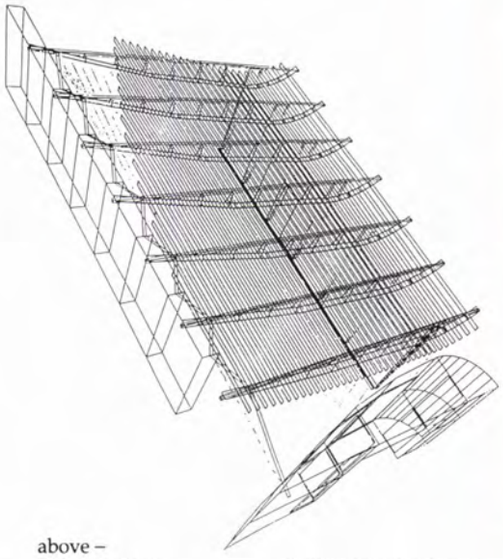
below –
Social housing K25, The Hague
The building stands in a strip of parallel landscape elements (street, trees, canal, dike) which form the transition between housing area and green zone.

This situation is reflected in the design: the street façade is a slab of stone behind which a living zone in light materials is created. The slab-like character of the building is articulated through a number of perforations which make the building transparent to the green zone: the building is floating above a lowered parking place and has big openings with community rooms around the staircases.

The programme consists of 45 flats of different types, varying from 55 to 110 square metres. This variety and the low number of flats are a conscious effort to make controllable a building with a diverse population.







above –
Experimental Mobile Villa
"On Wings of Art" is an experiment in relations between the public and the private realms. It is a mobile villa for a theatre group, simultaneously serving as stage, setting, auditorium and house for the travelling group. The villa stands in the sand. Sometimes the audience sits inside and the actors play outside or the reverse, sometimes there is an audience but no performance, or actors without an audience. Sometimes the audience attends the daily meal of the actors and sometimes the actors change the building without the architect knowing it . . .

below –
Design of the exhibition *Soviet Architecture 1917-1987* in the Beurs van Berlage, Amsterdam
In designing the exhibition in the ex-stock exchange by Berlage I used two geometric forms which are elementary in Russian constructivism: the circle and the triangle. From the edge of the roof a round, open column of white silk comes down. The column hangs above a concentrated exhibition of small models of Rodchenko and Melnikov buildings, and forms a shell over an intimate space where the constructions come into their own. About two metres above the floor, a gigantic black box in the form of a pyramid floats; on its inner side slides of Russian architecture and urbanism are projected – a big hat under which you go when you want to see the pictures.

The drawings themselves are exposed on long, low panels, leaning against each other and thus forming a roof, the cross section of this construction being a triangle again.

PROJECT CREDITS:

Hamburg Bauforum:
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Willem Jan Neutelings
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Boompjes Boulevard and Parking Garage:
Kees Christiaanse
Ron Steiner
Social Housing Festival and Building K25:
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Exhibition of Soviet Architecture and Mobile Villa:
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Herner Leiska

FROM BRUNELLESCHI TO CAD

Professor Mike Cooley wrote Architect or Bee, *a book which criticised the substitution of human creativity by the computer. Here he describes a new project which uses the computer as a tool for architecture, and not as a substitute for architects.*

Nick Reeves

Illustrator Nick Reeves re-addresses a wood cut by Dürer.

"If you've got a guy who can produce drawings non-stop all day, never gets tired or ill, never strikes, is happy on half pay with a photographic memory, you don't need . . . !"

Thus was the Computer-Aided Design revolution heralded with refreshing frankness in an advert for a CAD package. It didn't suggest it would turn every design engineer into a Leonardo or a Barnes Wallis. It didn't pretend it would make Wrens or Brunelleschis out of architects. Neither did it go as far as to suggest that it would free us from routine, boring, backbreaking tasks and allow us to soar into the celestial heights of our own creativity. Its message was brutally frank. It had to do with speed of production, control and, above all, the replacing of human intelligence with machines. It revealed one side of that double-edged sword which is technological change. That side, incidentally, which still tends to be the dominant, if unstated part of the agenda of many large corporations. Those aspects of technological change which are now proving so problematic in other areas of professional endeavour, are revealed within design itself.

Technological change in its present form displays three predominant historical tendencies. Firstly, it changes the organic composition of capital, making processes energy- and capital-intensive rather than labour-intensive. Secondly, it constitutes a shift from the analogical to the digital, dramatically changing the way we perceive our world and relate to it. Thirdly, it is a process in which human beings become passive and the systems become more active. These systems tend to be introduced within the general philosophy advocated by the founder of "Scientific Management", Frederick Taylor, who said: "In my system, the workman is told precisely what he is to do and how he is to do it, and any improvement he makes upon the instructions given to him is fatal to success."

There are expressions of concern from Rosenbock[1], Dreyfus[2] and myself[3] that we are now repeating, in the field of intellectual work, some of the mistakes made at earlier historical stages in respect of manual work. There is in fact, already evidence of these tendencies within Computer-Aided Design. I hold that this is in part due to the separation of hand and brain, which began to be so evident in

Right, computer generated drawings explaining the façade of the new Erskine designed Hammersmith offices, London. Drawings generated by Gordon Swapp, Rock-Townsend Partnership.

fourteenth and fifteenth century Florence when Brunelleschi was designing the cupola of the *Santa Maria del Fiore*, and around which time a word for "design" appeared in most European languages. The emergence of this word coincided with the need to describe the occupational activity of designing. That is not to suggest that designing was something new, but rather that it was being separated out from the wider productive activity and recognised as an activity in its own right. This can be said to constitute a separation of hand and brain, of mental and intellectual work, and of the conceptual part of work from the labour process. Above all, it indicated that designing was to be separated from doing.

My colleagues and I view this period as a unique historical turning point, where sadly, the possibility for a human-enhancing, more holistic form of science and technology was lost.[4] We now believe that with the new technologies, we are at a similar historical turning point. In many areas of design, reductionism is now becoming evident. Furthermore, many of the CAD systems are leading to high levels of abstraction. That, together with the "theoretical" forms of education for designers and architects, converges to mean that on occasion they cannot even recognise the objects that they themselves have "designed". This loss of a tacit dimension has resulted in some dramatic (and often comical) examples.

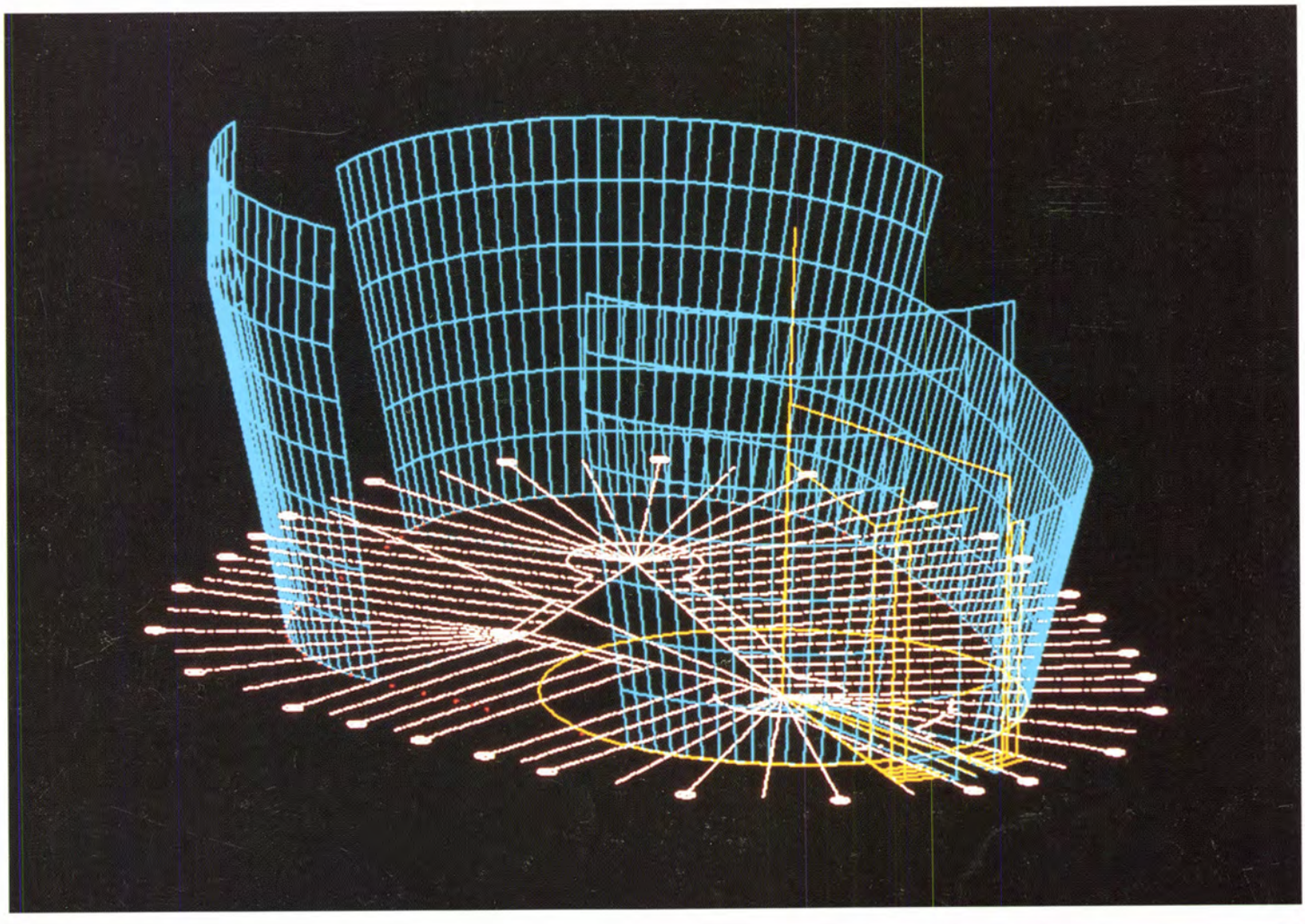
A designer working on an igniter for an afterburner moved the decimal point one place to the right (which in an abstraction is like one place to the left). Through his CAD system, he called up the preparation of the NC tapes. De-skilled workers on the shop floor then looked for material for this object and succeeded in producing an igniter with ten times the dimensions. What was alarming, was that when a skilled worker went up to the designer's office with this enormous object to make a joke of it, the designer didn't realise it was a mistake, even though it was of course 1,000 times the required volume. A startling confirmation of Joseph Weizenbaum's sub-title to his famous book "Computer Power and Human Reason" namely, "From Judgement to Calcuation"[5].

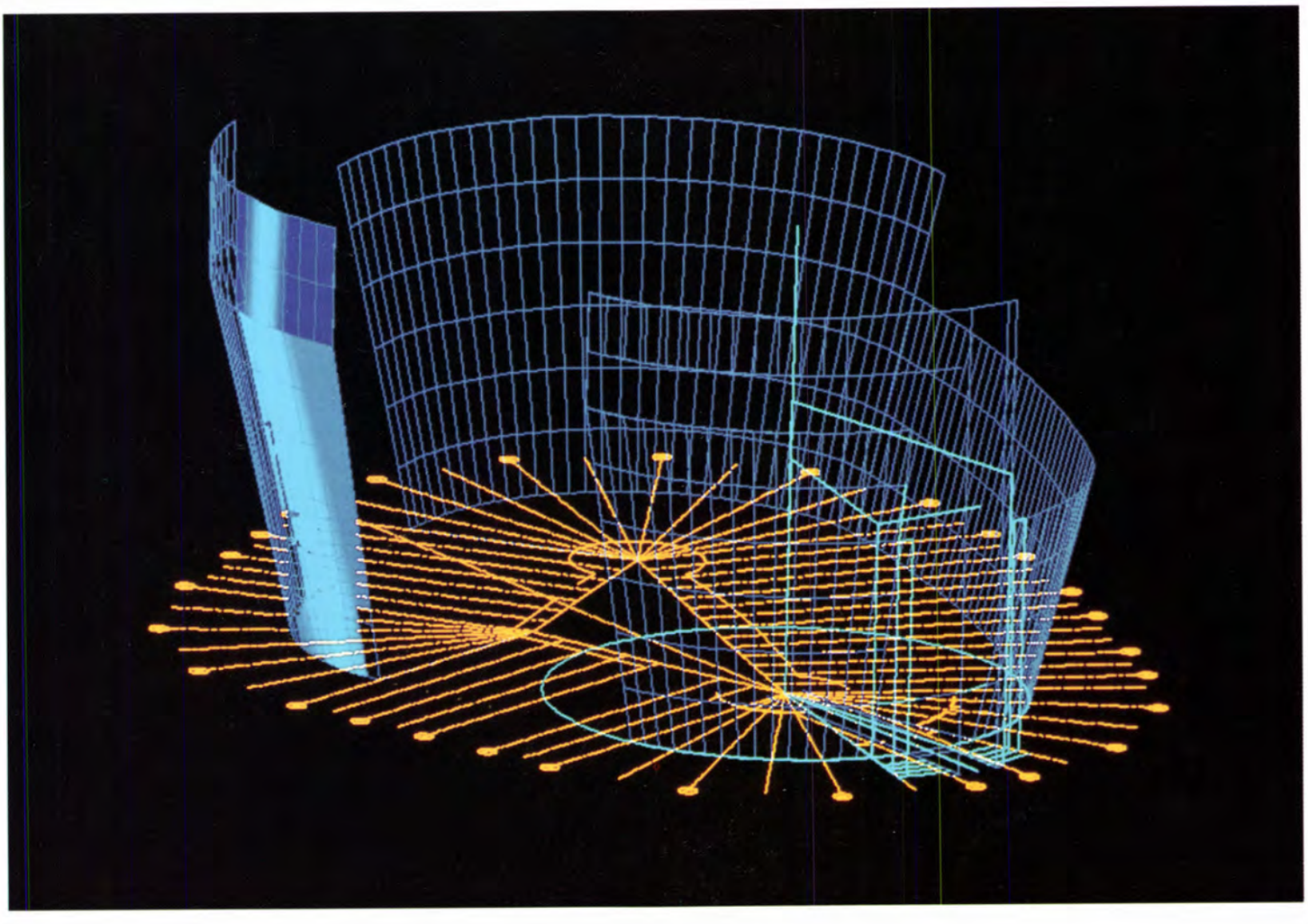
We are indeed losing the capacity to judge. As we get so separated from our materials and the physical world in which they are located, we lose the tacit knowledge, that sense of shape, size and form which the philosopher of science Polanyi spoke about when he said "There are things we know but cannot tell". That kind of knowing cannot be accumulated through the miniscule professional aperture of a VDU. In addition to this, a CAD environment does (but doesn't necessarily have to) encourage the notion of "the one best way": the idea that you can so optimise packages and components that just one route is left. This is frequently the basis on which menu-driven systems are constructed.

