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From Antiquity to Kinetic art

museum

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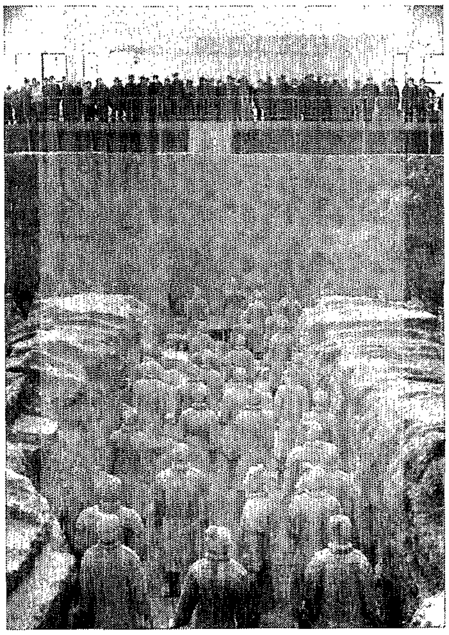

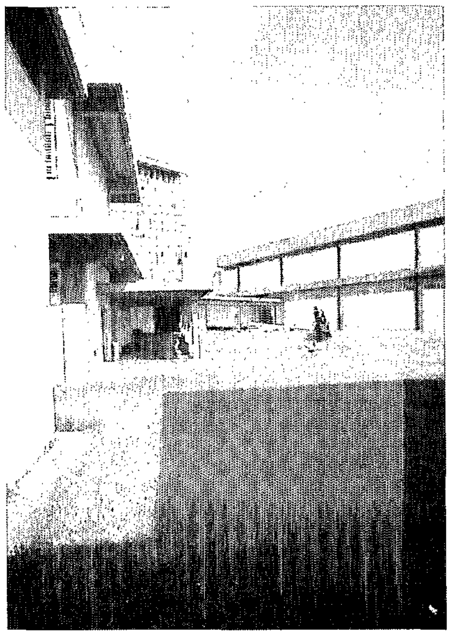

Front cover. Visitors and terracotta warriors in the Museum of Qin Shi Huang Terracotta Warriors and Horses (see article, page 140).

Back cover. Lardera sculpture in the sculpture garden of the Museum of Modern Art, Ciudad Bolívar, Venezuela (see article, page 156).

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From antiquity to kinetic art

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TRIBUTE TO GEORGES HENRI RIVIÈRE 1897 – 1985

With the passing of Georges Henri Rivière, just two months after Grace Morley, *Museum* bids a sad farewell to the last of the post-war pioneers in museum co-operation (see tributes in *ICOM News*, No. 2, 1985). They were a handful of men and women who gave form to the ideals and aspirations of an inspired generation and left an enduring imprint on museum practice in our time. It was they who conceived Unesco's cultural heritage programme, who created ICOM and who worked together for the founding of *Museum* itself.

Georges Henri shaped the magazine from the earliest years; it became the child of his resolute didacticism and of his devotion to the international idea. As Director of ICOM (1948-65) he forged a close, almost passionate relationship with *Museum*, which was severed only by the afflictions of his last years. To successive editors he lent his always inventive vision, his vast experience and his intellectual determination. A severely demanding counsellor, he was often much more than that, for time and again he threw himself into the preparation of yet another special issue, with a degree of energy and perfectionism that commanded deep admiration. It is a sad irony that the next issue, No. 148, will be devoted to the subject of ecomuseums, that new form conceived and shaped by his genius. While he could play no part in its preparation, the issue, dedicated to his memory, will reflect his seminal influence from cover to cover.

This 'mixed' issue itself contains a range of material that would have appealed to his wide-ranging curiosity. Its main section opens with a description of a site museum in Switzerland, organized on principles he himself had defined. It goes on to present two other archaeological sites in China and Bulgaria—the former an immense one of enormous historical significance, which has been explored only partly and presents a vast challenge for its conservators. The issue continues on a note of professional assessment and standard-setting—Georges Henri was at his best perhaps as trainer and teacher—and then moves on to the 'programming' of a museum devoted to the most contemporary expressions of visual and plastic creativity—Georges Henri could be more advanced in his thinking than any avant-garde and his rigorously ordering mind excelled particularly when it came to planning a ground-breaking institution. Next comes a museological case-study on new methods of displaying theatrical reality, the former being a domain where his influence was seminal, the latter one in which he could most certainly have made his mark!

Finally, the dossier on the destruction of museums and museum objects during wartime, a continuing occurrence that caused Georges Henri some of his bitterest moments, every time yet another armed conflict violated the sanctity of a museum somewhere, wreaking havoc with a distant heritage that he truly recognized as his own. He would have been pleased no doubt to see so topical a reminder of this ever-present threat.

To honour his memory in these pages and beyond we must maintain and if possible surpass the standards of excellence that Georges Henri Rivière taught us.

FROM ANTIQUITY TO KINETIC ART

A Roman town and its presentation to the public

Teodora Tomasevic-Buck

Born in Belgrade. Degree in archaeology and ancient history, University of Belgrade, 1958. Ph.D. from the University of Basle (thesis on *The Ceramics of the Thirteenth Legion in Vindonissa*, based on her own excavations in the legionary camp). In the course of subsequent excavations she discovered a theatre in the *vicus* of Lenzburg. Assistant Director, 1967-70, and since 1970 Director of excavations at Augusta Raurica. Secretary of the International Committee on Museums of Archaeology and History (ICMAH) since 1979 and a member of several scholarly associations.

The town of Colonia Paterna (?) Pia Apollinaris Augusta Emerita Raurica, better known by its shorter name Augusta Raurica, is one of three Roman towns located in Swiss territory, the other two being Aventicum (Avenches) and Equestris (Nyon). It lies about 12 km east of Basle and was the first ancient settlement to be established on the Upper Rhine. It owes its foundation to its very favourable location at the crossroads of major communication systems running from east to west, at the end of one of the passages through the Alps from south to north and at the starting-point for transport on the Rhine or for a crossing to the right bank to join the road network running north.[1]

The earliest scientific excavations at this Roman site began around 1800 under the architect Aubert Parent. They were continued by Theophil Burckhardt-Biedermann (1840-1914), Karl Stehlin (1856-1934) and Rudolf Laur-Belart (1898-1972). Further excavations are now being carried out by the author.

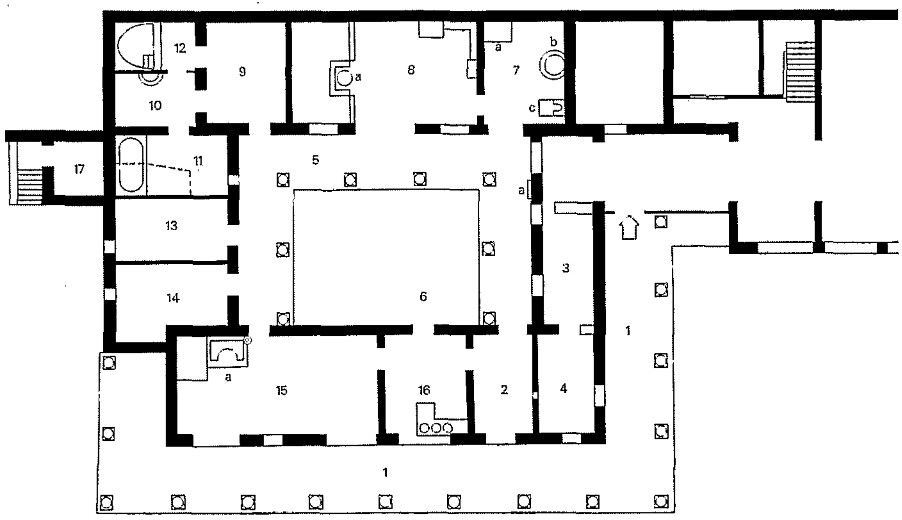
A number of ancient buildings have been uncovered and made accessible to the public. The style of presentation has changed over time, so the differences indicate when each group was developed as a museum object. Those placed on display in earlier periods, such as the ruins of the theatre, the temple on the hill of Schönbühl and the curia, bear more or less silent witness to the past and can be explored only with a guide and during the daytime, there being no orientation charts, lighting, etc. Later displays such as the *taberna* opposite the theatre, the kilns in the southern part of the upper town, the so-called baptistery in the lower town and the exhibition of mosaics in the basement of the curia are made more accessible to the visitor by means of written information. This group also includes a copy of a Roman house with an adjoining site museum based on George Henri Rivière's methodological guidelines on the organization of archaeological sites.[2] The third and last group includes two recently preserved tile kilns, displayed in accordance with principles that create an entirely new dimension for both specialists and lay visitors. Mention should also be made of the effort to go beyond the mere display of finds and objects and develop a dynamic process whereby the visitor changes from a passive observer into an active participant in the exhibition, as in the case of the reconstructed bakery.

