[Summary]

Résumés

Variability in building elements

Nowadays this kind of variability is increasingly in demand. The installation of movable partitions in offices has become the usual thing. However, when it is made a requirement without good reason, it often becomes dubious. Our recent Flashbacks have touched on this topic several times, and it has been realized, when viewed in perspective, that the value of partition mobility in certain office buildings has often been overestimated. Thus the question has been raised as to whether the high investment entailed by such partitions is always in line with the effective utility. Contrary to our Issue on the theme last year, we are presenting here medium-size buildings which are, as it were, the "architects' daily bread". Our introductory article deals with the influence of modulors on the structural conception of office buildings. The article demonstrates the economic advantage of orthogonal designs.
The Flashback is devoted to the Nordwest-Lotto building in Münster, which was planned a decade ago.
The second theme of this Issue is the increasingly important urban cultural center, with Ontario Square in Toronto being given as an example.
In "Reflections on Architecture", the author of this project lets us have some of his ideas on the subject.

Klaus Kafka, Dortmund

Influences of the modulor on the structural conception of "officescapes"

(Pages 9–12)

The purpose of this study is to elucidate the structural limitations resulting from the selection of a given modulor (in our case: equilateral triangular mesh) and to compare it with an orthogonal grid. Owing to the ever increasing precariousness of urban centres, government agencies and private firms are being compelled to transfer their offices toward the outskirts of cities. Moreover, the new forms of internal organization (rationalization of work processes, intercommunication, working conditions) have entailed the abandonment of the individual orthogonal cubicle in favour of large spaces which are polygonal and flexible (Ill. 1, 2, 3). In line with these transformations are the new architectural shapes which are modifying the appearance of our cities. The advantage of a polygonal modulor is thus obvious from the functional and aesthetic point of view.
If we consider the field of building, we must bear in mind the times required to execute a building, the capacity of construction firms and hence costs. Specific studies have shown that there has been no preferred carrying system for office buildings, whereas such systems become imperative for car parks situated mainly below grade level. Moreover, industrially fabricated elements (lighting fixtures, ceiling panels) in general call for a secondary grid (Ill. 5). The optimum carrying system thus results, in principle, from the superpositioning of this secondary system on the system adopted for the underground car parks. For the latter, although orthogonal shapes are better, it is possible to organize them in a profitable way within an equilateral grid measuring 10 m on a side (Ill. 7, 8). Triangular structures, on the other hand, present numerous difficulties at execution level: coffering, reinforcement, rectangular vertical shafts, reserve space, etc. (Ill. 15, 16–22). The air-conditioning of triangular premises is more complicated, hence more costly: ducts in three directions, apparatus, complex ceiling structures, etc. (Ill. 23, 24). Finally, in a triangular system, a tolerance in one of the directions affects the other two, which can entail tricky assembly conditions (Ill. 25, 26). To sum up, it can thus be said that polygonal systems will be preferred to the more economical orthogonal ones, whenever functional and aesthetic requirements are considered to be essential.

Publishing and printing building

Eva and Pertti Ingervo, Helsinki
Kymen Sanomat, Hamina

(Page 13)

This building of a publishing house is situated in the centre of Hamina, an unusual old town in Finland. The plan of this centre was drawn up in 1922 by Axel Löwe, who at the same time built the fortifications of Hamina and of Helsinki. The building volumes harmonize with the skyline of the town. There are located on the ground-floor level the public entrance tract, the administration tract and the editorial offices. On the upper level are the typography and printing departments.
The façade is covered with white ceramic tiles, and wooden grids furnish protection against glare.

Building with office space to let

Kurt Ackermann and associates, Peter Jaeger, Munich
Associates: Ulrich Knoch, Dieter Kiermaier

W+K+V Building, Munich

(Pages 14–15)

The siting on a corner plot in a very heterogeneous district, the building regulations as well as various other considerations led to the adoption of an L-plan comprising two approximately equal tracts. Moreover, it was necessary to allow for a maximum organizational flexibility permitting, above all, the siting of areas, varying importance and size.
The utility surfaces of the offices, 270 m^2 each, are distributed over 4 entire levels and part of a basement level. On the 2nd basement level are the storerooms and technical installations.
The skeleton is of reinforced concrete and ceilings of planking. The latter have "mushroom" type reinforcement running through the entire thickness of the deck. The basic grid is 1.20 m, and the movable partitions can be mounted in each of the axes of this grid. The acoustic ceilings are of perforated sheet-metal, and the lighting fixtures are incorporated. The curtain-wall façade is composed of bronze-eloxidized aluminium sections and of insulating glass also coloured bronze. The roof structure is of the multi-ply type with gravel top.