By the early 1980s it was clear that definitions of these problems and descriptions at a theoretical level of possible solutions would be indequate to bring about a creative questioning of the destructive orthodoxy. In 1984 a group of engineers, scientists, philosophers and social scientists from universities and industrial companies in Germany, Denmark and Britain, approached the EEC with a request for funds to design and build a demonstrator of a Human Centred Computer Integrated Manufacturing System. I was the initiator of the project, and together we asserted unashamedly to the EEC that we could not accept that there was just that one form of technology, which might be described as Tayloristic, Fordist or American; a sort of "one best way" at the macro level.

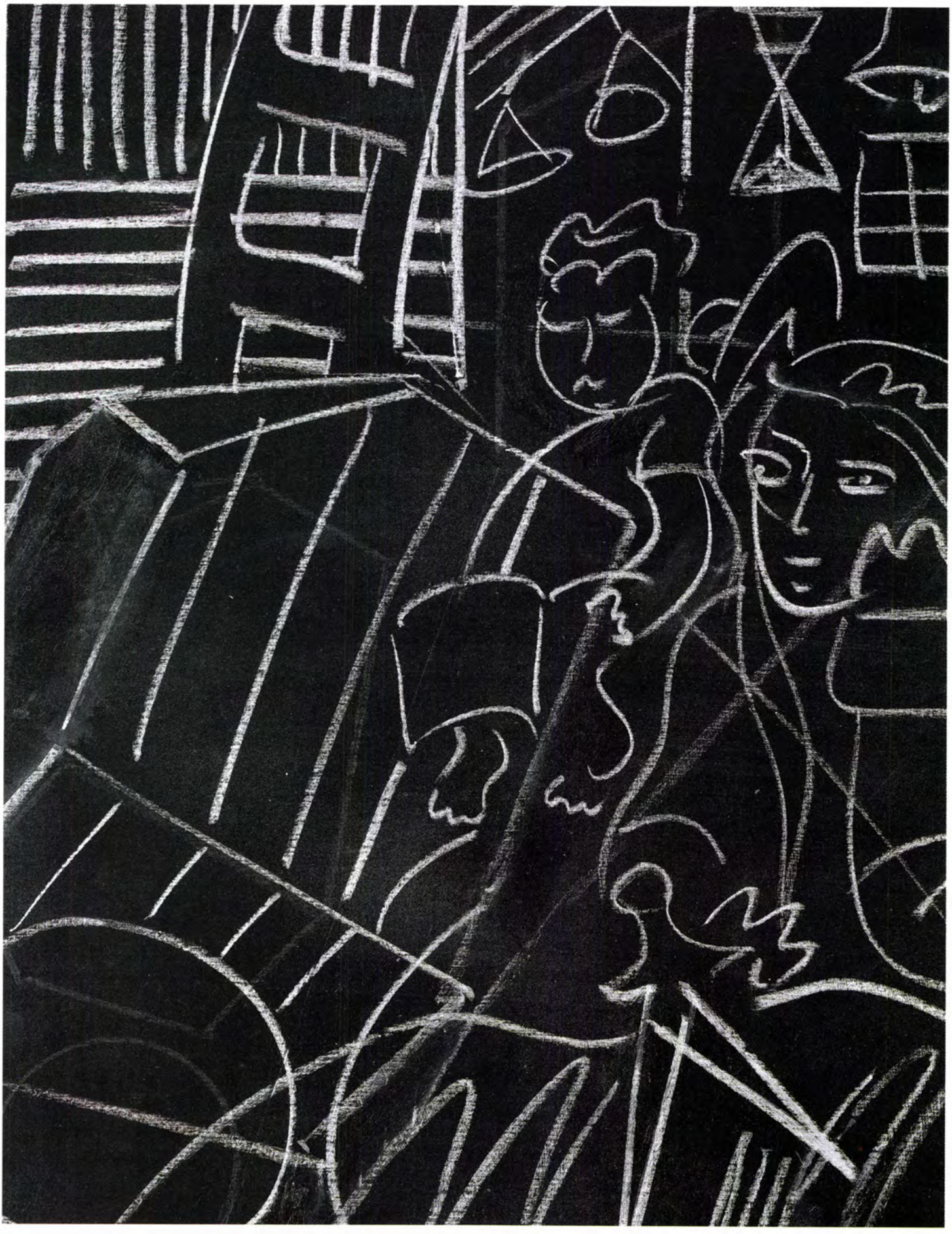
An original way to perceive technology is as part of culture. Just as cultures produce different languages, different music and different literature, why should there not be different forms of technology, including those which reflect our so-called European aspirations – even if they apply more in the rhetoric than in the reality? We were advocating a technology which would reflect those European expectations of motivation, commitment to quality, self-consciousness, dignity of the individual at work and the need to enhance human creativity.

Eventually, the EEC agreed, and ESPRIT Project 1217 was embarked upon. The CAD work was undertaken by the Danish partners, the Computer-Aided Production





No computer has yet been programmed to plagiarize and recreate what it plagiarizes and break the formal rules of drawing whilst doing so.



Nick Reeves

(CAP) work by the German colleagues and the Computer-Aided Management (CAM) and overall project management by the British partners.

An object at all levels in the system, was to support human skill and ingenuity by providing tools as distinct from machines in the Heidegger sense. Furthermore, we were conscious that many systems functioned on very high noise and very low signal, leading us to express doubt that we live in an information society, and to suggest that we actually live in a data society. Transforming data into information is a conscious human act of selection. If the information is applied, it becomes knowledge, and if that knowledge is absorbed within a culture and a tradition, it leads to wisdom, and wisdom can lead to worthwhile action. Thus we sought to design the system at the knowledge/wisdom/action end rather than at the data end (see fig. 1). The significant effort to arrive at this conculsion might not have been necessary had we heeded these words from a poem of T. S. Eliot's:
"Where is the wisdom we have lost in knowledge?
Where is the knowledge we have lost in information?"

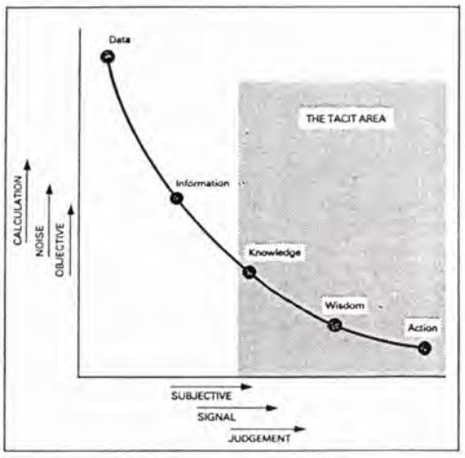
At the CAM level in this new system, an interface supports the operator-programmable input. Thus, skilled shopfloor workers can draw on their deep tacit knowledge, and furthermore their qualitative subjective judgements are accepted as valid by the system. The worker can give the quantitative elements to the machine and can, at all stages, override the machine. The interface provides for graphical input as well as more conventional forms, so that the skilled worker can see the blank form on the screen, envisage the component which is within it and describe by graphical input techniques the machining steps required, in somewhat the same way as Michelangelo removed from the material in front of him, all that which was not David.

At the CAP level, the object is to provide high transparency through a PC-based workstation on the shop floor. The system will provide a graphical representation of the consequences of downloading some machines, the potential for optimising particular product ranges and the best form of sequential planning based on human judgement supported by a system of computer-generated alternatives.

Perhaps most exciting of all has been the work of our Danish colleagues in respect of the CAD system. The partners as a whole were concerned that CAD systems are still essentially menu-driven, which means that however sophisticated the system, the designer is still somewhat like a child with a complex lego set making pleasing patterns with predetermined elements that cannot be changed. Furthermore, this compels designers to conceptualise problems in forms which are compatible with the menu rather than thinking in a very open-ended and creative fashion at the initial stage. By using the Scandinavian techniques of "user involvement", the Danish designers held a series of discussions and built prototypes so that they could evolve a CAD system which actually did aid the designer rather than the type more generally encountered, which tends to dominate the designer. The result is a prototype electronic portable sketchpad. On this, the designer can draw freehand any element he/she wishes, with an almost Renaissance-type freedom. Since the sketchpad is portable, one can take it around and have discussions with colleagues and shop floor workers before the design is consolidated, or one can have an "electronic dialogue" via the system. Its local memory will retain the evolution of the design, as the old design sketch books might have done. The resulting sketches can then be uploaded to the main CAD system, where geometrically correct drawings are produced. Furthermore the object is to provide a command-free input to the machine, where it is the capacity to design that matters, rather than the capacity to drive a complex CAD system.

The CAM system is now under test at Rolls Royce's Leavesden factory, and the British company BICC has installed two of the CAP systems in their UK factories. The German partners are demonstrating an integrated version at BIBA in Essen. The electronic sketchpad is now under further development and a video tape is available in Danish and English, which features the user/designers of the sketchpad. A diskette is available which can be used with a PC to demonstrate the potential of the CAP controller. The overall project is now being underpinned by a COMETT Project to facilitate action between Industry and University in developing forms of education that will support a Human Centred Technology. Furthermore an EEC DELTA Project is working on the design of a learner workstation, which will likewise facilitate the development of skills within manufacturing. Those examining constructive technological alternatives to machine control are optimistic. There is still time to join with them, so that right across the professions, there are clear and well articulated proposals for systems which enhance our creativity, rather than stifle it.

Fig. 1 The Tacit Area



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4 Rawlence C. (Director) – *Look No Hands!: A Film with Mike Cooley,* Equinox Series Channel 4 and Video London 1988
5 Weizenbaum J. – *Computer Power and Human Reason,* W. H. Freeman and Co. San Francisco 1976

Professor Mike Cooley, a Design Engineer with a PhD in Computer-Aided Design, initiated ESPRIT Project 1217.

His awards and distinctions include the $50,000 Alternative Nobel Prize.

A HANDLE ON CULTURE

Sander-Werbung

Handles designed by Alessandro Mendini for FSB.

Have you read the Tractatus Logico-Philosophicus *by Ludwig Wittgenstein? Did you understand it? Probably not. Even hardened philosophers fret tearfully over its more elusive passages. Wittgenstein also dabbled in architecture. For one thing he designed a house for his sister in Vienna. This house is logical, syllogistic and abstract. Even the door handles were rethought. A version of the Wittgenstein doorhandle is used as the logo by FSB (Franz Schneider Brakel). FSB is an intelligent, design-led company which produces quality handles and other metal fittings which are marketed to flatter the intelligence of a discerning, well-educated, middle-class clientele – including architects and philosophers. We asked Carl Auboeck, a specialist in both design and architecture, to interview Jurgen W. Braun, Managing Director of FSB.*