The first ruins displayed

The modern display of the ruins began before the Second World War, following major excavations undertaken with the help of unemployed people in the 1930s, which uncovered the large monuments in the centre of the upper town, such as the theatre and the temple on Schönbühl

1. The town succeeded Colonia Raurica, founded by Lucius Munatius Plancus in 44 B.C., and was moved by Lucius Octavius at the beginning of the first century to where the Ergolz and Violenback rivers flow together into the Rhine. Forming a spaciously designed upper and lower town, the first wooden constructions were continuously rebuilt in stone from the time of Claudius onwards. A considerable degree of affluence was achieved through intensive development of trades and commerce. The first ominous signs of a break in this favourable development were the Alemanni invasions across the Rhine around A.D. 253. However, the town was not destroyed like Aventicum when the Alemanni made their next incursion around the year 260 but continued to be inhabited on a small scale as a border town up to the end of the third century, thanks to the fortifications of its citadel, built prior to 260 in the lower town on the Rhine. We have no information prior to 1488, when Felix Fabri mentions them by name in the *Descriptio Sueviae*, as to how long it had been known or when it was rediscovered that the ruins of the upper town in Augst (Canton of Baselland) and of the lower town in Kaiseraugst (Canton of Aargan) were the remains of Augusta Raurica.

2. Georges Henri Rivière, *Essai sur le musée de site*, Paris, ICOM, 1978. (Mimeo, in French only.)



2
Plan of the 'Roman house' (key to rooms in text).

hill. The presentation work went no further than the fortification of remains of the walls uncovered and the addition of iron railings for the visitors' safety (Fig. 3).

The procedure was simple. The uncovered walls were faced with stone similar to that originally used, in order to consolidate them and protect them against further deterioration. Asbestos board was inserted in the wall to mark off the old walls from the new additions. This marking procedure is also used, as a rule, for other objects preserved at Augusta Raurica. The newly built wall crests were then covered with a layer of concrete. A marble plaque indicates the year in the case of large-scale restorations. When the trees in the amphitheatre were cleared away, those on the highest tiers were left standing.

Three building periods are discernible in the ruins of the theatre. Specialist visitors can easily distinguish, in chronological order, a raised-stage, an arena-stage and again a raised-stage theatre. It is difficult for amateurs, however, to differentiate between the building periods. There is a need for orientation charts where the objects themselves stand. Detailed information can be obtained only be referring to the guide to Augusta Raurica or an information leaflet, both of which are available only in the museum or at the kiosk during opening hours.

The trees provide welcome shade for the thousands of spectators who attend the open-air events, however one may feel about the treetops providing protection or their roots destroying the substance of the walls.

The ruins of the theatre are equipped with a mobile stage and seating and with electricity. It is thanks to these technical installations and the initiative of the local Pro Augst cultural centre that the ruins have come to life. Apart from the museum visitors—somewhere around 80,000 annually—here is a different set of visitors who do not come to see ancient drama but to take part in the National Jazz Festival or the Augusta concerts held in Augst every Saturday evening and Sunday morning during the months of June and August. There are also other events at irregular intervals, for example masked performances of ancient drama. The rent charged for use of the theatre ruins is spent on maintenance.

The theatre and the temple facing it on the slopes of Schönbühl hill form an architectural unit distinguished in its uniform orientation from the contrasting orientation of the streets and buildings of the upper town. The museological display has not taken this unity into account. In the theatre all the building periods are still visible, and the visitor can therefore see almost three centuries of history, but in the temple only the last, most recent period has been restored, with its monumental staircases, the podium of the temple and the circular colonnades. No detailed orientation charts are as yet available for the visitor, so that whatever is not visible remains inaccessible. As in the theatre, visitors depend on the guidebook for information. However, a collection box has been installed for visitors' contributions to the updating, conservation and museological presentation of the temple, and this has met with a good response.

The 'Roman house' and the curia

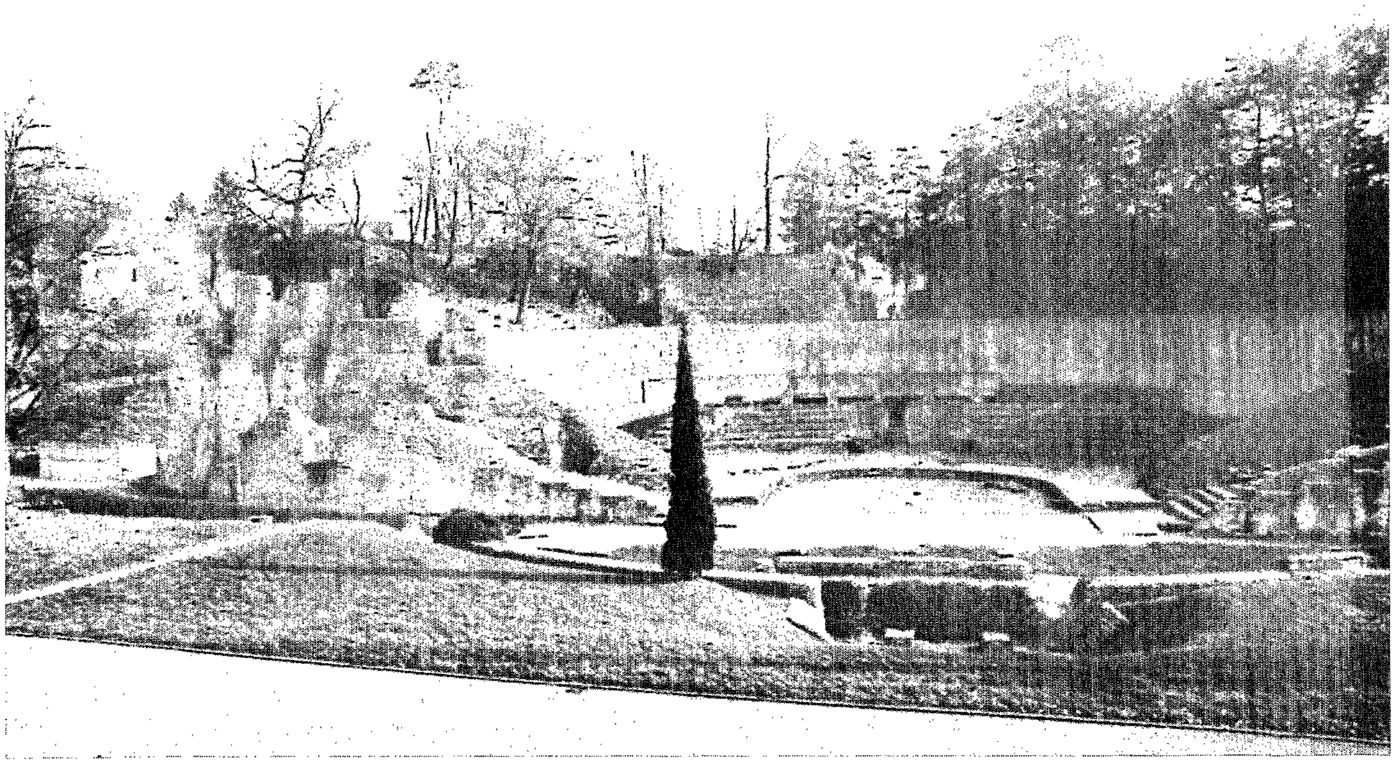
Among the second chronological group of objects uncovered figured the 'Roman house'. For some time the individual patrons of Augusta Raurica and the Historische und Antiquarische Gesellschaft in Basle or, from 1937, the newly established Pro Augusta Raurica Foundation, had been toying with the idea of displaying in a new museum on the site itself finds from Augusta Raurica that had until then been kept in Basle's Historical Museum. In typical federal tradition a private initiative set the process in motion. Dr René Clavel, a patron living in Augst, donated 100,000 Swiss francs for the construction of a 'Roman house'. The theory behind this was that visitors have great difficulty in inferring the third dimension from a mere display of plans and photographs. The 'Roman house' project was based on the principle of reconstructing only what had already been substantiated through the excavations in Augusta Raurica and to add only items that had been found (mainly in Switzerland) north of the Alps. If these were not available, one could fall back on the inexhaustible treasures of the southern Italian towns of Pompeii and Herculaneum. From the outset, however, it was decided to rule out the idea of building a house that—according to the state of knowledge on Augusta Raurica existing in 1955—would be as large as an entire *insula* of 50 × 60 m and would therefore have proved too costly. It was decided instead to undertake a partial reconstruction of the street front of *insula* 5, on which the new 'Roman house' was to stand. Because of present-day traffic conditions, the front of the house was moved slightly eastwards. A one-storey house with a *porticus* on the western and southern sides was built. The thickness of the walls and the dimensions of the rooms were based on examples from Augusta Raurica (see plan, Fig. 2).