Corner building in an urban centre

Suter and Suter SA, Basel
Associates: R. Böckli, H. Barz, H. Seiberth, B. Fellmann

Office building with flats, Danzas SA, Basel

(Pages 16–17)

Danzas SA, international transport enterprise with head office in Basel, wanted a new office building on a scale commensurable with its present requirements. It was decided to build in two stages. The building code determined the height, the depth and the intervals between buildings.
There was erected first an office wing, then the second tract with the main entrance, the connecting tract and the apartment house with a total of four 4-room flats. The offices are of the conventional type with central corridor. The interior courtyard is occupied by parking space for 30 cars.
The whole complex is of BA construction except for the top-floor level, which is recessed and has a metallic structure. The façade is of the curtain-wall type with wood-and-metal window frames, insulating panes and parapets of tinted glass. Anti-glare protection is provided by external slats.

Office and shopping center

Ch. F. Thevenaz and P. Prod'hom, Lausanne

Patria Lausanne

(Page 18)

This building is located at the corner of Avenue Fraisse and the Boulevard de Grancy, fives minutes from the central station, on a difficult steep site. The architects resolved the problem by designing a nine-floor wing on the boulevard and one of seven floors on the avenue. Internal communications are assured by two cores. The structure is prefabricated (Darlaco system), and the same is true of the façade elements. All levels are air-conditioned, and external slats provide anti-glare protection.

Office building with training centre

Dieter Oesterlen, Hanover

IBM Germany Building

(Pages 19–21)

The site is located on the interior circuit of the city near Paschplatz, the focus of an expanding urban core. In addition to the "officescapes", the client wanted a training centre for the employees of the firm.
In order to lighten the effect of this block measuring 34,000 m^3 and to integrate it with the smaller surrounding buildings, the architects distributed the complex into three volumes with different alignments and heights.
The complex is composed of the following: The office wing (five levels) with a ground-floor accommodating the computers, surmounted by 3 floors of offices and one floor with foyer, conference room and canteen. The training centre (3 levels) equipped with TV. A central tract forming the entrance.
The skeleton is of reinforced concrete with two solid cores; the peripheral elements are prefabricated. The 3000 m^2 of façade are of bronze-eloxidized aluminium with "Aurésine" panes and parapets of dark brown opaline. The blinds are on the inside.
The building is entirely air-conditioned, and installations are incorporated in the ceiling. Illumination ranges between 800 and 1000 lux.
The architects have sought to avoid the brutal effect of a single massive cube. That is why the exterior elements stress the effect of horizontality, while the basement parts and the access zone, which is elevated, complement the play of building masses.

Dörken + Mankel Building, Ennepetal.

G. Laskowski, W. Thenhaus, K. Kafka, Dortmund
Associates: K. Jost, O. Kuschnik

(Pages 22–24)

The Dörken + Mankel company is a family enterprise located on the periphery of the town of Ennepetal in a charming natural setting.
Unforeseen and rapid increase in production called for an expansion of office premises. The new building, the outcome of multiple planning constraints on a reduced site, is a square volume constructed on a grid of 1.625 m. The off-axis core and the building depth made possible both the organization of "officescapes" and of conventional individual cell units, decided on later by the client.
Above a ground-floor reception zone, there are, on the upper floors, the management of the firm and the various departments. All the offices have pneumatic intercommunication.
The basement, the cores and the interior supports are of concrete poured in situ, while the peripheral elements are prefabricated.

Independent of the supporting elements, the curtain-wall façade is of dark aluminium, equipped with insulating panes. Maintenance of façade is assured by exterior balconies which also serve as sunbreaks. The partitions and lockers, which can be dismantled, can be set in each one of the façade axes, which guarantees maximum flexibility.

Centre for three communities

Seppo Kasanen, Tapiola

Townhall of Sippola

(Pages 25–27)

For the centre of Sippola, a grouping of three townships totalling 16,000 inhabitants, there was organized a competition in 1962. The architects' main task was to create a building which would be unmistakably recognized as the most important one in the area.
The townhall is designed on an L-plan, the third side being closed by an arc to which the council hall is oriented. The free shapes of the halls contrast deliberately with the more orthogonal premises.
The façades are of light concrete, steel and copper, while the ceilings of the halls are faced with wood panelling.

Office and bank building

Rödl and Kieferle, Böbligen
Associate: A. Oberts

Homberg National Bank

(Pages 28–29)

The site is close to the medieval centre of Homberg and is strongly influenced by the neighbouring edifices. One of its boundaries is a part of the old wall of the town crowned at this point by very picturesque timberwork houses. Opposite the site there is a fine stand of trees and the historic façade of the Homberg College.
The client had a very precise notion of his program: Drive-in window, contacts with management, a level capable of being let separately. He called for a building, as it were, "to measure", which, on the other hand, had to be sufficiently flexible to allow for later changes in the organization of the firm.
The architects responded with a bank running up for two floors with a mezzanine level. This tract constitutes the centre of the composition. A system of conveyors and a "tele-check" installation connects the windows (cash, checking accounts, savings department) with the other tracts. On the mezzanine floor are the management offices and the credit department as well as the board room. The basement accommodates the safes, the technical installations, the records and a training centre for staff. The terrace premises are let separately and are accessible from the east via separate lift and stairway.
The complex is designed on a grid of 5.25 × 5.25 m, and practically all of the structure is of rough framed concrete, intended to harmonize with the timberwork of the neighbouring houses. An identical structuralist intention appears in the ceiling of the main tract consisting of white panelling contrasting with the black concrete facing. The materials are sober, and the sole colour contrast is furnished by the orange settees on the green wall-to-wall carpeting.