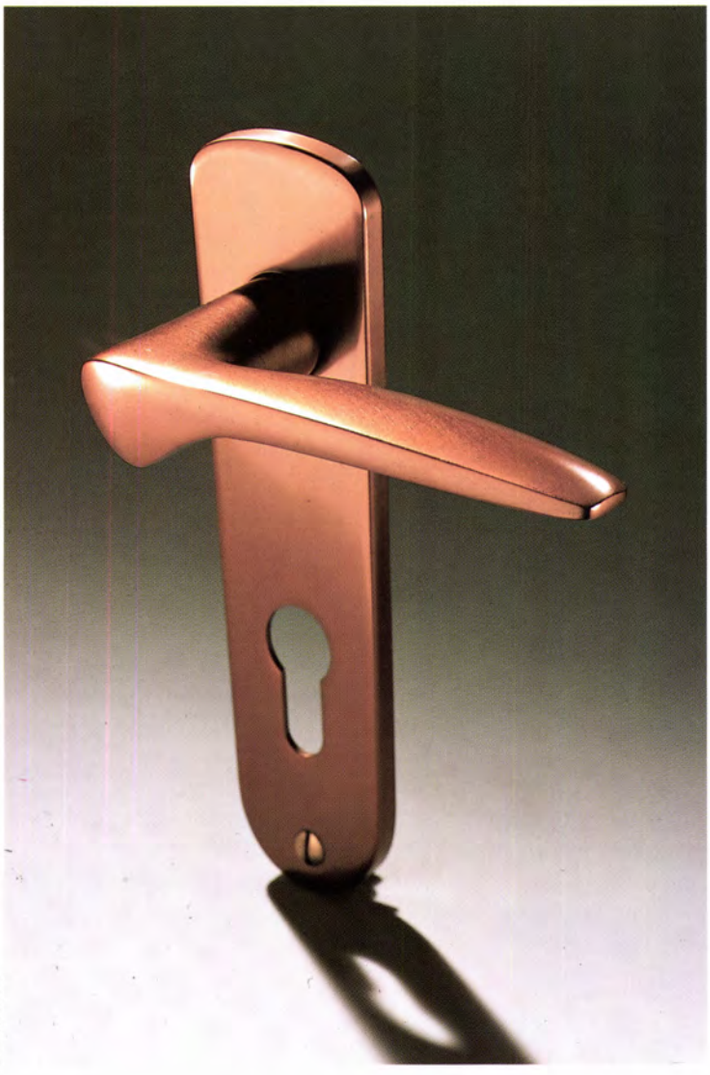
CA: Mr Braun, how does it feel to be an international trend-setter in a field, which I would say was dominated by an ironmongers' mentality up until a couple of years ago?
JWB: I think one can say that after the experiences we have had with our customers and they with us, the market has become more strenuous and involved. We simply had to leave behind the old production and trade methods.
CA: How did the changes actually come about in this more than one hundred-year-old firm?
JWB: In 1979 I arrived as a complete outsider in the firm, which was a good all-round performer in the fittings market and had a 30% share in it. I came up against a friendly but outmoded and perhaps a little too short-sighted management, which was convinced that the firm would continue as it had done up until then. At the time Johannes Potente was the works' designer and had been for 50 years. He was in charge of all the design work.
CA: A very typical situation for an old traditional family firm.
JWB: Exactly – and the substance, the manufacturing quality and the work situation (all 620 employees live within a radius of 7 kilometres of the plant in Brakel and the 12 villages within the area in the green hills of the Weser mountain region) fascinated me and animated me to instigate constructive changes.
CA: But it doesn't work that quickly –
JWB: Yes, and in my case it took around five years. Interestingly, it was during a conversation I had on a plane with my neighbour that I was given a tip which was to be decisive for me and FSB. He suggested Otl Aicher as a design adviser and I was in urgent need of an advisor.

No sooner said than done. I packed my catalogue and showed it to Aicher so that he could give it a new image. I naturally had not anticipated that Aicher would see things more in-depth than I did at that point in time. He threw me out with the remark that he was not a house painter and moreover that I should work out what I actually wanted.
CA: What happened then?
JWB: I then knew what briefing meant. Intentions, wishes and so forth, which first had to be defined. I basically had everything: production means, turnover and a large collection of all possible fittings. Yet the necessary drive was lacking.

The second accident came about whilst browsing in a bookshop, the antiquarian sort, where I discovered old books on the art of trade and a whole pile of books of differing type on tools, cutlery and walking- sticks. I bought the lot and turned them into the book "grasping and handles" together with Otl Aicher. This, our first book, became the basic philosophy of the "art of grasping", also defined as "lucky grips". In other words, basic considerations of ergonomics, haptics and product culture. It formed the basis for all the further steps. Here too, Wittgenstein makes an appearance – his handle form has been used in our logo.
CA: Why was this:
JWB: I think that this handle, which has been in our catalogue since the 1920s, was an important pointer in the developmental path of our business. I see it like this: the smooth, round, bent tubing form, pure avant-garde for its time, has attained an almost eternal validity, become almost holy, but is also there to remind us that there have to be totally opposing shapes and styles.
CA: How did it progress from there?
JWB: From exactly this starting point. On the one hand, the round and bent handle of Wittgenstein and on the other, the HEWI collection made from plastic, made me uncertain as to whether a formal development could then take place. Our strength lay not in the bent plastic material but in the hand-formed models of our Johannes Potente. I was very unsure as to what to do.

Then another accident came to my rescue. Klotz's exhibition *Revision of the modern* in Frankfurt in 1984 provided me with the clue as to which of the architects and designers on show there could contribute to the FSB collection. Amongst them were people like Mario Botta, A. Mendini, H. Hollein, A. Isozaki, P. Eisenman, P. Tucny, S. Hayashi and D. Rams. I immediately contacted them individually to seek their co-operation and, to my surprise, all of them were enthusiastic about it.
CA: In what form were the contributions provided?
JWB: Handles were to be developed on the basis of our bible *Grasping and handles* and the four unwritten commandments of grasping by Otl Aicher. The materials, brass, aluminium, bronze, high-grade steel and combinations with wood or thermoplastics, were prescribed, but otherwise as much freedom as possible was allowed.
CA: And this then led to the now legendary door knob workshop in Brakel?
JWB: Exactly. FSB granted contracts to the participants in September 1985 with exact specifications. Handover deadline was March 1986. An important part of the entire process was the workshop in Brakel held the following September, which allowed a comparison of the submitted designs and created an atmosphere which was conducive to discussion so as to consider aspects of the individual work and allow thoughts to be aired.
CA: Had you considered other possibilities of coming up with ideas before this workshop?
JWB: Yes and there were three ideas: either using our own in-house designer and the usual "cleaning lady test", ie the procedure in use up till then; to conduct a quick market research exercise and to have the same test carried out by around 3000 "cleaning ladies"; or lastly, to announce a student competition. We then quickly decided on the fourth possibility, in other words, to commission external designers. This was to bring in more creative professional pressure from outside and to derive useful public relations from this pressure.
CA: So you turned the design initiative into the starting point of a concerted marketing idea.
JWB: Exactly – it was simply our intention to rouse ourselves from our slumber with the trumpets of Jericho and to reassert the business in the eyes of the public.

Every single recommendation of each individual designer brought a different approach to the same problem and with it a better understanding of the problem,



Sander-Werbung

Sander-Werbung

Left, handle designed for FSB by Franco Berg. Right, handle designed for FSB by designer Johannes Potente.

a manifest recognition of the benefit of the so-called "hand-form model" and a tendency to move away from handle forms determined by a geometric aesthetic. Completely different suppositions and solutions arose, and the opposing views of Dieter Rams and Peter Eisenman is evidence of this. This confirms my opinion as to the validity of this course of action, of conducting such a design experiment. The employment of diametrically opposed designer personalities on the same theme creates a dynamism, aided by the positive atmosphere.

CA: What remained of the ten original collections and what could and could not be integrated into the production programme?

JWB: The process of elimination began in the workshop, where one could glean from the basic discussions a picture of the market chances, profitability, long-term effects and intended design politics of FSB. With the help of Dieter Rams and Otl Aicher, who incidentally was not at all enthusiastic about the whole workshop idea . . .

CA: What was his opinion then on the whole future product design of FSB?

JWB: Aicher was convinced at the beginning that one should only have one designer (similar to Johannes Potentes previously) and that he should be involved in the future developments. But once he saw the atmosphere and contrasting aspects of the ideas, he was all for it. So Aicher and Rams helped choose those designs which were given close

consideration for the expansion of the collection. They were the designs of Botta, Hollein, Mendini and Rams, from which we knew from the beginnning we could make a consistent collection.

CA: What was your experience in working with such different design heavyweights?

JWB: For example, the work with Mendini was great fun, but with Rams it was unbelievably strenuous. He questioned everything and criticised everything, absolutely terrible, but he was absolutely right. This is perhaps reflected in the fact that Mendini has one page in our new catalogue and Rams twenty-four pages.

CA: Does anything happen to the price when "name designers" contribute the designs?

HWB: At the beginning, yes. Our first unique series could only be sold through specialist design shops, which was a very limited market, and for very high prices. That has basically changed. With the Rams collection we had the luck from the beginning to develop an economic product. His 27 products have been on the market since July 1989 and have already won the silver award of USA interior architects.

The price reduction succeeded only after the successful placing of the product in the market. Hollein and Mendini are also responsible for products with high turnovers. Hollein with a hand-form model, which was related to the form language of Potentes, and Mendini with his *Omaggio a Gropius,* a re-design which on the one hand appeals to the traditional taste of the customers today and on the other hand is an up-to-date product because of its choice of colour. We are in the process of creating a healthy serial production so that the unique series comes within the reach of everyone.

CA: It gives me the impression – both positively and critically meant – that FSB could become the Alessi of the door fittings industry . . .

JWB: You may be right, luckily we can look back in an almost historical fashion on the advantages and disadvantages of such diversified design and product politics. We will take such steps carefully and always in the sense of a creative innovation, and not just let loose a firework at a jumping jack. Looking back though, the workshop firework was *the* event for FSB and signalled the turning point in design.

CA: How are we to understand that?

JWB: Well, we have created an internal identity in our business, based on the theoretical input of commissioned designs from external designers, the publication of our handbooks "Grasping and Handles" and the "Door-Handles Workshop in Brakel", and, very importantly, a monograph which our chief designer J Potente published in 1989. This internal identity has been understood and respected by every employee from the processing of the raw material to the sales department. I can say this with certainty. Our conceptions could not have been realised in any other way. In 1989 I held 24 slide presentations for my employees, so that each one of them understood how and why things happened or did not happen. The three books are as important as our catalogue, and all embody our corporate identity and present it to the world.

CA: When a new catalogue appears, which of the customers' characteristics does it aim to speak to?

JWB: Naturally the intelligence of the customers. Whether final consumers, architects, or cabinet-makers, it is to bring the unmistakable philosophy and quality of the products to the fore for every single item.

CA: Mr Braun, how do your product and design plans look? Are there new product lines which already permit a guess at the developmental trends?

JWB: I believe so. One year ago we asked Jasper Morrison to create a line with the help of brass as a basic material – a filigree brass wire. This series is already in the catalogue and should appear on the market shortly. Morrison has also designed a completely new hand-form series which will appear in the next catalogue.

Perhaps this answers your question and its lightly resonant untertone as to whether we can no longer work with the younger designer generation. Morrison to me represents the new Johannes Potente of FSB, and we are continuing a powerful tradition of hand-forms into the future. □

COMMUNICATE DON'T DECORATE

Much interior design emphasises function and visual grace but neglects the need to communicate directly with users. Lewis Blackwell argues that modern environments should have the same immediacy of message as a TV commercial

Unlike domestic spaces, the commercial or public interior is almost invariably designed by one party for another to make a statement to a third party. The self-consciousness of our cultural strivings in all kinds of activities – from literature to fine art, advertising to animation – has a relevance to the interior.

We are aware that the associations of an image are part of the function and can be taken seriously or treated ironically. The interior designer does not work in a vacuum and neither does the user experience that environment without relating it, consciously or unconsciously, to many other environments.

So how come interiors so often lack the resonance, the wit and the drama that other commercial creative work takes for granted as a requirement of civilised and effective communication?

There's the rub: *communication*. Beyond the most obvious messages, interiors are still not seen as having a lot to *say*. Rather, they *do*. We journalists and critics are partly to blame, of course, through our fondness for promoting new trends based on judgements that do little to extend beyond personal taste. In working on a new volume of the biennial publication *International Interiors* (published by Thames & Hudson in the UK) I thought it wise to be a little more catholic in my approach to marking design trends. I tried to ignore the pundits (nigh on impossible, I admit) and instead concentrated on what actually attracts designer, client and public attention.

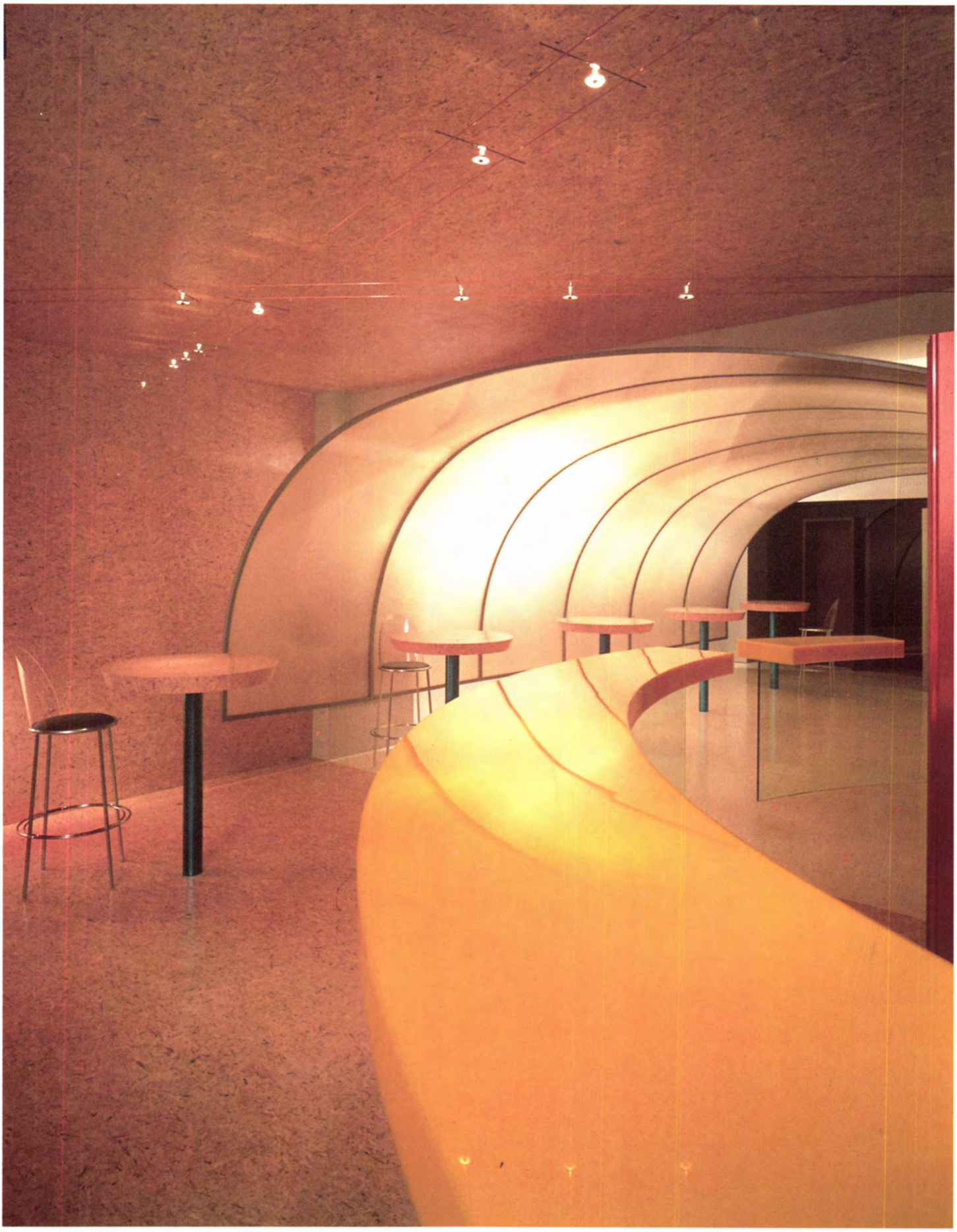
The simple linking factors behind all the projects included were the use of strong and original methods by clients and designers to put across a distinct and appropriate message to the users. (By "message" I refer to the expression of a whole range of different functions that are involved and must be bonded together in the interior.)