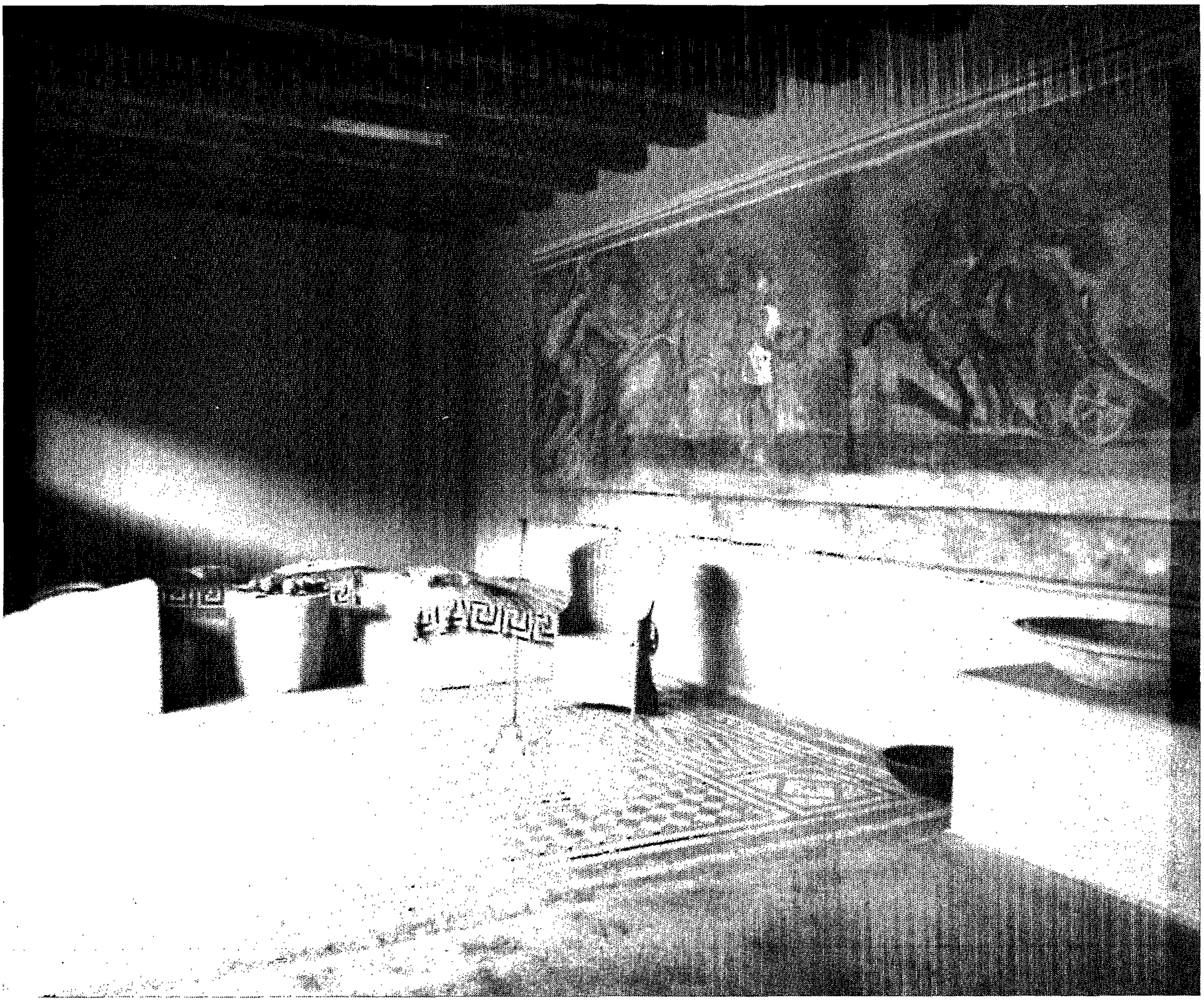
The roof was covered with reconstructions of tiles (*imbrices* and *tegulae*). The floor was made mainly of mortar mixed with tile fragments, and the walls were painted in single colours, Pompeii red, green, etc. The window openings were designed from examples found in the immediate neighbourhood. Different rooms are grouped symmetrically around an inner court (6) in the form of a garden with plants known to have existed in the Roman era. On the central axis leading to the portico (5), the main reception room (the *oecus*) (8) opens on the garden with a *triclinium* (8a) designed after a model found at Pompeii, far more richly fitted out than any found at Augusta Raurica. The dining area is equipped with woven draperies, furniture (including a wicker armchair of the kind commonly found in Rhineland tombs) and articles for everyday use (Fig. 4). Light is provided by an iron candelabrum, and a bronze tripod discovered during the excavations prior to the construction of the 'Roman house' serves as a base for a bronze mixing vessel. Alongside other recipients in *terra sigillata*, a copy of an *autepsa*—a bronze samovar—modelled on one found at Aventicum adds the finishing touch to the comfortable furnishings.

The floor is covered with a mosaic taken from a *villa rustica* in the immediate neighbourhood (14 km away). The wall is decorated with a partial copy of a painting from Pompeii showing the funeral of Patrocles, who fell in the Trojan War. The kitchen adjoins this room on the south (7) and is directly accessible from it (Fig. 6). The kitchen equipment consists of both finds and copies. An oven (7a) with a high working surface has space beneath for an open fire. The smoke is supposed to escape through a hole in the roof. Vessels made of terracotta, bronze and iron give visitors an insight into the cooking procedures used. Alongside is an oven for making bread (7b), an installation found in various sites at Augusta Raurica. To show its purpose, prettily decorated loaves of bread like those found in the Pompeii excavations have been placed inside.

Exhibit 7c on the other hand, is an authentic low fireplace, with a hearth raised from the floor by a layer of brick tiles and a small vertical guard to prevent the ashes from being scattered about the room. The vessels and utensils, some of

3
The ancient theatre excavated in the 1930s.





4
The *oecus*.

which are copies, are hung from the walls, the kitchen installations being supplemented by a hand-mill and one or two oil and wine amphorae.

The rooms adjoining the southern façade (3 and 4) house administrative services connected with the museum, which was built in 1957, two years after the 'Roman house'.

The baths are on the north side (9-12). The *apodyterium* (9), with its marble copy of a statue of Venus, is equipped with a stone seat and shelves above it on which to place garments removed for bathing. The *tepidarium* (10), already equipped with a *hypocaustum*, is situated between the *caldarium* (11) and the *frigidarium* (12). It contains an overflow basin in Jura marble, copied from one found in the *thermae* of the legionaries' camp at Vindonissa (Fig. 5). Part of the floor and one of the walls of the *caldarium* has been left open to show visitors how a *hypocaustum* works, with floor heating, a fire channel, an underfloor cavity and *tubuli* leading up the hollow side walls. The hot bath is equipped with a copy of a mixing device like those found at Petinesca and Pompeii. The *frigidarium* was so efficiently designed that when a private bath was found in 1972 in the southern part of the upper town, *insula* 42, it was possible to dismantle it and reassemble it piece by piece in the 'Roman house'. A tragic mask in bronze (cast in Araldite) decorates the gargoyle above the bath, similar to the overflow basin in room 10.

Two rooms adjoin the north front of the house. One (13) is equipped as a bedroom, with a simple bed like those found at Pompeii, a chest with bronze ornamentation, a wicker chair similar to that in the *oecus* and a bronze stand with an oil lamp, which, together with the glow of a candle, creates a special atmosphere.

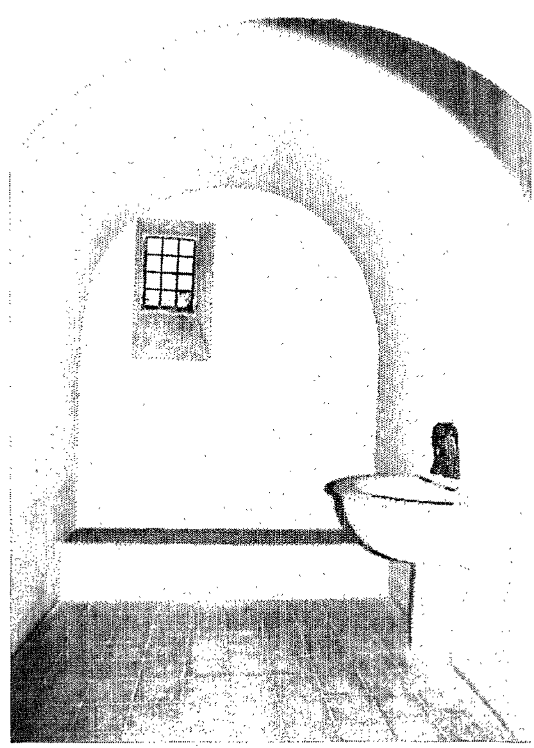
The next and last room (14) in the living area is designed as a pantry. Shelves with high-quality tableware and kitchen pots are arranged next to a chest copied from one that had arrived at Pompeii from southern Gaul and was just being unpacked at the time of the disastrous eruption of Vesuvius (Fig. 7). Amphorae containing oil, *garum* and wine stand by the wall, their pointed tips embedded in the sandy ground. A map of Europe charting two types of amphora shows the trade routes for oil from Spain and for wine from central Italy. A little wooden cupboard with a safe compartment at the bottom, the doors of which are mounted on boxwood hinges, contained the household valuables. The upper part of the cupboard, equipped with a glass panel for the safety of the exhibits, contains a terracotta money box, several glass objects and a little box made of bone.