Office building with flats

Kurt Ackermann and Associates,
Jürgen Feit, Munich
Associate: Günter Stückle

Max Weishaupt Building, Munich

(Pages 30–32)

This building is situated in an old district of Munich not far from the Ramersdorf church on a busy traffic artery. This fact, along with the strict building code, had a determining influence on the planning.
At ground-floor level there are the exhibition rooms of the Weishaupt company with attached offices. On the 2 upper levels, 2 "officescapes" measuring 150 m^2 each and 4 flats. On the top level, a very large flat and two big terraces. At basement level, the storerooms and various other premises of the firm, as well as a garage for 20 cars.
The outer walls are of rough concrete with inside insulation. The window-panes are set in eloxidized aluminium frames. The office tract is a skeleton of reinforced concrete, while the flats are carried by concrete cross-walls. All floors are covered with wall-to-wall carpeting, except the exhibition rooms, where the flooring consists of granite slabs.
On one side there is a garden and a small children's playground.

Completion: 1970
Constructed volume: 9450 m^3
Cost: DM 2,200,000.

Klaus Uhlig, Cologne

Urban Recreation Centers

Determination of needs

(Pages 37–39)

Environment protection and leisure have become major needs of our age. It is therefore necessary for us to build recreation centers, for the planning of which we still lack sufficient data.
We are not yet living in the age of leisure. According to EMNID, annual working hours totalled 4000 in 1900, have been reduced to 2400 at the present time, and will drop to 1500. Between now and the year 2000 the number of free days should amount to around 220 days per year.
The need to relax is just as essential as the need to work and to have a place to live, but as 72% of all free time is spent at home, it is clear that the problem of leisure facilities falls within the context of town-planning.
The determining factors are multiple: political, social, economic, biological, geographical, etc. Leisure concerns all segments of the population, children and the aged included. The leisure city of tomorrow will offer facilities for the most diverse activities, collective or not, ranging from listening to music to sports, for it will combine in concentrated form elements that have hitherto been dispersed. From the economic standpoint, such centers are unavoidable if we think of the problems confronting us now: real estate prices, shortage of labour, administrative reorganisation, etc. The leisure center will be the new town square, the agora protected from the weather. The various premises will either be equipped for specific activities or left empty for individual initiatives.
In siting such centers, it will be necessary to consider communication nodes, historic buildings and already existing sports facilities. The computation of present needs, as well as potential future ones, ought to integrate a whole range of data: population, functional areas, amount of leisure, concentration of specific needs, etc. A quotient per inhabitant does not yet exist, but it seems to be around 0.7–0.14 m^2.
Nevertheless, it must also not be forgotten that such needs are dynamic in character being within the context of a continuously expanding field.

Eberhard Zeidler, Toronto

Reflections on architecture

(Pages 43–45)

It is clear that in the future men will have to live increasingly in Megalopolis. "How will life be lived there?" An architecture will have to be invented for this environment. But the present situation is one of confusion, both the polluted environment and the solutions offered as an escape from the dilemma. We ought to look at ourselves the way a doctor examines his patient.
Architecture is not solely art or technology; it is both at once. Now then, how can the architect reconcile two such contradictory activities as an engineering technique in constant linear development and an art which, being an integral part of our life, is subject to the same cyclic rhythm?
At the end of the 19th century, the architects recognized this schism aggravated by the acceleration of technological progress. The theories of Bauhaus, which are still very much alive, too often led us believe that the technical solution of a problem constituted at the same time the aesthetic response. And mass production became a cult, that of technical formalism. The following generation rejected technology to create a new romanticism of design (Yale University School, Scarborough College). Our generation has reached the following phase having as its watchword: Back to Man. Is that really a new idea? For the Greeks man was the measure of all things. However, looking at our environment, we can see that we have forgotten this detail.
In effect, architecture ought to be the second skin of the human being. To speak of the influence of the environment on man's psychic life is to speak of art as a vital element. It will be necessary for us to build this second skin of man with the aid of technology and the financing thereby made possible. We have returned full circle, and constraint makes its appearance once again. Vitruvius also stated this postulate.
The environment which we ought to create for the future depends on this complex of contradictory conditions for which no generation seems to have discovered a real equilibrium.
Within this already multiple context we ought not to forget that art is a process of achievement and perfecting. In other words, planning will never be completed, because it has four dimensions, even five. Never was a new "race" of architects no longer necessary. And there is no need to invent a new name for them; the ancient name is magnificent: "Akhi-kekton".