In the case of a shop or restaurant, getting that communication strategy right is a crucial part of the business success. Increasingly, given demographic trends, employers are finding that creating a workspace that is finely tuned to employees' needs beyond basic function is a great help to ensure a healthier and happier workforce. Companies, indeed governments, are also realising that their buildings and interiors say a lot about their past and present – and future.

There are few things as expressive of their time as a commercial interior: unlike the domestic interior, the commercial interior exists to be constantly tested by a changing round of users. And if the interior "fails", which is likely to happen in some way sooner or later, it will be replaced, should this be deemed cost-effective.

Foster Associates-designed Esprit shop, Sloane Street, London, built on a corporate image shift to hi-tech interiors

Shiro Kuramata's Comble bar in Tokyo: what it says is more significant than what it does (and prices can reflect this)



The Body and Bath Shop, Tokyo, by Satsuo Kitaoka says what it is concerned about in name and in the uplifting cleanliness of its interior, playing with light and translucent surfaces

It is a harsh world that the aesthetic concerns of the interior designer's craft must live in, yet this very threat of transitoriness, this pressure to achieve, ensures that the leading edge of interiors is among the most innovative areas of commercial creative work.

Interior design is free from many of the conservative pressures affecting architecture, yet not usually subject to the same mass-production pressures as products or furniture.

Nor, to perhaps make a provocative association, does the creation of an interior have the purely marketing-led objectiveness of much graphic design or advertising. And yet the production of a new commercial interior is increasingly bound up with the soft science of marketing.

For many designers this increase in marketing awareness is seen as an unwelcome development, but it is an undeniable one. The innovation and commitment of a client such as the casualwear fashion chain Esprit does not stem from charitable intentions towards designers, but from a commitment to using innovative design as part of a business strategy.

Whether or not it is of significance in the history of interiors is of no importance to the client, but the profile of the corporate image is relevant. Perhaps it was ever so, but the pressure on interiors to give identity has never been greater.

Until recently the creation of interiors was viewed as being on the margins of other activities: a sub-division of architecture, or a facet of corporate image-making. But a combination of factors – economic, technological, professional – has ensured that the interior has taken on a much clearer significance.

To refurbish, reposition or re-state a place by revamping an interior is seen as not only a viable but often a crucial investment in operating a retail environment such as a shop or restaurant. Workspaces and cultural buildings also have a shorter life and greater investment in the interior because of the need to deal with more sophisticated human requirements, often with more sophisticated equipment from the introduction of more computers to the demands this puts on air-conditioning.

The demands are rising all the time. The notion of "sick building syndrome" has been a bugbear in air-conditioned offices in recent years; now one new fear is that the multitude of magnetic fields within a modern commercial interior can cause illness. Meanwhile, perhaps buildings can help overcome sickness – hospital designers are certainly waking up to this. For example, a startling sculptural assembly at the Sinai Cedar Cancer Centre in Los Angeles was designed by Morphosis to both symbolise and influence the patients' battle against the disease.

Moves towards "global design", the internationalisation and integration of diverse design knowledge, show interiors moving into the same mode of production as – horror of horrors, for many designers – advertising. The disciplines of client liaison, planning and creative execution are already commonplace in the larger design

The Propaganda film company in Los Angeles by Franklin D. Israel: film set-style constructions are transformed into efficient offices, reinforcing the corporate character

Philippe Starck's work on the Royalton Hotel, New York, pitches design individuality as a unique selling proposition for the hotel. You can't escape the marketing concept, it is in every twist of a chair leg

consultancies, mimicking advertising agency structures. But, of course, the disciplines already existed in the behaviour of individual designers.

This is not to say that Philippe Starck does not display some distinctly French approach, or Shiro Kuramata a Japanese character. But their references, inspirations, influences and methods of working are increasingly global.

The influence of the client, too, can be global, as with many large corporations or retail chains such as Benetton, whose approach to retail interiors is not dissimilar to that of Coco-Cola to advertising. While designers may be concerned with aesthetic, functional and technological exploration, the character of high streets, shopping malls, business districts, leisure locations and so on, is more down to an agglomeration of large strategic decisions by clients in planning environments.

For those designers who may scoff at such marketing talk, the answer is simply to look at who pays for good design – the clients. The good ones do care about marketing (even hospitals, local authorities and prisons, now). And they are concerned to know what the designer is saying to the user on their behalf through an interior.

They will not retreat from wanting more knowledge, so the designer needs to retain expertise by expanding the understanding of what design is delivering by embracing fully this idea of communication. Otherwise somebody else will – perhaps an offshoot of an ad agency – and the interior designer will be left as the clerk of works, just drawing up the results.

Lewis Blackwell is the editor of Creative Review *and the author of* International Interiors *(Thames & Hudson), published this Summer.*

OUT OF THE SHADOWS

The American oil crisis of 1973 brought US lighting consultants onto the building design team as a matter of urgency. But this environmental discipline has been slower to catch on elsewhere. Emma Platt sheds some light on the subject.

Statue of Liberty – lighting designed by Howard Brandston Lighting Design

"All design is *de facto* lighting design," says Andre Tammes, a partner in the consultancy Lighting Design Partnership. If this were a definitive statement then everyone of us would have heard of lighting consultants and know exactly what they did for a living. But lighting is not the final word in design and realistically no lighting consultant could claim to be the first and last port of call in a design project.

However, lighting consultants are beginning to establish themselves as essential members of the building design team; as critical to the project's completion as the architect, the quantity surveyor, or the structural, mechanical and electrical engineers. As Jonathan Speirs, also a partner at Lighting Design Partnership, points out, "It would be inconceivable to design an auditorium without an acoustic consultant, and just so, it should be commonplace to include lighting consultants in any building projects."

To gain wider recognition and acceptance, lighting consultants have organised themselves into professional institutions. For example the International Association of Lighting Designers, an organisation founded in America in 1969, has recently set up a European committee based in London. Nick Hoggett of lighting consultants Derek Philips Associates, is the European committee's current chairman and is responsible for organising annual awards programmes and other public presentations of member's work.

Meanwhile The Lighting Forum was founded in the UK in 1986 "to advance and stimulate lighting excellence" and "to promote a finer understanding of lighting design and its practical application to a wider audience". The Lighting Forum has recently become affiliated to the Chartered Society of Designers in an effort to raise its profile.

On the whole, lighting consultants have a hard task. People are often prejudiced against the self-taught specialist and most lighting consultants have no formal training in lighting design. Instead they come from a background in architecture, interior design, electrical engineering or even the theatre.

But the cause of the lighting consultant received a filip in 1987 when an enthusiast, David Loe, set up the International Philips Centre for Lighting Education and Research at the Bartlett School of Architecture and Design in London.

According to Loe, prior to the foundation of the Philips centre, lighting education was a science and technology subject – and one that was in general decline. Interestingly enough, it was pressure from the Chartered Institute of Building Service Engineers that got the programme off the ground. For the first time the Philips centre studied lighting from both an arts and a science perspective. "Too often," says Loe, "architects looked at lighting from a purely aesthetic rather than functional perspective, while engineers produced correct even levels of lighting that were incredibly dull.

"Now," he adds, "every student gains a firm grasp of the technology, luminaires and fittings, but in the context of architectural design and human requirements." The course apparently got off to a slow start but in three years the student numbers have doubled from six to 12, and the 1990 intake has risen from 12 to 15 full-time students.

The slow but rising numbers on the Philips course reflects the gradual but mounting interest in lighting design in the construction industry. Hoggett reckons that it is over the past four years that large developers in particular have acknowledged the contribution lighting consultants can make to a scheme. What's more, they have been prepared to pay for it.

On the other hand, Derek Philips Associates has been around for 32 years, quite as long as any American consultancy. America is generally regarded as the birthplace of the lighting consultancy profession, principally because there are many, many more consultants over there.

However, the proliferation of lighting consultants in America is not

Above and far right

Munamar Hotel, Marmaris, Turkey. This five-storey atrium is the heart of a five-star hotel. Miniature halogen starlights are used to define the perimeter with recessed downlighters highlighting the columns creating a dramatic effect at night. The four bridges crowning the atrium diffuse the lighting during the day and are backlit at night providing a soft contrast to the starlights and an enclosing feature to the space.

Scheme by Lighting Design Ltd

Guildford Business Park, Guildford, Surrey. The reception for the main three-storey building demonstrates the dramatic effect that is created by using the interplay of different sources and their colours. Cool coloured fluorescents are used at high level for efficiency and maintenance reasons with the warmer low voltage sources providing highlighting in local areas, eg over the reception desk. Metal halides positioned over the entrance throw a punchy white light down over the doorway and the warm sodium bollards to demark the entrance from the exterior.

Scheme by Lighting Design Ltd

The Canion Hasharon shopping centre, Israel. A very striking example of coloured light used to define architectural details. Red and blue neon emphasise the structure with metal halide providing the background lighting and low voltage halogen sources under a bridge cross fade to provide a starlight effect.

Scheme by Lighting Design Ltd

necessarily a reflection on relative ability, but because the US economic climate and enterprise culture have allowed such consultancies to flourish. American designer Lesley Wheel has been working as a lighting consultant since 1957. In her opinion the "hierarchical structure" of US society makes the specialist that much more acceptable. She refers to it as "the consultancy layer".

"I came to London in 1963 to work on the lighting for the Hilton Hotel and I'd have liked to have stayed on but the British didn't seem to take to paying for my advice," she says. "Even with modest fee projects, I wasn't able to get anything off the ground. Now I think that has changed."

According to Wheel, lighting design was still a luxury in the States until 1973. "The '73 Arab oil embargo changed all that. Now a lighting consultant could be justified for cost efficient use of power. Also, adds Wheel, "building construction costs escalated and lighting, it was realised, was a relatively inexpensive way of giving a building distinction."

Even so, Helen Diemer, vice-president of the International Association of Lighting Designers, comments that it has taken 25-30 years for the lighting consultant to be accepted as a professional on the building design team. However, she believes that now lighting consultants are "coming into their own". Her argument is that "the sophisticated technology in any modern building requires individual specialists for each electrical system, including lighting specialists."

In the UK Andre Tammes has seen that all too often the lighting consultant has been brought in as a remedial measure "when the architect finds he is getting nowhere with the electrical engineer and the manufacturer is not responding to the brief". This situation is far from ideal. "You end up horse trading on the fee because the client won't increase the budget," says Tammes. "Anyway the contribution the lighting consultant can make by this stage is highly compromised".

Lighting consultants should be involved just before the design concept is finalised, according to Peter Hucks, senior designer with Lighting Design Limited. But this, of course, changes the way the project is run. "From the client's point of view," explains Tammes, "this is a major issue, perhaps an obstacle to using a lighting consultant, particularly on fast track projects. After all, all other elements of the building programme must be slowed down while the lighting is properly sorted out." But, he explains, using a lighting consultant will make the difference between integrated, effective, even dramatic lighting, and the "estranged appliqué" that an electrical engineer might introduce.

It appears that the role of lighting consultants often veers between a circus act and the Red Cross service: between a high-profile designed element and the emergency stop gap in which consultants become corrective surgeons of light flicker or poor colour rendering. But there is another skill that the lighting consultant can bring to the building design team: the ability to interpret the psychological impact a building's lighting has on its inhabitants.

The Wellgate shopping centre in Dundee, Scotland was apparently revived by Lighting Design Partnership's complete overhaul of the lighting design. "For the most part our treatment of the enclosed space was extremely subtle but very effective," says Tammes. A good example is the computerised sensitivity of the lighting to natural daylight conditions; as night falls, the lights in the shopping centre brighten.