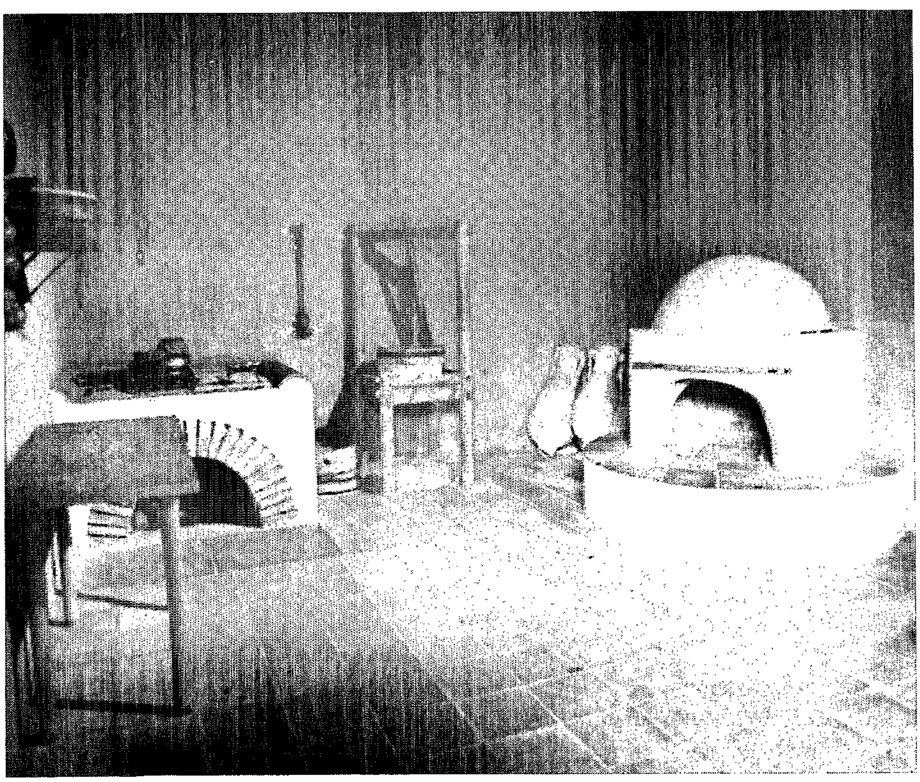
Against the south wall of the colonnade, next to a stone inscription providing information in Latin—according to ancient tradition—on the building of the Roman house, stands the bust of the founder, Dr René Clavel, on the shaft of a column (Fig. 8). Near by, another panel in Latin and German provides information on the plants in the garden, already known in ancient times, numbered for ease of identification. Above an altar to Apollo from Augusta Raurica a *lararium* like those at Pompeii has been set up; in the centre is a painted *togatus* distributing gifts, flanked by two *lares*.

The private and business rooms are not separated in the customary way; and so the visitor can enter the rooms on the west front (15, 16 and 2) from the inner court. The room built as a workshop (15) contains an original production unit for making sausages and meat products. A bronze cauldron hanging from a wooden cantilever over an open fire was used to cook the products before hanging them up for drying or smoking in a smoking chamber, several examples of which were discovered at Augusta Raurica. A fresco attached to the nearby wall shows two men carrying a spherical amphora on a pole. To illustrate this carrying procedure, similar amphorae are suspended below the fresco (Fig. 9). A selection of equipment, tools and architectural ceramics are exhibited alongside different kinds of waterpipes made of clay, wood and lead. A wooden cobbler's chest copied from a fresco at Herculaneum contains a stone last and an array of copied leather shoes. They include a child's shoe of Gaulish design, the model for which was found in an early Celtic settlement in Basle, the 'gasworks'. A tavern (16) with a *thermopolium* (a heated counter of the type frequently found at Pompeii), hanging pitchers for drinks and a pair of scales for weighing sausages and meat products (imitation samples lying next to it) gives visitors an idea of how travellers might have dined during their passage through the town.

Before leaving the room the visitor walks over a small section of mosaic—embedded in the floor—taken from the central baths in the forum. The wooden

5
The *tepidarium*.





6
The kitchen, equipped with finds as well as copies.

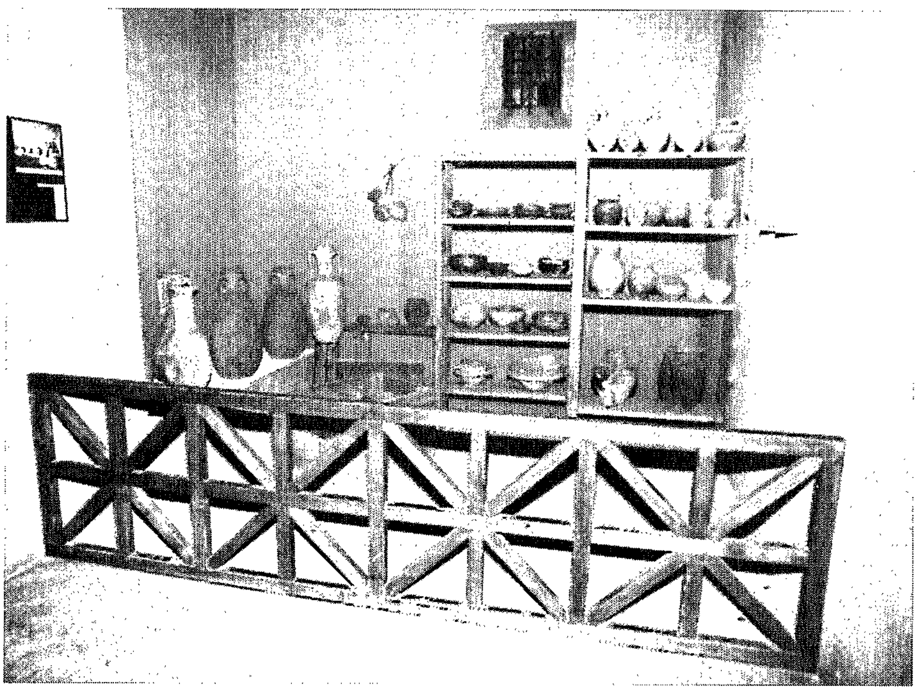
door leading to the next room — a copy of a door in Herculaneum — can be closed with a wooden lock. Visitors can study the working of the lock from a model hanging near by on the wall and operate it with its key.

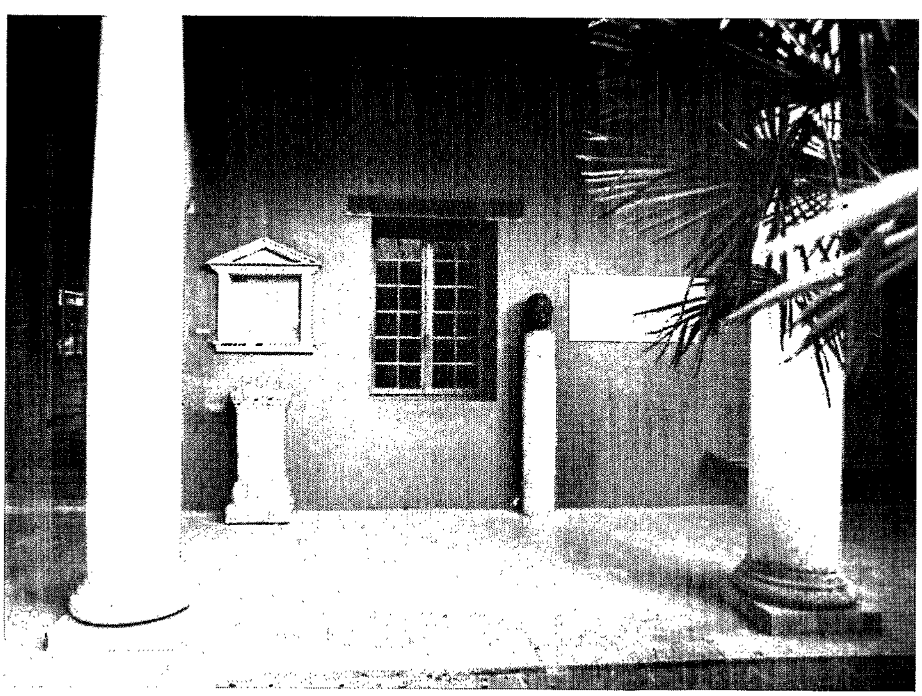
The large expanse of glass facing the street towards the west portico makes it possible to view the interior even when the museum and 'Roman house' are closed. The last room (2), designed as an entrance hall, is at present being used as an exhibition room for fragments of mosaics belonging to the same series as the mosaics exhibited in the basement of the curia and originally found in the Palazzo of the Three-Horned Bull, *insula* 41/47 in the south of the upper town.

The Roman house and museum is the only display unit in Augusta Raurica for which an admission fee is charged. All other areas may be viewed free of charge or on payment of a voluntary contribution.

Since the beginning of the century excavations in the main forum have been undertaken on many occasions, and the uncovered ruins buried again afterwards. It was not until 1960-65 that the curia, explored by Rudolf Laur-Belart, which possesses walls over 5 m high, was preserved. The tiers of seats were restored and the basement closed up with a window and door. After its long 'Sleeping

7
The reconstituted pantry.





8
The atrium with a bust of the founder of the project and a dedicatory inscription.

9
Workshop with original production unit for making sausages and meat products.

Beauty' repose, it now houses a permanent exhibition of mosaics.

The differently mounted mosaics, two from older collections and the remainder from the Palazzo of the Three-Horned Bull, are hung on the rough-hewn ashlar walls. A panel painted in Pompeii red, about 1 m high, links up the different mosaic floors or floor sections at eye-level.

