Summary

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Alvar Aalto, Helsinki

Cultural Centre of the City of Wolfsburg

(page 63–72)

Wolfsburg is located near Brunswick-East, on the border of the two Germanies, a few minutes off the Berlin express highway.

This village with its medieval church and its hunting lodge of the Dukes of Brunswick was designated officially a municipal borough at the time of the establishment of the Volkswagen works producing cars on a assembly-line basis.

The surrounding landscape with its hills lends itself very well indeed to the laying out of a city, which in 25 years has become a sizeable town very urban in character without having had to pass through the various intermediate provincial stages.

This urban organism founded by design, without mines or any other exceptional natural sources of wealth, has nevertheless grown to be a very lively place with a clearly articulated structure. Its residential districts are grouped around the centre and are backed by the natural hilly landscape, which is largely unspoiled.

The pulsing heart of the city is the automobile industry, which constitutes the livelihood of several thousand people.

The authorities of Wolfsburg have seen to the creation, the rapid development, of an administrative centre which is growing up around the city hall, and they have set aside ground for the erection of a building which will satisfy the cultural needs of the city.

The castle of the Dukes of Brunswick represents a second cultural pole, where there are being installed artists' studios, places of work and temporary residence for regional artists.

As the residential districts form islands, as it were, separated by dense screens of vegetation, the social environment of the residents is restricted to the given neighbourhood and so reduces the individual to that specific solitude which is the result of our industrial technological era. To combat this grave social challenge, the authorities of Wolfsburg have decided to create a setting permitting a healthy growth to the urban community.

After all, even the structure of the family is undergoing transformation; the placid harmonious atmosphere of the old days is perishing and it is important for the rising generation above all to offer new foundations for a viable social life.

Our age, characterized by vast productivity, progress and material comfort, requires certain hours to be set aside for contemplation; and everyone feels the need for conversation other than mere shop talk, for a hobby, for contact with the worlds of art and literature.

These observations stem from a festival booklet issued by the municipality at the inauguration of the cultural centre on August 31, 1962.

On July 1, 1958, the 20th anniversary of the founding of the city of Wolfsburg, there had been created a prize for the plastic arts and there was decided the erection of a suitable building to house the following cultural institutions: library, adult education centre, youth recreation centre, etc.

Aalto's plan won the first internal competition between the two submitted, his own and that of the Berlin professor, M. Baumgarten, because he concentrated the three parts of the programme in one single complex in order in this way to achieve the closest possible connection among the different functions.

Here is the detailed programme:

1. Library:
Municipal library, juvenile library, open-shelf library for adults (35,000 volumes), for juvenile readers (8,000 volumes) and for children (6,000 volumes and reading-room); newspaper reading-room and utility premises.

2. Adult education centre:
Auditorium for 200 people with inclined floor and facilities for film showings; four auditoriums for 20 to 80 people; workshop for art projects.

3. Youth recreation centre:
"Open-door house", large hall with amateur stage; four club rooms; two meeting-rooms for societies; four sewing-rooms and handicraft shops; wood-working, metal and ceramic shops; table-tennis room; coffee bar.

4. Shops:
Photographic studio with laboratory; ground-floor premises for a travel agency, the cultural society and three shops.

The survey conducted among the young people brought out that they wish neither glass faces nor buildings that are "too modern". They want cozy get-together nooks separable by sliding partitions.

Here is Aalto's plan:

In the centre of the ground floor is the adult library with the circulation and checking desks, with view over the study room, the record library and the library for juvenile readers.

The libraries and the adult education centre are reached via a big lobby with cloakroom looking on to the city hall square.

The young people's and children's entrance is situated on the south side, where there are a park, a site reserved for a future theatre and the playground. First comes the children's library, then the puppet theatre and the fairy tale nook. The first floor is reserved for older children with their library and workshops, which are grouped around a conference room with an open fireplace and a sliding roof.

On the ground floor, the connection between the adult tract and that for the children is constituted by a multi-purpose room (dancing, theatre, concerts). On the first floor, the studies connect the auditoriums with the "open-door house".

The five auditoriums were essential for the formal conception of the whole complex; Aalto is said to have been seen on the city hall square a few days after his invitation to the competition sketching his idea against the dark forested background of the city. The polygonal façades, entirely blind, belonging to the five auditoriums and the workshops constitute the sole free elements of this architecture, which is kept very strict in the shop tracts, study rooms, offices, in the manager's flat and in the library wall.

The auditoriums whose walls with their little windows suggest a woven fabric are supported by round columns clad with dark copper, the arrangement of which gives the effect of tree trunks in a forest.