A lighting consultant's tools aren't just experience and knowledge of lamps and light fittings, but an understanding of natural light, its effects and how to control it. This is particularly important in modern glass buildings. The irony is that lighting consultants are frequently being asked to cut out the direct sunlight the architect has gone to a lot of trouble to let in.

NEW YORK ARCHITECTURE/ GAETANO PESCE

New York Architecture 1970-1990
Heinrich Klotz (editor)
Munich, Prestel, 1989

Trumpville and the *Deutsches Architekturmuseum* make an exotic combination, even within a globalised economy and an even more universal culture industry. This sumptuous book is, in effect, the catalogue of an exhibition of the architecture of the last two decades in New York, held last year in the Architecture Museum in Frankfurt.

It was obviously a New York of the mind that was the focus of this exhibition – neither the buildings illustrated here nor the architects belong exclusively to that very literal and pragmatic city. The projects range from the ebullient and evocative sketches by Zaha Hadid – "The New Calligraphy of the Plan" (1988) to the gloomy precision (it's all too obvious what its going to be like) of Swanke Hayden Connell's design for the Feldman tower done in the same year. Within the same ten pages appear the weighty reality of Cesar Pelli's Work Financial Center at Battery Park (1982-1988) and OMA's extended graphic meditation of the nature of New York, "The City of the Captive Globe" (1972). In between are a host of more or less real or imaginary projects by Ambasz, Gwathmey Siegel, Holl, Pran, Ranalli and many others that testify to the obvious – that New York possesses a wonderful, vital, contradictory, self-promoting architectural culture.

Making sense out of such profusion is more difficult. It must be said that only two of the five introductory essays are really worthy of the Big Apple. Robert Stern manages to convey the enormous architectural fecundity which created a world city in the 1920s and '30s, and the equally astonishing revival of the city's energies which began, against all expectations, in 1976. Ken Frampton begins and ends his essay in his best rococo Welfare State style, attacking the contradiction inherent in New York between the world views of the architectural tycoons and of the architectural street fighters. This dichotomy makes it difficult to produce "quality, middle range work without becoming artistically corrupt or going to the wall".

What could they have made of all this in Frankfurt – a city which is on the verge of being thoroughly Americanised with projects in train by Helmut Jahn and Kohn Peterson and Fox. The weakness of both exhibition and book is that, despite Ken Frampton, no one gets down to analysing the two factors that really make New York so profoundly interesting and disturbing architecturally. New York *is* different, not because of superfluous talent, pluralism, deconstructivism or the appalling glut of third rate postmodernism, but because firstly the process of production and exchange of buildings is so commercialised that the architect's power and scope have been brutally abbreviated and marginalised. Secondly the city is special because the culture industry, which is equally ruthless and equally commercial, appears to offer young architectural talent instant fame and infinite possibilities. Greed and fantasy ride together. The Grand Canyon between promise and reality is the real contradiction

which fractures the adamantine heart of what is indeed the world's coldest, hardest and most beautiful city. □

Francis Duffy

Gaetano Pesce
by France Vanlaethem, London, Thames & Hudson 1989

Famous for his *Pratt* chairs, Gaetano Pesce is a Northern Italian "artist-architect" who builds only a little but proposes a lot. He makes full use of the irresponsibility that the twentieth century has granted to the artist (the children of our age). Sometimes the narrowness of adult wisdom is revealed, sometimes he only shows that Mother knows better.

I find his work interesting but not likeable. One of the practical distinctions between design and architecture and *art* involves the use of the word "like". It is sufficient ground for failing a design or a building if its users or sufficient numbers of the public actively *dislike* the thing. Active dislike gets in the way of function: working in or with something that you find unpleasant causes some distress. And distress is not a legitimate goal for design.

Art, in its modern sense, concerns itself with speculation. Yet increasingly design and architecture have, on their fringes, become speculative and more like a modern art in which pleasure is secondary to unease. Hence it can be held that to say "I do not like the work of Gaetano Pesce" (designer-*artist*-architect) is to miss his point. Liking or disliking does not come into it – what counts are Pesce's ideas.

France Vanlaetham has written a serious and enjoyable review of an interesting, iconoclastic "architect". It is well illustrated, thoughtfully structured and helpfully footnoted.

Vanlaethem says that Pesce's "art-architecture" is the product of the three pillars of twentieth century avant-gardism – abstractionism, expressionism and surrealism. As a visual polemicist Pesce operates in a spirit of continuous revolt and change. He needs an opposition: he needs the world's bureaucratic and authoritarian structures, its conventional and average good tastes and its capitalist-consumer orientated wisdoms in order to give him both licence and a job as a kind of *fool* to the world's King Lear. And this, perhaps, is no great criticism, for it was Lear, not the fool, who went barmy.

Vanlaethem calls Pesce's work "an architecture of fragments". He explains that Pesce is searching out meaning and narrative as, for example, in Pesce's scheme called "Project for a Lilliputian Habitat" where the spaces are underground cavities and impressions of a dismembered body. In essence all his work begins and ends with the body, sometimes quite literally. The erotic and the visceral underlines Pesce's aesthetic.

Some of the ideas would look astonishingly banal if realised. In his project for a Church of Isolation (1974-77), we are told that the "congregation enters through the eyes and nose of the human figure". As a literary image this could have potency, as a visual image the sight and the actuality of people disappearing down a huge snout in the earth is absurd. If absurdity is what is wanted then fine, but this is a "church" intended to present a retreat from the bustle of New York, and in the search for solace one needs reassurance, not absurdity. In any case, a more appropriate orifice for that damned city would have been the anus.

Pesce likes the possibilities permitted by inconsistency. Inconsistency underlies his counter proposal for the development of Les Halles – it is a daring, amazing, baffling model which passes through classicism, and modernism and into organised decay in one and the same plan. It is a fusion of the man-made with the organic. More promiscuous than New York, this scheme would be an appalling visual mess if built, a nightmare for the window cleaners but a haven for all kinds of birds – which would be a delightful compensation.

An architecture of fragments is also intended, according to Vanlaethem, to include the results of outside participants and inhabitants. Hence the Pesce proposal for Les Halles includes residential structures – concrete skeleton structures with services for people to build what they want. As Vanlaethem says, it is not a new idea. What he does not ask is whether it is desirable, why not make such schemes on the ground – why is "participation" always given within the rules of the artist's ego? How many people want to see their dream house stacked above or beneath someone else's dream? There is artistic selfishness in the air.

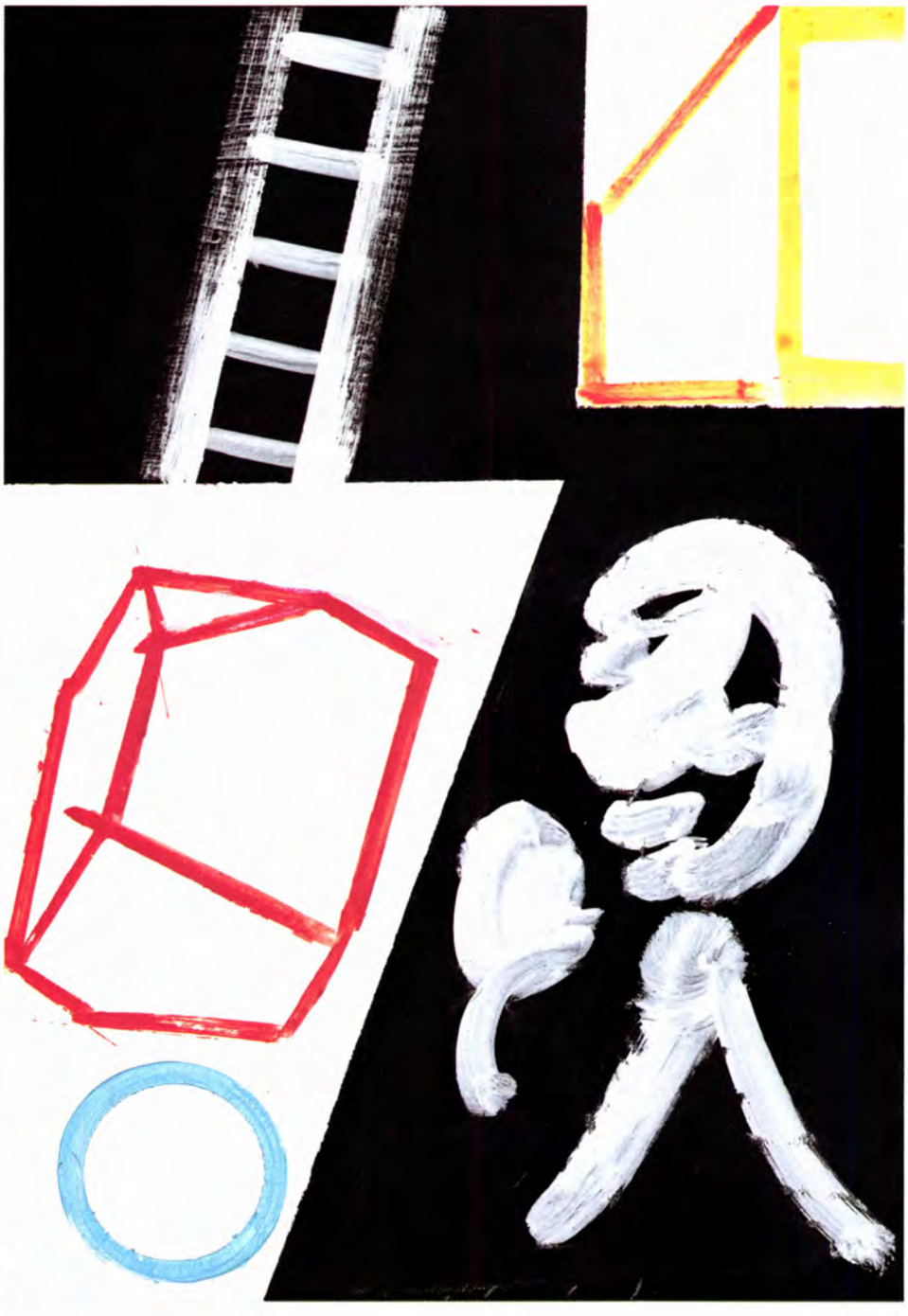
One of the realised projects is an apartment in Paris for Marc Andre Hubin. The main double storey high room is divided across one third of its area and also a dramatic balcony from which one can look into the space of the main room. Populated with Pesce's organic furniture and decorated with angular, edgy objects and detailing, the riotous assembly is kept in order by the classical geometry of the building itself. It is like looking into a jumbled up jigsaw box.

Pesce apparently said "The times that we are living in today demand new representations" and also that he wanted to endow our spaces with new significance. This is a noble, humanist aim but in truth I am not convinced he is interested in the significance beyond his own creative ego – this is characteristic of the contemporary artist. □

Peter Dormer

GLASNOST AND OSTRICHES

Pierre Vago tutors us in the real politik *of international co-operation in architecture.*



Nick Reeves

It was 1945 and the war was over. In Paris, a young architect who was better known as chief editor of a famous international magazine, put forward the idea of creating a single union of architects irrespective of politics, religion, race, ideology and aesthetics. He spent 2½ years sending out information, explaining, convincing sceptics and overcoming deep-seated prejudice. Finally, in July 1948, representatives from 22 countries signed the certificate of incorporation of the International Union of Architects. (It has been erroneously stated that it was originally a European association whereas, in fact, the United States, Australia and Egypt were among the signatories and architects from 17 non-European countries attending the Congress which followed its formation.)

As an original member of the IUA who has worked extremely hard over the last 25 years to make it a success, I felt entitled – and honour bound – to appeal to all architects through what is unfortunately the only means of communication available to the Union, ie its monthly information letter. To my amazement, under various pretexts and in spite of contradictory decisions, I was not allowed to express my opinion. *Glasnost* has not yet reached the IUA. I fail to understand why it should want to conceal such obvious truths and to avoid a genuine democratic debate on the present and future of the Union. Nor why it should try to deny what is common knowledge and will only be exacerbated by such unreasonable censorship. However, there are many lessons to be learnt from the consequences of an attitude which insists on distorting reality and presenting the gloomiest prospects through rose-coloured glasses. The best way to cure a patient is not by concealing or refusing to acknowledge the

symptoms and serious nature of the illness. We cannot go on indefinitely hiding our heads in the sand like ostriches. Recent history has shown the results of policies which wanted to impress and were based on self-congratulation and a refusal to confront reality. A world organisation such as the IUA should be completely frank and above board. The alternative is for it to continue to proclaim its successes as it moves towards final collapse – like a piece of rotten timber in which the internal disintegration is concealed by an outward appearance of soundness.

Nobody wants the Union of Architects to be efficient, actively constructive and successful more than I do. It is an organisation which has become even more useful and more necessary as we approach the end of the twentieth century. But in order to meet the challenge of the modern world, it must recapture its original spirit and energy.

Hidden Reports

Printed below is the most important part of the article which I wrote at the end of 1988 and which the executive of the IUA still refuses to publish.