The tour begins to the left of the entrance with an illustrated account of the discovery, next to a panel providing information on the rescue and preservation process. Detailed synoptic plans are inserted between the following mosaics, informing visitors about the origins of the floor sections. The exhibited portion of the mosaics is marked on the synoptic plan in the same red as used in the panels. To ensure that visitors view the exhibits from the best distance and to prevent them from touching them, strips of wood are attached to the floor at a distance of about 1 m from the walls. The space between the walls and the barrier is filled with the brown lapilli used in hydroponics. This basically visual barrier has also proved effective on occasions when the curia is used for non-museological purposes, for example when the rooms are rented for private parties, weddings, concerts of chamber music, etc. Spotlights are used for lighting, and the room, which holds 120-150 people, is heated so that it can be used all year round. Lavatories have been installed in the space between the relieving arches of the external eastern retaining wall of the basilica.

Tile kilns in plexiglass and other attractions

The third and last group of monuments open to the public includes the tile kilns discovered in 1972 during the execution of a large-scale suburban building scheme by Liebrüti AG. The building contractor was very co-operative during the archaeological explorations. In return, it was proposed from the outset to offer him as trustee a number of attractive archaeological items from the excavations to be incorporated into the site layout. Although part of the building site was located within the town walls, hence on the territory of Augusta Raurica, it was not built up in ancient times, and hoped-for finds of architectural fragments failed to materialize. An unexpected prize, however, was the discovery of a very well-preserved tile-kiln complex that had to be salvaged at all costs.

As the problem of integrating the find into the block of flats to be constructed on the site could not be solved satisfactorily, the building contractor generously agreed to forgo some of the flats and reduce the size of the block. This left sufficient space for a special protective building to house the kilns.

The basic idea was to design the protective building in the form of an extra-large display window, to guide visitors around the exhibit and inform them about all the details through the glass façade. Only specialists and maintenance staff are allowed inside. The outside appearance of the protective building matches that of the blocks of flats. An extremely important feature for keeping the glass façade free from condensation and preventing moss formation on the kilns are the openings at the top and bottom of the panes (Fig. 10).

The access route to the display window leads from the south-east road past a panel containing information on the discovery and financing of the exhibit. Mention is made of the commune, the canton, the Swiss Confederation, the building contractors involved in the urbanization scheme and the Pro Augusta Raurica Foundation, which made a contribution from the bequest of a patron, Dr J. Wüthrich.

The first item the visitor sees is a scale model of the tile kilns in plexiglass. There is a lighting system that can be operated from the outside during the night. As the model is made of transparent material it is also possible to study the working of the substruction, the firing channel and the combustion chamber, which are not visible through the very well-preserved firing chamber. From this vantage point, the work pit and the opening of the firing channels of the two kilns are clearly visible. Moving round the corner, visitors come upon the *Made in Augusta Raurica* exhibition placed just behind the glass and portraying various trades, such as that of mason, carpenter, bone sculptor, etc., with their tools, by means of original finds from Augusta Raurica.

Copies of a recent British publication on brick kilns illustrate the firing process and provide information on the different types of kiln. On the east front there is a synoptic plan, a detailed chart of the excavations, detailed colour drawings of the two kilns and the cross-sectional drawings made during the excavations. A reconstructed section of tiled roof measuring about a square metre and made up of original *tegulae*, *imbrices* and *antefixa* shows how the products of the kilns were used. The glass wall on the north side provides a view of the kilns from the charging door.

On the west side is a display of original finds and copies of publications on finds from Augusta Raurica relating to the trades of glassmaker, bronze-founder, stonemason and potter. Interested visitors can obtain additional information on the objects displayed in the first booklet of the archaeological guide to

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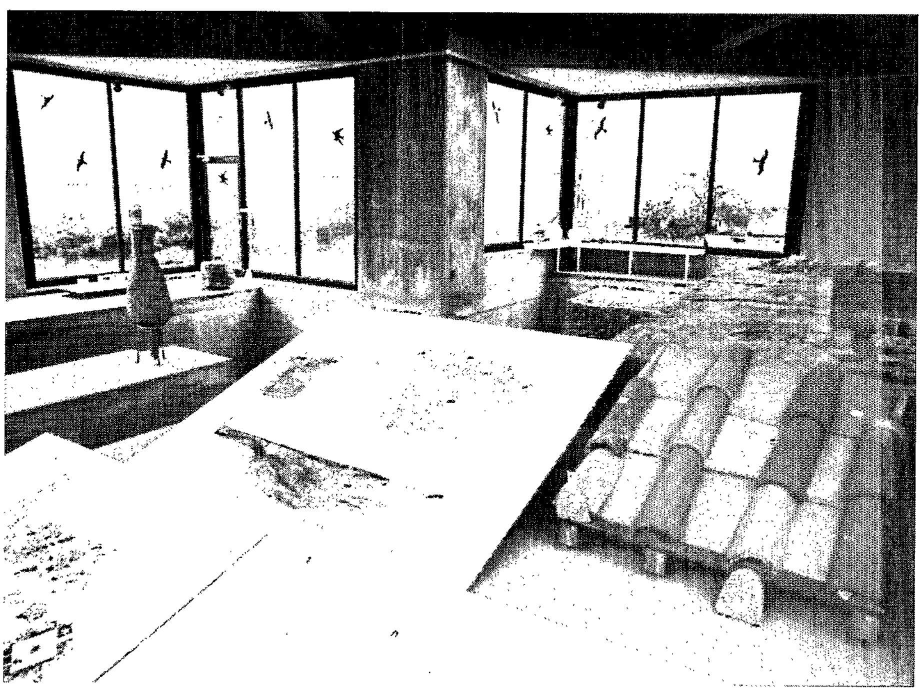
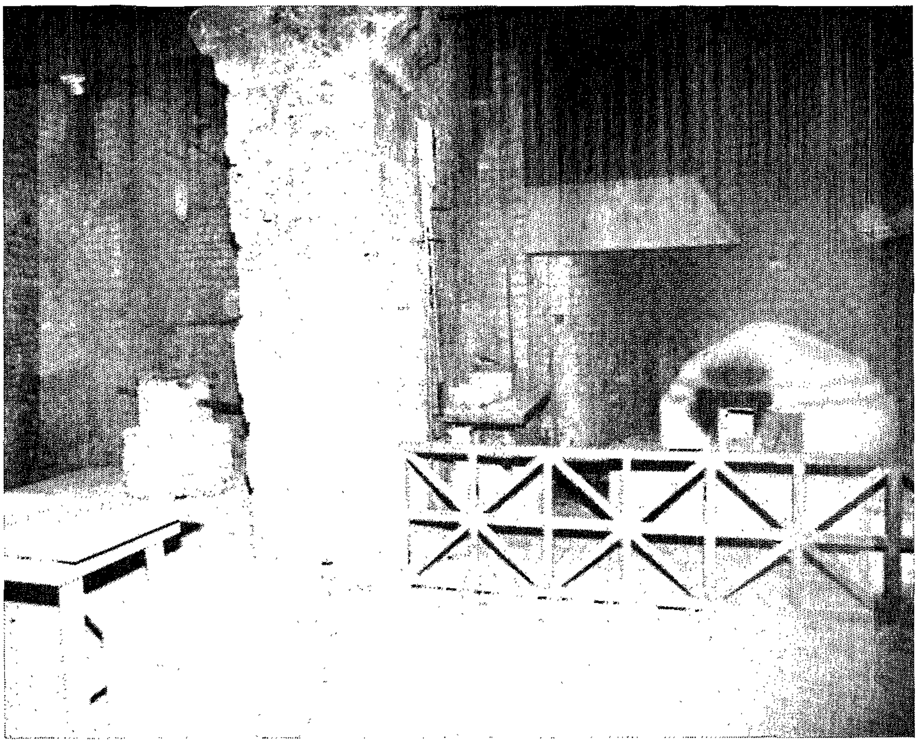


10
The tile kilns in their outsize 'show-case'.



11
The 'bakery' with its live attractions. *Left:* the mill. *Right:* copy of an oven.

Augst/Kaiseraugst on sale at the kiosk and in the museum.

Against the northern retaining wall of the temple on Schönbühl hill opposite the 'Roman house' and the museum, an 8 × 13 m 'bakery' has been built—a light wooden construction with an asbestos cement roof. It is the first museological unit to have 'live attractions'. One of the three niches of the retaining wall beneath the asbestos-cement roof provides a space with seats for an audio-visual presentation on the baking of bread. The second niche contains a mill from Augusta Raurica, operated by two sturdy workmen, to grind the grain. The third contains a copy of an oven displayed in the *taberna* opposite the theatre. In the middle of the 'bakery' is a large table for kneading the dough. The utensils and vessels for making bread are kept next to it in a lockable chest (Fig. 11). An exhibition on the outer enclosing wall of the 'bakery' informs visitors about breadmaking in ancient times, especially in Augusta Raurica, with actual samples of cereals. For a time the agricultural school in neighbouring Sissach planted and harvested ancient varieties of cereal on the slope next to the 'bakery', as a supplement to the bread-baking activities.