The entrance lobby lighted from above via the stairwell is supported by the same trunks and has an astonishing colour scheme: blue tile facing for the walls, white tile facing for the columns and natural wood for the construction of the lattice ceiling, the furniture, the cloakroom and the railing.

The library is made up of a sunken polygonal tract in the centre whose walls are lined with bookshelves like those of the wide gallery surrounding it. The overhead lighting is effected by means of a window strip running along the upper wall of the gallery and by another strip situated above the break in levels; the central tracts gets light through 14 round skylights. This natural lighting is accompanied by artificial lighting designed to create the same lighting effects at night.

This principle is applied to all the overhead light (catalogue room, juvenile library, small study room between the record library and the reading-room).

The upper hall with its ceiling of wood has a star plan accenting the entrances into the auditoriums; it has a large picture window facing south looking out on to an interior courtyard intended for theatrical performances and games.

This court situated on the first floor is surrounded by buildings on three sides; in the centre there is a structural element that serves as a backdrop for the stage; the west side is delimited by the skylights which light the inside of the shops. This open-air space is very livable with its natural wood latticework on the east; it is in direct connection with the conference room of the "open-door house."

The other roof terraces of the first floor are not accessible, for they accommodate the skylights and the lighting fixtures as well as the lighting strips on the superstructure of the large library.

The atmosphere created in the auditoriums is a very successful one owing to the successive groups of indirect overhead lighting elements, the effect of which is amplified by concealed reflectors.

Only the large auditorium was given a vertical window on the east closed by movable blinds.

Aalto designed all the furniture of the building.

His style is apparent in the settees and cocktail tables of laminated wood and in the design of the tables. Aalto devoted especial attention to the design of the lamps. He employs by preference brass and copper in parallel with metal blinds varnished white and equipped with reflectors. The light sources are covered with copper grilles or with superposed cowlings.

The building as a whole is characterized by the extreme care which Aalto and his colleagues have devoted to detailing. Nevertheless, it could be asked whether the white shade applied to all the walls and all the ceilings, which to be sure goes very well with the natural wood, the copper and the tiles, will stand up to the intense usage inflicted on it by the public and particularly by young people.

We should like to add a few words on the collaboration between the architect of the plan and the contracting architect in charge of execution, Mr. Schneidler, graduate engineer. After having seen the major building of Aalto in Helsinki to familiarize himself with his typical employment of wood and copper, Mr. Schneidler was in a better position to adapt these construction principles to German conditions.

Coordination was achieved in five conferences in Helsinki and by way of a book defining all the volumes with their corresponding equipment which shuttled between Helsinki and Wolfsburg to have additions successively made to it.

In the presence of leading dignitaries at the inauguration ceremony Aalto had the following to say:

The negative aspect of an industrial way of life involving machine work takes the shape of a danger of monotony and soul-destroying uniformity of functions.

This new building ought to provide an antidote to all that, but it should also constitute a symbolic accent in the skyline of the city. This was what the people of the city wanted, and their wishes served as a basis in the drawing up of the programme, which was a typically contemporary architectural challenge.

The reaction of the public, the frequency with which it utiliyzes this building The reaction of the public, the frequenwill show whether it is in actual effect the focus of this young city and whether the city uses it in the manner envisaged by the builders.

The performance of a serenade by Mozart in the courtyard of the old hunting lodge made an unforgettable impression on us: the projectors, which attracted the bats, lit up the Renaissance façade, on the stage four strings were producing classical music and in the background there could be detected the basic melody created by the ceaseless operations of the great motor-car works.

Giselher Wirth, Zurich

Recreation Centre at Wollishofen near Zurich

(pages 73–77)

Since 1954, after an international convention devoted to school architecture and open-air education, Zurich, the largest city of Switzerland with nearly 500,000 inhabitants, has enjoyed a world-wide reputation for its recreation centres.

The first "Robinson" playground was set up shortly after this convention with the assistance of the Pro Juventute Foundation, of the Association of Patrons of Playgrounds and numerous neighbourhood associations. The programme includes making available a wide range of materials (wood, paper, moulding clay, paints, and tools) in an attempt to activate the children's play and render them less passive.

In combination with club facilities, hobby shops and a library, this recreation centre at Wipkingen (ZH) is patronized by people of all ages.

We are in this Issue publishing a report on the 7th centre in Zurich. The site is located on the edge of the lake adjoining the boat-landing and the public parks to the south of the open-air swimming-pool.

An old motor vessel, the "Lützelau", is anchored in a little cove and fitted out for the children and young people. The boys can make a fire in the engine room; there are facilities for dancing and discussion.