But I would first like to quote Vice-President Kücker who, in a memorandum written in September 1987, referred to "a progressive decline, a loss of public interest and prestige, a lack of commitment from architects, the failure of the last two Congresses, unproductive working parties, lack of information, representatives who were incapable of taking responsibility", and so on. At a Council meeting he concluded: "The IUA is a failure at all levels. The young and even the not-so-young professionals are no longer interested in the organisation, the press either ignores the events held or reports them ironically". In his speech the honorary chairman regretted that "with the warning of Dublin over and forgotten, the painful memory of Brighton fading with time, and the hole in funds plugged by a bank loan, things seemed to have returned to normal." He added: "I have long been aware of a dangerous decline of which the two disastrous Congresses of Cairo and Brighton were an unmistakable indication. There was also the Dublin Assembly with only 49 Sections represented, 6 of which were in the position of the 31 Sections which statutorily would not have had the right to vote."

That was nearly three years ago. Since then a series of "discussion groups" has been asked to find solutions. Most have called for a restructuring and a reform of statutes without making any attempt to analyse the problem seriously or to carry out the consultations and investigations necessary to make a diagnosis which would in turn enable the appropriate treatment to be prescribed. These wild suggestions were ultimately abandoned. It was generally acknowledged that the IUA was, above all, in need of professional and cultural activities rather than administrative meetings. Major issues such as training for architects and professional practice have been completely neglected for the last twenty years! Information for architects has become non-existent. Working parties have gradually become a thing of the past while committee meetings have increased at an alarming rate. At the Assembly, which gives Sections the opportunity to express their opinions once every three years, the programme only allocates a few minutes to each National Section as part of the general discussion which is unanimously requested but always avoided due to lack of time.

Was I not right in 1988 when I wrote: "In view of the undeniable seriousness of the situation, and faced with divergent, conflicting and irreconcilable opinions, generally expressed at a personal level by one member or another of the Council, I appeal to those who shoulder the heavy responsibility of restoring the vitality, energy and prestige of the IUA, to reconsider their method of working towards constructive proposals for general debate, to be submitted democratically to all National Sections. It is not a question of forming a "new IUA" by destroying existing structures in order to create an uncertain association of seven, ten or twelve so-called Regional Unions. This would only increase bureaucracy and running costs, and create barriers and ditches – where we should be increasing the number of bridges, contacts and exchanges – with ill-defined communications structures and vague areas of responsibility and procedure.

"After years of discussion, the 1948 Statutes were modified in Cairo.
Is the Union any better for it? A lot is said about lack of funds. Is it generally known that between 1973 and 1988 the budget has increased fivefold? And has this made the Union any more active? It is obvious that the situation in 1988 is no longer the same as in 1948, but which paragraph of Article one of the Statutes do people want to delete? The objectives are still all valid, it is their implementation which, as always, presents problems in terms of priorities and means.

"But it is not so much a case of replacing existing management structures as of defining their respective responsibilities more clearly and ensuring that the union is run more efficiently. There is not so much a need to change the Statutes every ten years as to begin by putting the clauses into practice. Instead of being obsessed by ways of raising more money, we should make better use of existing funds. Rather than taking the easy option of criticising former presidents and representatives, we should make use of their experience, availability, good will and often their enthusiasm. Instead of using the "youngsters" as an excuse, we should welcome them into the Union, offer them assistance, make them associates rather than wanting to control them and keep them under our wing. Young people have a capacity for enthusiasm, loyalty and idealism which should serve as an example to us all.

"My dear colleagues, you are not being addressed by an idealist but by a builder who has proved his sense of reality. The necessary and inevitable revival of the IUA – a world union of architects, not a conglomerate of national groups based on economic or religious sympathies or the political systems of their countries – calls for enthusiasm and determination today just as it did forty years ago." □

TM spotlight for QT 12 100 W/ 24 V. The anti-dazzle attachment narrows light emission to 6°. Interchangeable reflectors are available for light cones up to 60°.

Eclipse spotlight with interchangeable light heads for QT 12 100 W/ 12 V. The luminous flux can be set to 60%, 80% and 100% using the safety transformer.

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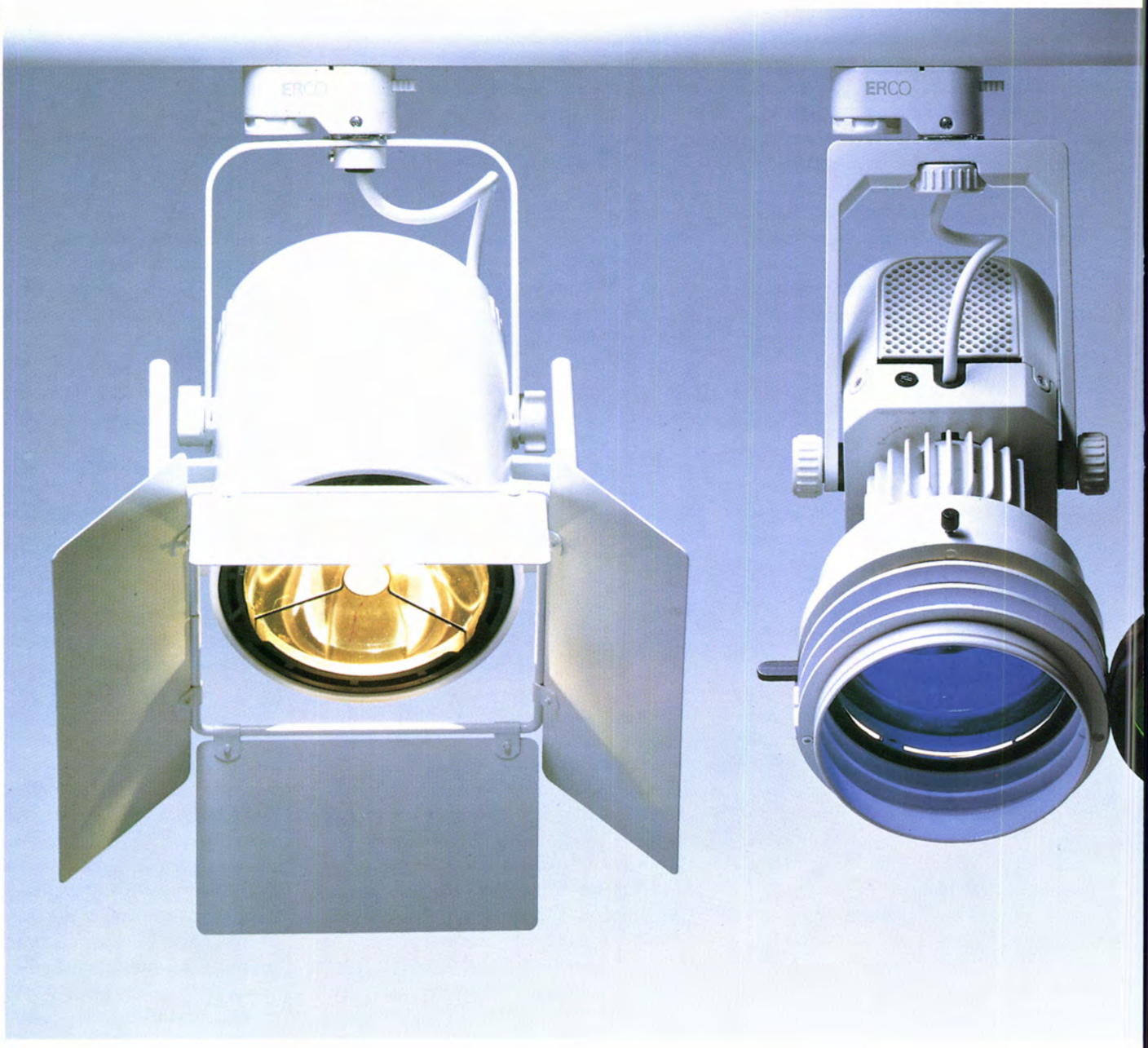

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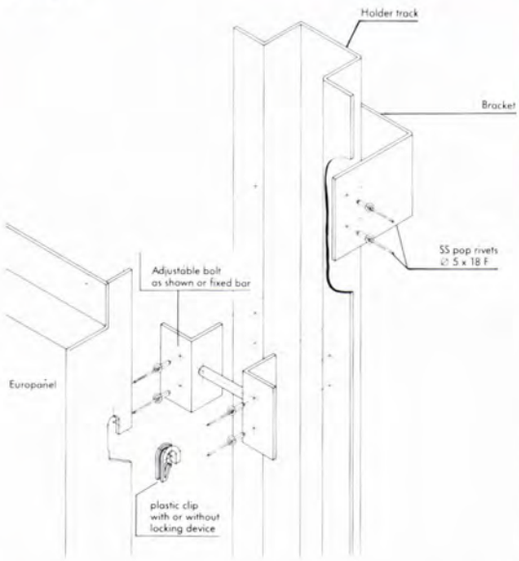

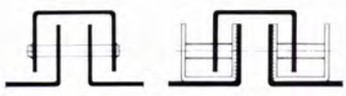

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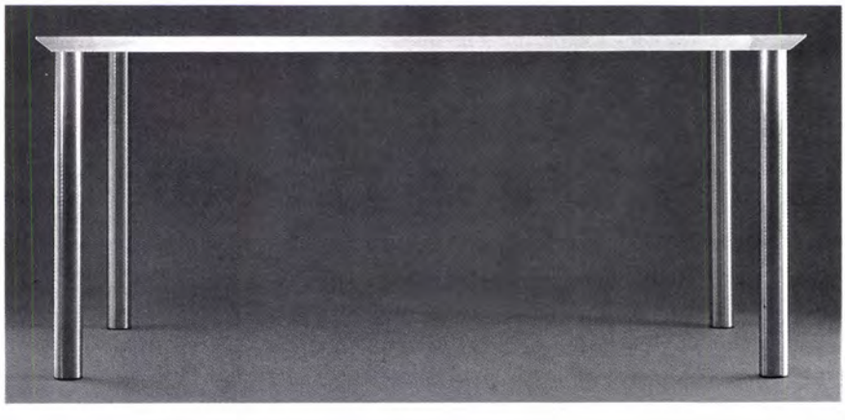

Design: Friis & Moltke,
Architects MAA, IDD

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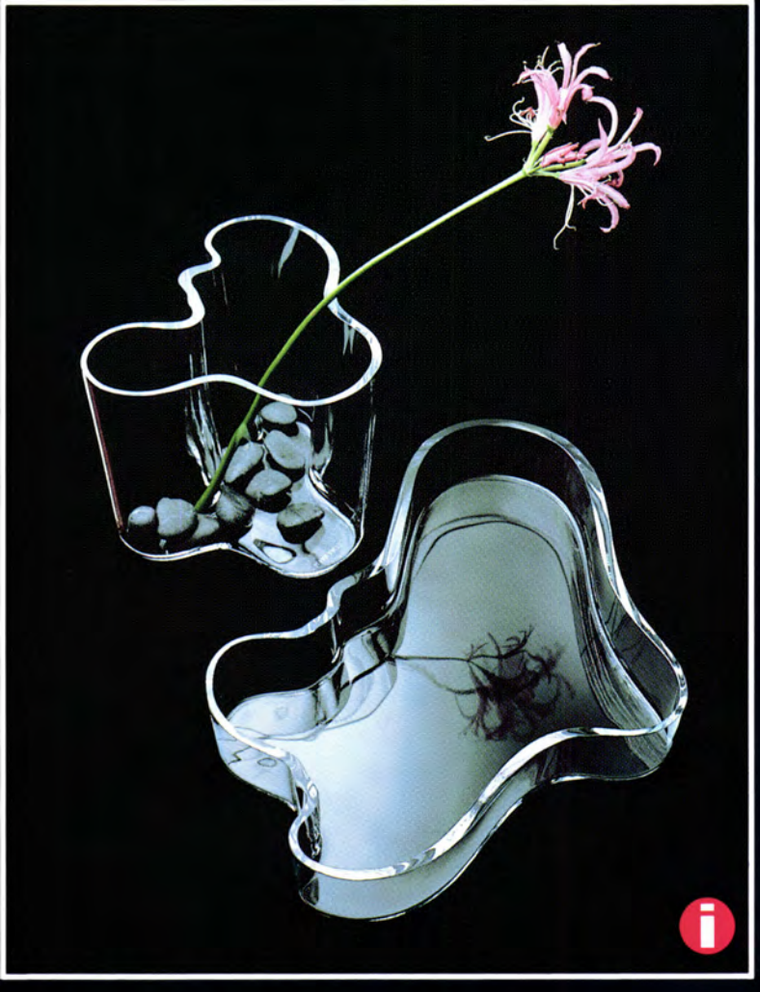

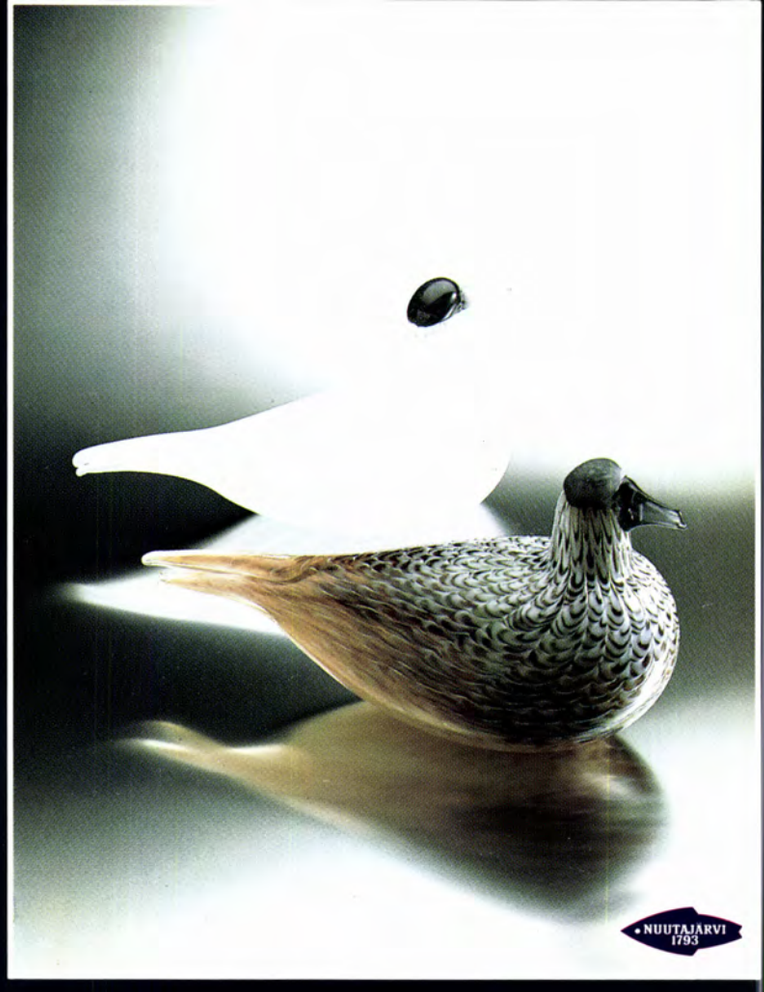

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New Impressions

◀ The use of Junckers solid flamey beech gives the room an extra dimension. The floor becomes an integral part of the decorative scheme.