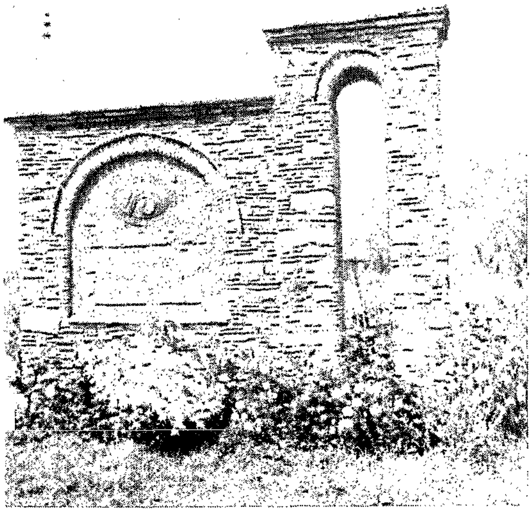
The 'bakery' is supervised by a hostess (who receives a fee for her services). She advises on the baking process, sells the ground flour, keeps an eye on those trying their hand at milling and directs the kneading, shaping and baking of the bread in the preheated oven. Because of their great popularity, bread-baking displays are organized and duly advertised all year round, except in the severe winter months. Schoolchildren visiting Augusta Raurica as part of their history course find it particularly interesting. The booklet on Roman bread (*Le pain romain*) can be read in preparation for a visit and to obtain detailed information on bread-making.

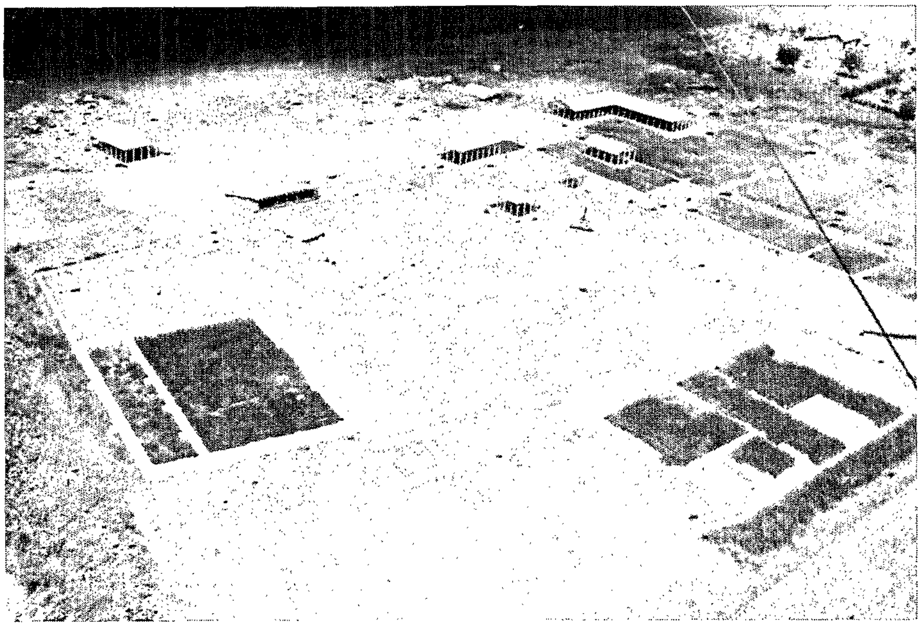
On arrival, school classes usually go straight to the 'bakery', prepare their bread and put it in the oven to bake. They spend the baking time of about ninety minutes visiting the 'Roman house' and the museum. They then remove the loaves from the oven and have a picnic. Thus fortified, they proceed to view the open-air ruins before leaving. An array of letters with photos and drawings posted up on a board in the 'bakery' bear witness to the favourable impact on children of the live display.

This kind of educational and dynamic excursion into ancient times not only provides a far-reaching perceptual encounter with the past but helps to bring history to life. It gives young people a better understanding of the heritage of our collective past and promotes a commitment to preserve it in a spirit of responsible citizenship.

[*Translated from German*]

12
Entrance to the ancient ceramics works near Pavlikeni.





13
Overall view of the site.

A site museum near Pavlikeni, Bulgaria

Bogdan Sultov

Born in 1930, died in 1982. Ph.D. in ancient history and classical philology, Clement Okhrid University, Sofia. Director of the Antiquities Section of the Historical Museum of Veliko Tarnovo. Was responsible for archaeological excavations at Veliko Tarnovo from 1955 onwards; among his principal discoveries was the ceramics works at Pavlikeni. He was one of the organizers of the international colloquia 'Terra Antica Balkanica' organized in Bulgaria in 1974 and 1979. Member of the Association for the Study of Roman Ceramics.

The author was a remarkable guide to the Roman ceramics works at Pavlikeni during a meeting of specialists on the exchange of information on cultural heritage preservation organized by the Bulgarian National Commission for Unesco in 1980. This short article was received after his sudden and untimely death in 1982; we are glad to be able to publish it today.

In 1971, the ground beneath a tractor subsided and an ancient ceramics works was discovered near Pavlikeni, a town in northern Bulgaria. In actual fact, this did not come as a surprise. Some ten years had elapsed since initial investigations had been undertaken at the site of the ancient ceramics works at Boutovo, a unique example of its kind in south-east Europe, located a few kilometres away from Pavlikeni. From the outset, it had been assumed that the area of Nicopolis ad Istrum, a Roman city founded at the beginning of the second century by the emperor Trajan on the occasion of his victory over the Dacians, had become a centre for the production of red glazed pottery, which it was thought hitherto had been imported from abroad, and that the Boutovo works was not unique of its kind but was part of large production unit.

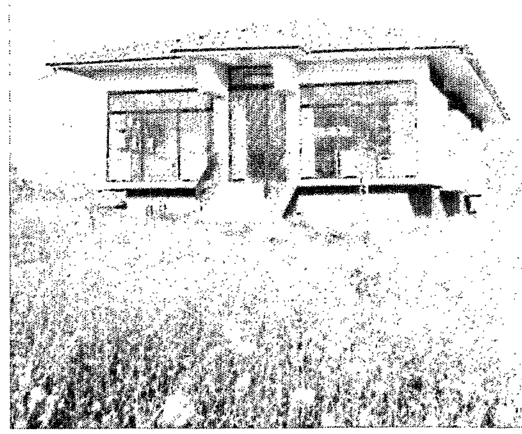
In recent years, we have concentrated largely on the study of the ceramics works near Pavlikeni. Up to now, we have discovered over fifty ceramic ovens, various workshops, tools and a significant proportion of finished pottery.

The ancient ceramics works near Pavlikeni was set up at the beginning of the second century by immigrants from Asia Minor and Thracian potters. The facilities continued to be used until the middle of the third century. Similar ceramics works existed in various parts of the vast Roman Empire. Many of them have been studied and described in detail, but the discovery of ceramics ovens has rarely led to subsequent endeavours in order to ensure their conservation on the spot. Research specialists who have already studied facilities of this kind have produced suitable reasons for this, which were convincing for themselves and for public opinion, on the grounds that it is difficult or even impossible to ensure conservation of terracotta monuments in the open air. Those who have attempted to do other-wise have been hindered by bureaucratic obstacles. This accounts for the fact that the nineteenth century and the early twentieth century witnessed the disappearance beneath new buildings of ceramics works near Arrezo, Puzzioli, Aquincum and elsewhere. This is how the ancient ceramics works of Boutovo was destroyed, buried underneath the foundations of a modern city.

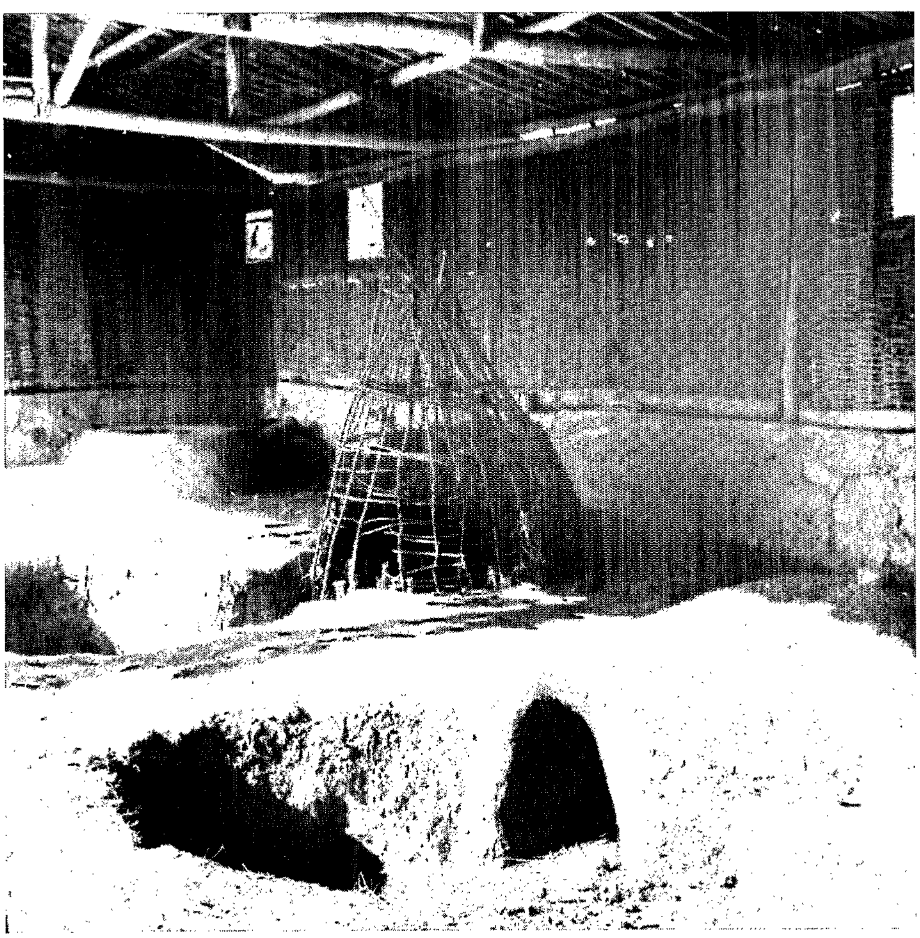
The choice of on-site preservation and display