The centre proper combines a club house, a workshop (as large as a classroom), two hobby nooks and a kitchenette, a big lobby, the director's room and a storeroom. The large outside stairway and the veranda running along the entire building serve as sun-breaks and protection against the rain or as a stage that can be seen from the play lawn.

The construction of this one-storey building is of steel, wood and glass and rests on piling, this owing to the weakness of the ground on the site. The piling construction permits a free planning of the lake shore to meet unforeseen changes, for, if need be, the building can even be moved.

A stand of already existing trees provides shade for the play lawn by the edge of the water. There are even facilities for some "Robinsons" to build their cabins to the east of the site. A promenade along the lake is furnished with benches, and a play site with a sand pile and other facilities is an attraction to small children.

This building, conceived for play and pleasure reflects a certain Japanese lightness of touch. For this type of programme the minima construction method of Mies van der Rohe is especially well adapted: it is an envelope, as it were, for leisure activities, an invitation to relax, a setting for discussion and stimulating diversions.

The proportions obtaining between the supports and the roofs and walls are harmonious, the stairs appear to be suspended in front of the foundation; the roof makes itself felt everywhere, for the caisson elements that separate the block in the centre do not go all the way up to the ceiling. Thus unity is achieved among the interior spaces and the outside; there is in this way created a very lively interpenetration of the garden, workshops and open areas, of the covered tracts and the outdoors, of light and shade. The lack of elevation supports gives this little building a still greater effect of hovering lightness.

Thus this small structure is an admirable example of harmony of proportions and masses which is in keeping with the programme and function and is a striking example of what contemporary Swiss architects can do.

Construction:

Geological probes revealed that the ground on the site was weak (sedimentary deposits, clay, etc.) and the gravel layer appears to be only 14 m. thick. This fact made necessary the use of concrete beds.

The module of the whole building is based on the international norms with a scale of 10 cm. In this way the prefabricated materials, like the acoustic panels measuring 50×50 cm., the door dimension of 100 cm., the outside walls measuring 300 cm., all are very well integrated.

In the vertical direction, 100 cm. was chosen for the boat house, 200 cm. for the core and 250 cm. for the room volumes, which is relatively little, the idea being to scale them down to the size of a child. To create a more intimate atmosphere, the ceilings are clad in composition wood panels.

The supporting structure is made up of welded steel frames. 18 DIN 12 pillars support four 6×12 m. frames at ground level and roof level, where each frame section of 6 m. is taken by a pillar; in this way the junction points are greatly simplified. The angles of the frames are supportless, and their lower wings are visible.

The frames themselves receive I purlins with parallel flanges and the resting span of 3 m. is supported by wooden planks. The panelling of the flat roof is screwed directly to these planks as well as the longitudinal oak floor supports.

The building is heated by stoves fired with gas which are semi-cumulative in winter, while in summer ventilators bring in fresh air from the boat house. An outside brise-soleil has been dispensed with, for the trees furnish sufficient shade. As it is a ground-level building, the fire regulations do not prescribe any fireproofing.

Skidmore †, Owings+Merrill, New York

Albright-Knox Gallery in Buffalo

(pages 78–81)

In Buffalo the problem arose of transforming an already existing museum and of adding a wing to it. The architects sought to preserve the integrity of each part by maintaining a distance between the modern tract, in keeping with the style of the whole complex, and the old building, which is one of the finest examples of the classicist style in the USA (Edward B. Green, architect, Buffalo, 1905).

At the time of the transformation the architects preserved as much existing material as possible (e. g.: marble floors, door frames, etc.). The walls of the sunken court, which was erected on the foundations of the old gallery and which connects the principal tract with the new part, are constructed of the same white Vermont marble. Thus the calm elevation with its Ionic columns is not disturbed. A hall in grey glass breaks the horizontal marble line and leads into the new auditorium having the same sombre colour scheme.

To effect inside communication the floor of an upper gallery was opened to accommodate a spiral staircase and a lift leading to the new part which is attached to the lower level without being noticed.

The open-air courtyard for the sculptures is very spacious and recalls moreover a court situated on the inside of the old building and lighted by skylights. The lighting of the exhibition surfaces is built into the ceilings of all the new parts. The lighting fixtures are attached to rigid partitions on movable tracks above the divisions for the purpose of obtaining a general effect of clarity, regularity and shadowless uniformity.

On the other side of the court is situated the conference room whose grey glazing reflects the old building in the daytime, while at night it gives the impression of a lantern with red reflections due to the presence of settees upholstered with red nylon.

The roof structure is supported by two single visible pillars which do not clutter the open space. Beneath the auditorium a double staircase leads to a gallery where there can be seen the magnificent Albright-Knox Collection of Modern Art.