▲ "Citadellet", a 7,000 sqm. office building in the Gothenburg Docklands, was the first major enterprise in Ralph Erskine's project.

The architects succeeded in combining atmosphere and a unique experience by choosing Junckers solid hardwood floorings for the Gothenburg Docklands in Sweden.

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The Architects *Klas Bjarne* and *Pietro Raffone* from Arkitektlaget AB designed the renovation of "Citadellet". For the flooring they chose the flamey grade Sylvaket beech from Junckers. The flamey impression adds warmth and a decorative dimension to the spacious rooms. A soft, natural appearance which conveys exclusivity and elegance. The natural floor lasts for centuries and oiltreatment ensures easy daily maintenance - even on high-traffic areas. The overall economy is highly attractive to any project.

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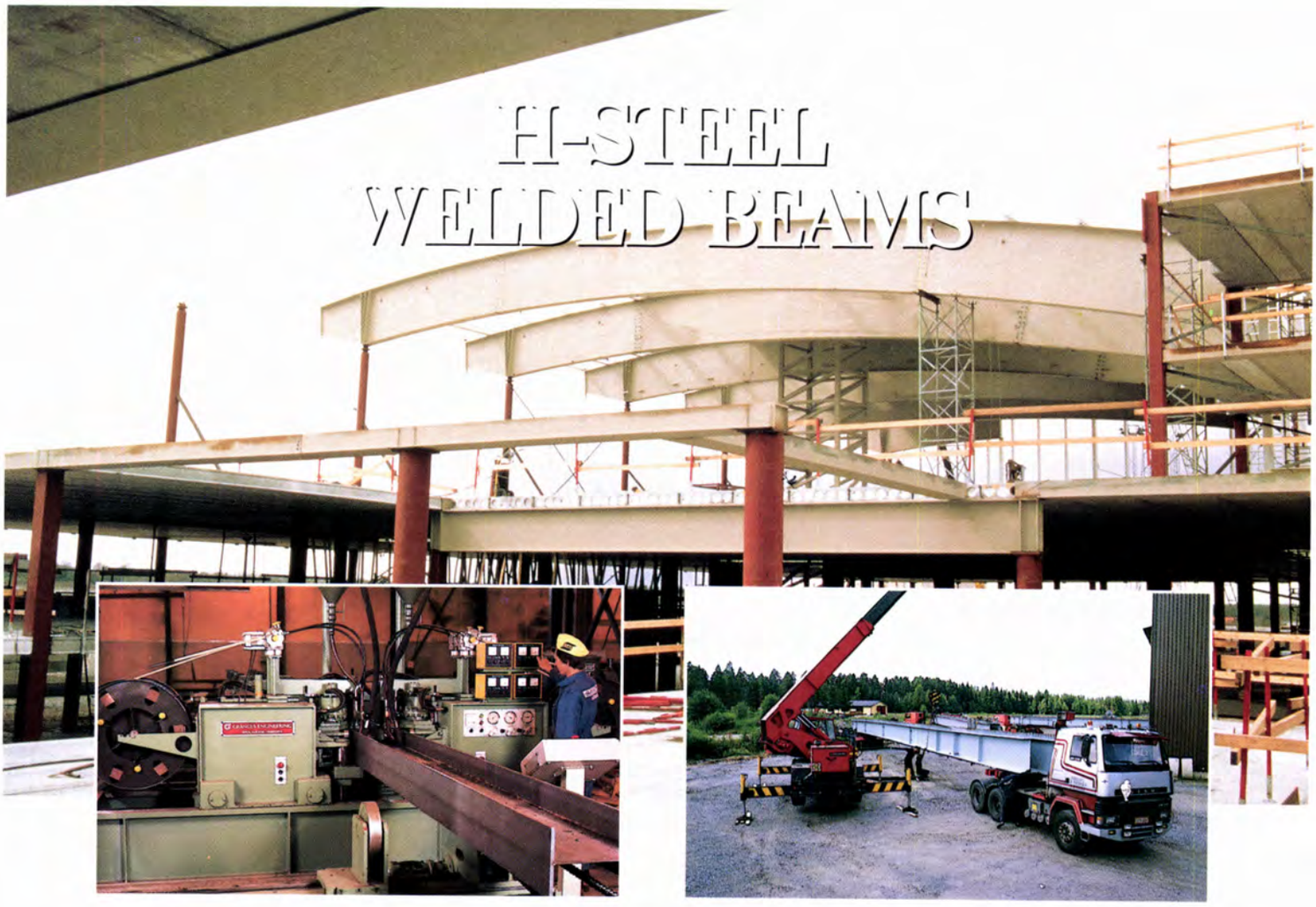

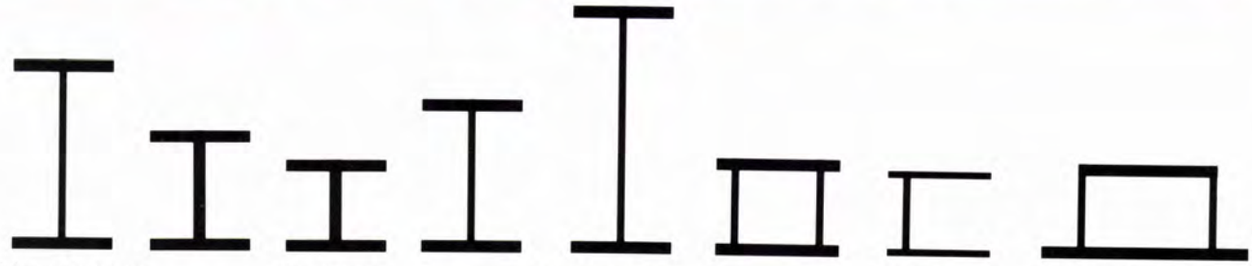

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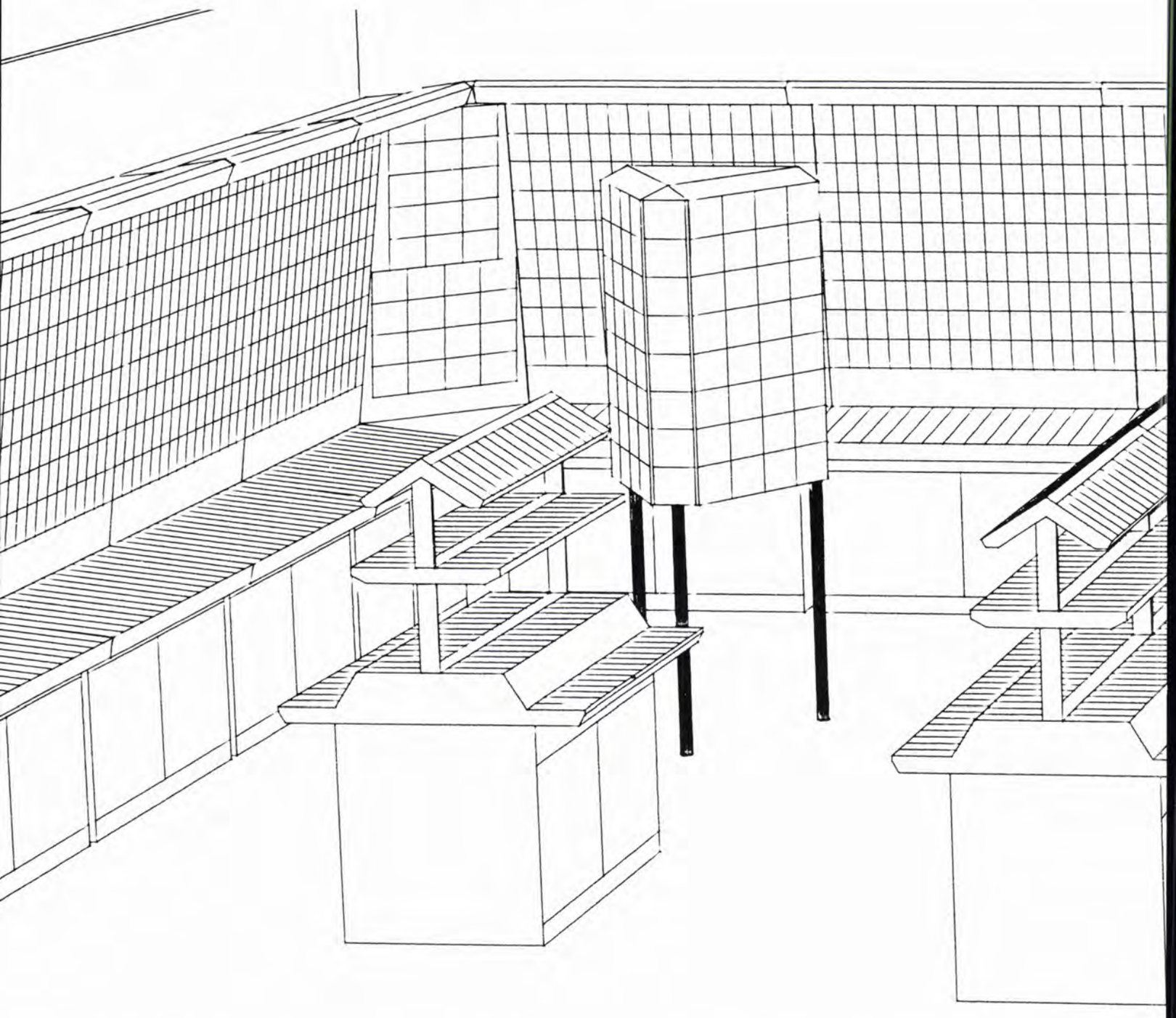

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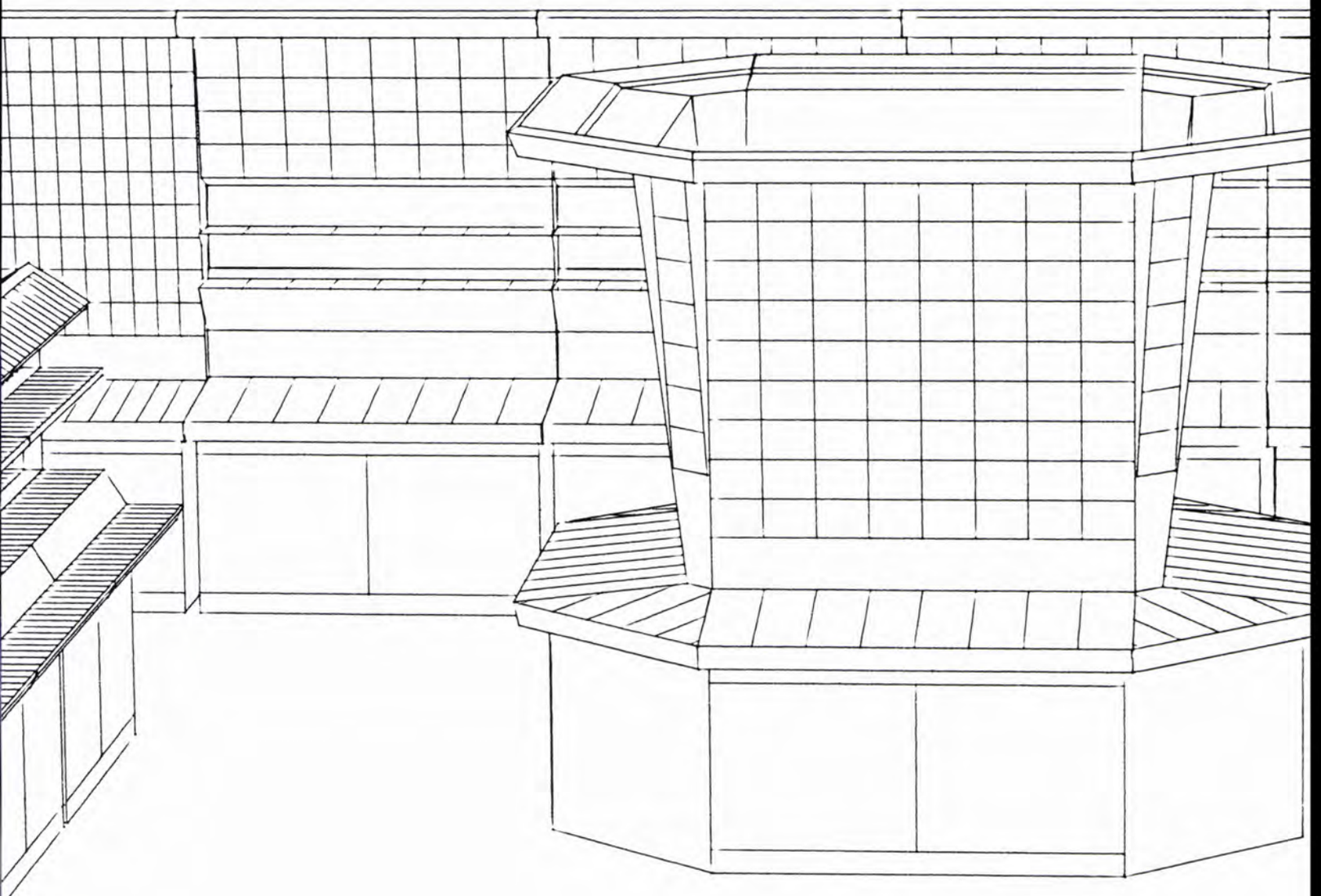