When the ancient ceramics works near Pavlikeni was brought to light, there was some discussion as to whether, once the necessary research work had been undertaken, the land could not be given back to the local farmers, as in the case of other ancient works of this kind, or whether it would not be appropriate to undertake to safeguard this monument which had been spared the rigours of time. It was the second solution which was adopted without reservation, despite an awareness of the major difficulties that would have to be overcome. First and foremost, it was a question of preserving monuments built of materials which undergo rapid and irremediable disintegration under the effect of atmospheric conditions. In this connection, established worldwide practice could not provide us with practical examples and methods. The standard procedure involved moving small ceramics ovens into the exhibition halls of museums or adapting temporary insulation materials with a view to protecting ancient ovens on the spot. We had already made good use of such experience for extracting, shipping and displaying ceramics ovens for the museums at Veliko Tarnovo and Trojan. At this juncture, it was necessary to ensure the conservation of large-scale monuments, while leaving them on the spot, and we were running the risk of finding them considerably deteriorated by the spring if we abandoned them during the winter. Prompt action was called for. The community organizations and firms of the city of Pavlikeni provided quite valuable assistance, without regard to effort and materials, with a view to safeguarding the monuments that had been recently discovered.

Buildings of metal, glass and fibro-cement on concrete foundations proved to be the most suitable. First, they provided a sure means of protection against atmospheric conditions and, second, they afforded every opportunity to exhibit the monuments to visitors. This, therefore,



14
The museum building.



15
Restored ceramics oven.

16
Fragment of a second- to third-century clay pot.

17
The museum exhibition hall.

was the approach adopted for the presentation of this ancient ceramics works. By leaving the greater part of this windfall of precious items in their original places, we succeeded in lending new life to these ancient monuments.

The exhibition hall, which was built specially on the site itself, plays an important part in the presentation of the ancient ceramics. It contains a reconstitution of the development of ancient ceramics production at Nicopolis ad Istrum. The exhibition also reflects the part played by the local population in the enhancement and protection of their cultural heritage, that is to say the principle of public involvement which constitutes the basis of museology in Bulgaria.

Reconstituting ancient processes

In the course of archaeological excavations conducted in the vicinity of Pavlikeni, a quantity of defective pottery was found which, in ancient times, had been thrown into rubbish-pits and claypits. All this, together with the potter's tools that had been found, gave us the opportunity of attempting to reconstitute the entire technological process of ceramics production.

The use of comparable materials from other sites and practical data, collected during archaeological excavations, enabled clay-washing pits to be dug, a completely equipped pottery workshop to be restored and the development of the installations used for the baking of ceramics —from the open hearth to the complex dual-chamber oven—to be traced.

The reconstitution of ceramics production is the highlight that completes the overall exhibition of the ancient ceramics works. It is of considerable educational importance, especially for members of the younger generation who can acquaint themselves for the first time with the development of one of the most ancient of man's trades—pottery.

'Amici historiae (friends of history)' is the name given to the wall of the reconstituted pottery workshop, to which new bricks are added bearing the names of all the visitors. This 'visitors' book', unique of its kind, has been very carefully devised and each visitor leaves the place with a feeling that he has left behind something of himself. 'Something' which he will return to see another time, not as a visitor but as a 'friend of history'. We can imagine the joy and pride which foreign visitors experience when they detect signs of the presence of their own country, forever carved on a brick, amongst the many other bricks bearing the names of the friends of Bulgaria. This has nothing to do with a novelty feature, but the expression of a noble human feeling, enshrined on a strip of land and yet sufficiently eloquent to bring people together.

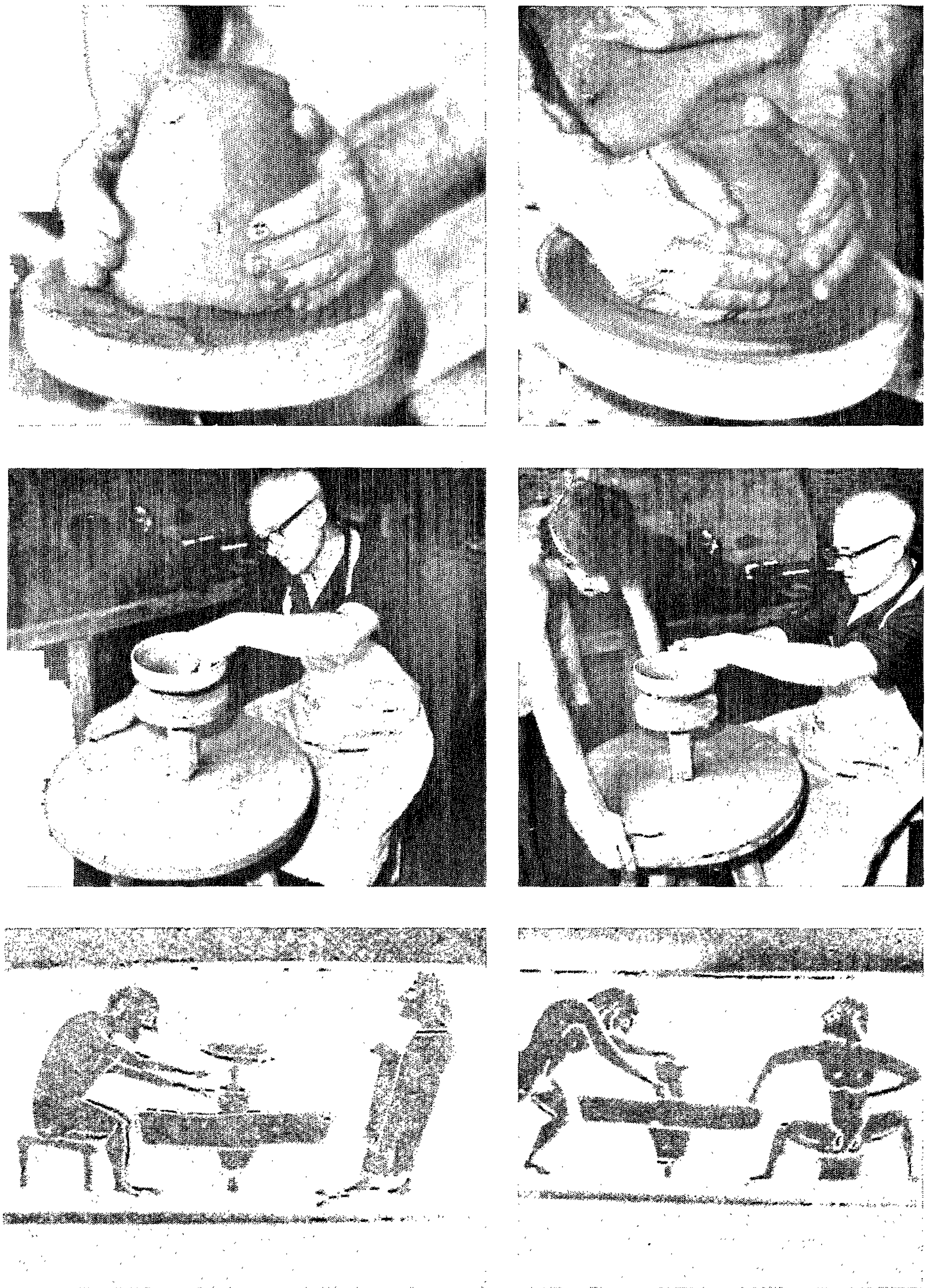
In recent years, the ancient ceramics works near Pavlikeni has developed into a school for young specialists. Students belonging to the Unit for Scientific and Practical Studies on Ancient Ceramics at the University of Veliko Tarnovo have been playing an active part in the archaeological excavations. The summer provides them with an opportunity for putting their theoretical knowledge into practice, once it has been acquired in the lecture halls. We believe that such work with the students should be extended and better directed through attracting young museum specialists from all over Bulgaria and from abroad.

The name of Pavlikeni has already become well known to archaeologists throughout the world. This is due more especially to the two international seminars on the question of ancient Balkanic ceramics, organized in 1975 and 1979 at Veliko Tarnovo and Pavlikeni. The city of Pavlikeni has therefore developed into a centre for international events.