The total cost was $ 2,000,000, of which $ 300,000 were for the renovation consisting in an exterior marble facing, railings and stairways; also the false-ceilings were redone with a ventilation system, insulation and lighting; there were installed special regulators for humidity and temperature. The elevation elements of the auditorium are of aluminium with 12 mm. of grey glazing. All the floors are paved with rubber tiles and that of the outside courtyard is of marble.

Kunio Mayekawa, Tokyo

Extension to Gakushuin University in Tokyo

(pages 82–86)

The assignment here was to build on a large wooded site in the Majiro district in Tokyo, which is surrounded by already existing university institutes, the following buildings: faculty of letters, faculty of sciences, administration building and a large auditorium.

For the faculties, the architect selected long narrow cubes with a central passageway; the administration building groups its rooms around a central hall illuminated by a skylight according to a square plan, and the large auditorium is a pyramid on a square plan.

The administration tract constitutes the connecting link among the four buildings which are joined together among one another by covered passages.

The faculties have four floors with research rooms for professors and assistants, laboratories and an auditorium.

The administration building has two floors; on the ground floor there is situated a central hall devoted to administrative functions; all around there are separate offices of varying styles and dimensions. Two spiral stairways lead up to the first floor, where there is located the main administration office with the secretariat of the rector, the rector's office, meeting-rooms and a waiting-room.

The large auditorium accomodates 700 persons. Its roof is pyramidal in shape, its peak being diagonally displaced to match the incline of the floor beneath and to create a better acoustic effect. This pyramidal shape likewise prevents excessively large shadows from being cast on the neighbouring buildings. The pyramidal structure is made up of lozenges covered with concrete panels. The floor surroundings the stage is flat, while the seats beneath the eccentric peak of the roof are disposed in thirteen ascending rows; the projection booths are located at the back of the hall. There are two glazed strips above the upper passageway; plaster slats placed above the seats and the stage contribute to a better acoustic effect. Lighting is effected by two round concentric ceiling fixtures. An independent gallery is situated under the roof and is accessible by way of a ladder. The entrance to the hall is located at the bottom facing the seats and it communicates with the foyer underneath the rows of seats.

The design is characterized by a high degree of unity. The employment of raw concrete with vigorous dimensioning of the individual elements suggests Le Corbusier, who has greatly influenced the Japanese. The stairs of the institute buildings constitute a free element and recall Chandigarh with their massive railings. The administration has a reticulated roof. The elevation pillars, which are continuous, run up through all floors yielding a vigorous section. The intermediate pillars give the impression of projecting balconies.

The pillars stop at the upper roof level, while the parapets of the roof terraces appear to be freely suspended between these pillars. This very plastic method of construction is, however, kept within bounds and is typically Japanese in character despite the influences of Le Corbusier; it recalls the native wood construction.

While the faculties and the administration building are highly differentiated, the auditorium is monolithic in effect owing to its immense scale and its self-contained character.

Mayekawa has been extremely successful in adapting the impressions he received in Paris to the traditions of his native land and in thus creating an authentic Japanese architecture.

Sep Ruf, Munich

Catholic Church in Munich

(pages 88–91)

The plan:

The circle is the clearest and the most symbolic shape for a building with a central symmetry, and it is encountered in all periods of art from ancient times on down, its function originally being to express unity and perfection.

It is here applied in an original manner and is the essential element underlying the plan of this church: a large circle with a diameter of 32 m. has inscribed within it an asymmetrical circle with a diameter of 28 m.; thus, their peripheries form a sickle whose width comes to four meters on the east side and nothing near the entrance on the west. This space constitutes the utility premises distributed over four levels. A dome surmounts the centre of the exterior circle and does not fall in the middle of the interior space; the glazed portal is the only thing interrupting this rounded uniformity.

The elevations, the exterior appearance:

This volume has an effect of power and is entirely closed in giving an appearance of great unity. The exterior envelope, which is almost without openings, is of hot-fired brick, this making up the principal material employed in the construction of the church. Grids at the foot of the east elevation house windows which light the rooms on the basement level. The roof structure resting on this wall is supported by a steel skeleton and is covered with sheet copper; this slightly curved structure is crowned by a plexiglass dome having a diameter of 5 m. and forms an overhang of 4.5 m. The edge surrounded by an aluminium finish takes 22 columns of steel at intervals of 5.35 m., which serve to hold up the roof in its tensed position. Their lower part is thus loaded with some tons of concrete; these columns end in a trench, where they are freely suspended. Apart from their static function, they serve to indicate the outer circuit for processions. The flooring material is red clinker. Two lateral doors clad in copper lead via the entrance area to the interior of the church. The main entrance face is entirely of safety glass, the horizontal joints of which are almost invisible and the vertical joints tied in structurally with the four bearing elements of the roof.