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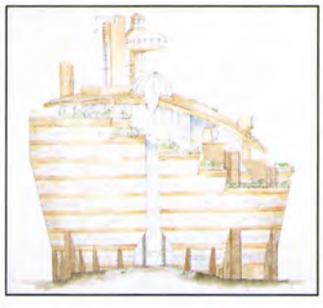

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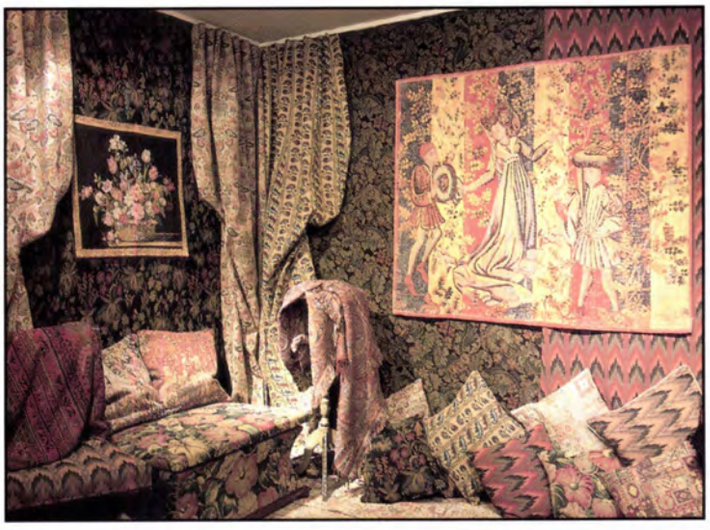

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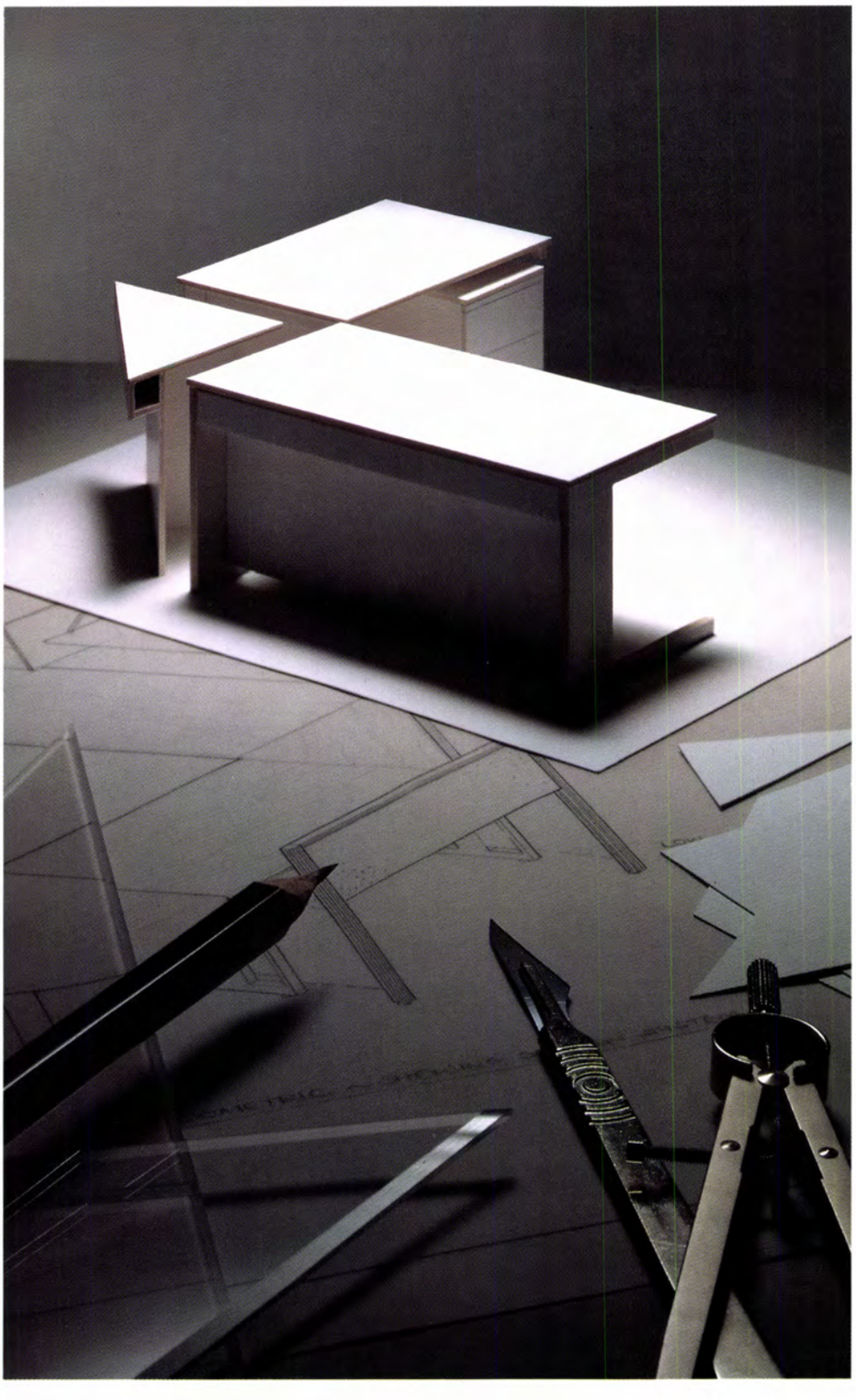

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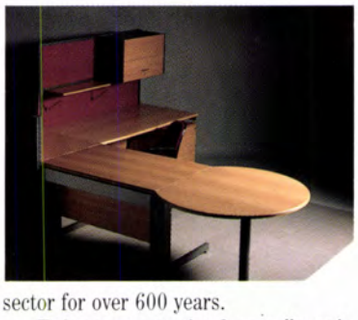

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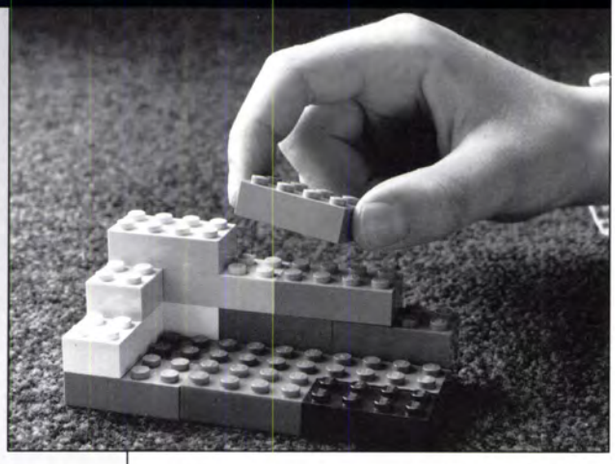

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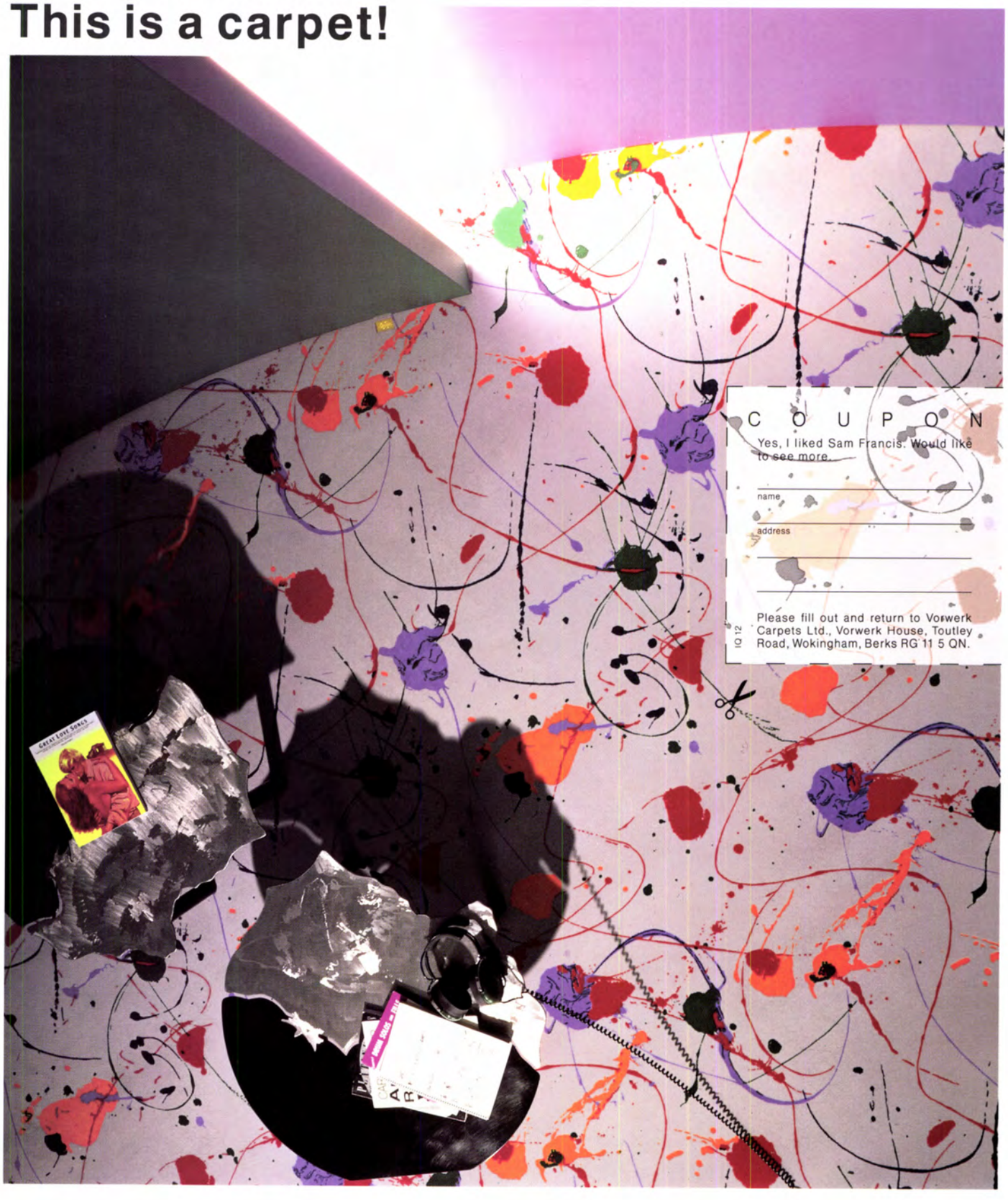

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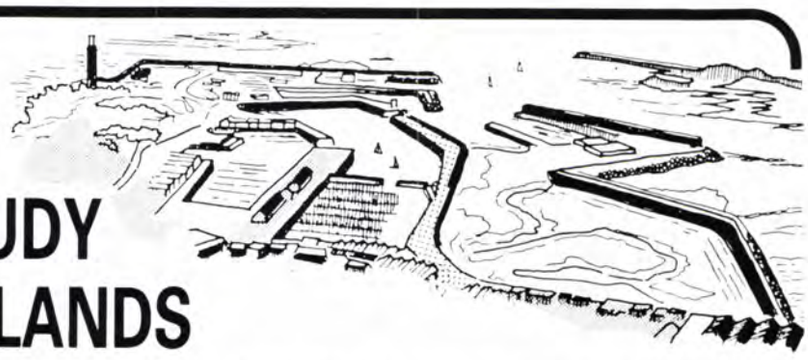

Initial expressions of interest are sought from multi-disciplinary practices, or consortia of practices, wishing to be considered for a major planning commission commencing in mid 1990.

The successful practice will be appointed by the Island Development Committee of the States of Jersey (the Island's government) to prepare a long-term development plan for the waterfront of St Helier, the Island's commercial capital, in accordance with a Planning Brief which was agreed by the States Assembly in January 1990.

In the first instance, practices are asked to write to receive a synopsis of the requirements and an application form from **Miss S Clements, the Planning Section Secretary, Department of Planning and Building Control, P.O. Box 596, South Hill, St Helier, Jersey, Channel Islands.**

States of Jersey

IDC Island Development Committee

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