The interior:

The interior space formed by the smaller circle expresses very adequately the basic idea, which was to shelter the sanctuary in a protective envelope. The rounded and solemn wall is almost without structural articulation and is broken only by the large entrance portal, the two lateral entrances one of which leads to the sacristy and the opening towards the fonts on the east side with the grids that surround it.

Acoustic panels are placed at six different spots, where the bricks are laid up without joints. The altars are sited on a slightly elevated level thrust into the centre from the east; the main altar is located underneath the dome, while the Holy Sacrament altar is more to the east. The sickle-shaped space contains the fonts, two confessional chapels, the sacristy and a room for the vestments, the corridors and ground-floor utility rooms; in the centre of the first level is the choir with the organ console and a box-room, on the second level the organs; at the very top is a gallery glazed towards the outside giving the effect on the inside of a window strip. The ceiling consists of wood panelling in star pattern the elements of which are prolonged to the base of the skylight with ever widening intervals; this conceals the iron ring that supports the dome. Night illumination is effected by neon tubing placed along the gallery railing on the upper level and along the edge of the dome as well as by suspended lamps.

Annexes:

The vicarage hall has a square plan and is situated to the north-west of the site; like the church, it is of brick and the edge of the roof is of aluminium. The east wall is of translucent concrete. A large lobby leads in to the actual hall. The west wall consisting of a skeleton and wooden panelling is subdivided by four asbestos-cement pillars, which support the canopy of this hall. A brick wall connects the hall, the church and the clock tower on which are suspended three open-air bells.

The vicarage is a long one-storey building containing the flats of the curates, an ecclesiastical library, studies and young people's recreation rooms. The central heating plant for all the buildings is located in the basement.

Dr. J. Dahinden, Zurich

St. Paul Catholic Church at Dielsdorf near Zurich

(pages 92–94)

Location and Zoning Regulations:

Its location in the capital of the district gives it the status of a mother church of one of the largest Zurich parishes comprising 15 political communes.

The narrow site in the centre of the village surrounded by old farmhouses with big roofs in two sections, roads on two sides recalls a cross with its axis terminating at the intersection of the roads on the north. It is the Gothic structure of the large tent which invests this architecture with its sacred character, while at the same time it remains in harmony with its surroundings. The elevation with the main entrances faces the centre of the village, whereas the four converging ridges set up a rhythm counter to that of the slope and have their highest point at the focus of the site above the altar.

Programme:

The church has a seating capacity of 300 in the central nave, in two slightly separated aisles, in the confession chapel and in the baptistery. The winter chapel with seating capacity of 40 is situated perpendicularly to the choir. Beneath the church there is a hall for 150 people with a stage, cloakrooms and utility premises. The rectory with an independent entrance is connected directly with the sacristy and is composed of a living-room with a dining-nook, a kitchen, a waiting-room, a reception room, studies and bedrooms for the vicar, the curates, a guest and the housekeeper.

The requirements of the Catholic liturgy and their application at Dielsdorf:

The unity of the plan corresponds to the present integration of the church (public area) and of the altar space, whose indirect lighting, elevated position and its apselike shape indicate all the same its separation. Daylight enters in such a way as to concentrate the attention of the worshippers on the altar. The locus of the liturgy is treated with a great deal of careful attention. The sermon is preached from the same space near the altar where the pulpit is located. The narrow benches in the side aisles are intended for solitary worshippers who would feel lost in the large empty space of the nave. The fonts in the low chapel beneath the gallery stand in a significant relationship to the altar. To give due emphasis to the sacrament of the confession, the confessional boxes have been placed in the centre of the church with some prie-Dieu. The ordinary chapel beside the apse is also used for private religious services; and, aside from its function as choir, it provides additional seating capacity during high masses.

Architectural conception:

St. Paul was a tentmaker by trade; thus his church should retain something of an improvised character: it is not a final abiding place of God, but a sort of "camp" for the Christian community, which ought to lead to the final eternal establishment. As always, the simplest structural element is the roof whose steep pitch is in keeping with its religious symbolism. All visual statics have been disavowed: A glazed strip separating the supporting part from the supported structure signifies separation from the earthly foundation. All the natural light sources are invisible from the position of anyone who is worshipping and constitute no distraction.

The generous unity of materials employed is achieved by the exclusive use of untreated concrete and larchwood which makes up the panelling under the roof; this makes for a certain intimacy that is particularly important in modern churches.