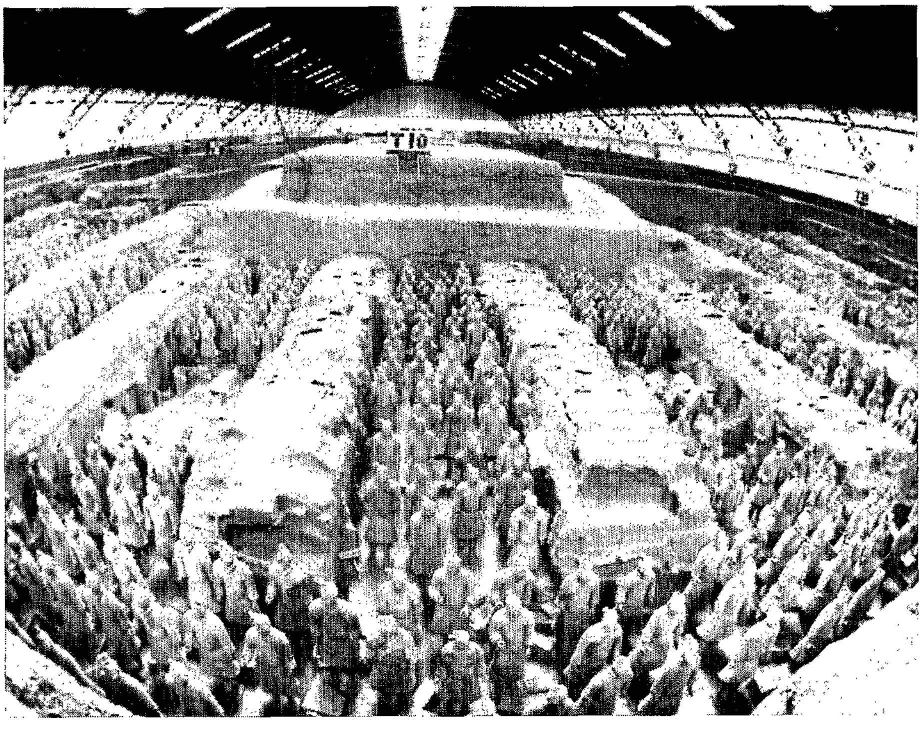
Our desire to study, preserve and present the ancient ceramics works corresponded perfectly to the idea, in respect of the protection of the environment in this region, aimed at making the site a place of rest and an area for tourism. This idea has been actively supported by large sections of public opinion in Pavlikeni. Most of the former meadows have been preserved; thanks to the voluntary help of the local population, the land in the vicinity of the excavations has been transformed into a small park within which stands the original archaeological base.

Every year, the ancient ceramics works near Pavlikeni attracts thousands of tourists from Bulgaria and abroad. This quiet spot, where history is in perfect harmony with nature, has become a favourite place for young and old alike.

[*Translated from French*]



18
Reconstitution of ceramics production.



19
The No. 1 Exhibition Hall that stands over the Pit No. 1 with its terracotta warriors and horses is 230 m long from east to west, 62 m wide from north to south and 22 m in height. The pathway running along the walls inside the hall forms a ring around the pit. Note the six-metre-wide skylight running 180 m along the top of the roof. There are also twenty-eight 6 × 6 m skylights providing natural light. Together with the side windows they make the hall bright and clear.

The Museum of Qin Shi Huang Terracotta Warriors and Horses

Wu Zilin

Born in 1936 in Hunan Province. Degree in archaeology from the University of the Northwest, 1959. The same year appointed Chief of the Weishui archaeological team, Shanxi Province, in charge of the ancient Qin sites of Yuncheng and Xianyang. Appointed Chief Archaeologist at Xianyang, responsible particularly for the excavation of the Qin Shi Huang site. Appointed Director of the Terracotta Warriors Museum in 1984. Has written several articles for Chinese archaeological journals on the ancient Qin site, on the invention of paper and on prehistoric cereals. His article on rice cultivation in antiquity won the social science studies prize for Shanxi Province in 1981. Member of the Archaeological Society of China.

The Museum of Qin Shi Huang Terracotta Warriors and Horses is located in Shanxi Province, 37 km east of Xian, a city well-known for its historical and cultural importance.

In the spring of 1974, a great terracotta army was discovered by Yang Peiyan, Yang Weihai and Yang Pengyao, three local peasants, while they were sinking a well in a grove of persimmon trees not far from the east outer wall of the Qin Shi Huang mausoleum. This extraordinary discovery attracted the immediate attention of the central and local authorities. The Shanxi Provincial Archaeological Team on the Qin Dynasty Sacrificial Objects was organized the same year to carry out exploration and trial excavation. The team's work unearthed a hitherto unknown subterranean pit containing a vast number of terracotta warriors and horses of the Qin Dynasty.[1]

In order properly to protect the large quantities of rare relics of unique historical significance unearthed from the pit, the government decided at the end of 1975 to build a large museum on the site. Its construction was completed within four years. On 1 October 1979, the Museum of Qin Shi Huang Terracotta Warriors and Horses was opened to the public. Its name was written in calligraphy by Ye Jiangying, the former chairman of the Standing Committee of the National People's Congress of the People's Republic of China.

Site layout

Pit No. 1 containing terracotta warriors and horses is the main part of the museum, displaying to the public the excavation site itself and the spectacular finds from it, as well as a magnificent bronze chariot and other finds excavated

1. The Qin Dynasty (221-207 B.C.) lasted only fifteen years. Its founder was Qin Shi Huang (259-210 B.C.), the first Emperor of China. He succeeded to the throne of the Qin Kingdom at the age of 13 and was personally at the helm of the state at 22. He unified China at the age of 39. All his life he worked to abolish the system of granting titles and territories to the nobles, to establish prefectures and counties under central imperial authority and to standardize writing, law, currency, dress, carriage and wagon axle lengths and the system of weights and measures. As the first great unifier of China, he established its first multinational and centralized feudal empire, and played a very important role in the development of Chinese feudal society.

from the west side of the mound of the Qin Shi Huang mausoleum. The museum covers an area of about 60,000 m². Its No. 1 Exhibition Hall, where warriors and horses are on display, has a floor space over 14,000 m² (230 × 62 m); the exhibition hall for the bronze chariot and horses, over 300 m²; and the southern and northern auxiliary exhibition rooms over 1,200 m² (Figs. 19, 21).

To the east of the exhibition hall is a square in the middle of which there are three long flower beds. On either side of the square are the southern and northern auxiliary exhibition rooms, respectively displaying different types of terracotta warriors, horses, chariots and actual weapons unearthed from Nos. 1, 2 and 3 pits as well as those from the tomb area proper.

Feudal emperors in China had throughout the ages paid great attention to the construction of their mausoleums and regarded them as symbols of their imperial power. Shortly after he succeeded to the throne in fact, Emperor Qin Shi Huang began to build his own. After the unification of the country, a labour force over 700,000 strong was called on to build the Lishan mausoleum, whose construction lasted thirty-nine years and had yet to be completed when he died, but was carried on by his successor Hu Hai.

Sima Qian, a great Chinese historian who was born about a century later, described in his famous work *Records of the Grand Historian* the furnishings of an underground palace below Qin Shi Huang's mausoleum: 'The palace is full of figurines of officials and rare and valuable objects. A device is designed to make bows bend, ready to shoot those who are trying to get close. Hundreds of streams of mercury link up with each other. Exhibits cover the fields of astronomy and geography. Candles made of giant salamander fat keep lighting. In 206 B.C., however, Xiang Yu (the leader of a popular revolt against the Qin rulers) captured Xianyang and 'burned the Qin Palace, the fire going on for three months'. Qin Shi Huang's mausoleum was also destroyed. In 1961 the surviving tumulus was among the first batch of key historical relic units declared to be under state protection. This magnificent monument covers an area of 56.25 km². After archaeological survey, drilling and trial excavation, discoveries include tombs of immolated slaves, stable pits, stone material processing workshops, tombs of criminals, pits for the execution of slaves, pits of life-size terracotta warriors and horses, and pits of bronze chariots and horses.

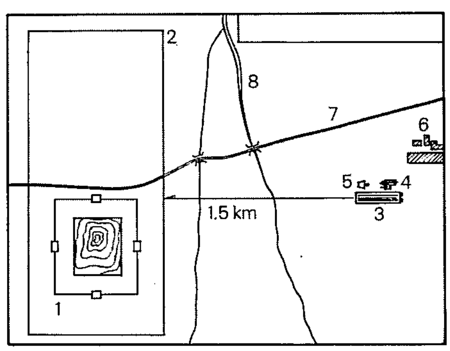
The pits containing the terracotta warriors and horses lie to the east of the mausoleum and constitute an important adjunct to it. Three such pits have been found, and are numbered by archaeologists in chronological order of discovery. We estimate that they contain over 8,000 life-size terracotta warriors and horses, reproducing the real formations of Qin Shi Huang's garrison force.

On the east side of Pit No. 1 lies a 60 × 3.5 m corridor (Fig. 20) in which stand three rows of sixty-eight pottery warriors, mostly infantrymen, lining up into a horizontal formation. Behind them ten partition walls divide the pit into eleven tunnels facing west. The tunnels at the north and south ends are narrower, with two lines of warriors standing within them; the two outer lines of warriors respectively face north and south, looking outwards.

Some of the warriors are in armour, others in battledress. Among them are some wooden chariots; each chariot has four hourses in front of it and three armoured warriors standing side by side behind, including the head warrior, his companion and the driver. The warriors are generally 1.8 m tall, holding weapons such as dagger-axes, spears, swords, hooks, bows and halberds. The horses are 1.5 m high and 2 m long. In the past few years five ditches have been excavated in Pit No. 1 (where there are twenty-seven ditches in all), covering a floor space of over 2,000 m² and 1,087 pottery warriors, 32 pottery horses, 8 chariots and 3 drums have been unearthed. It is estimated that over 6,000 pottery warriors and horses will be finally unearthed here.

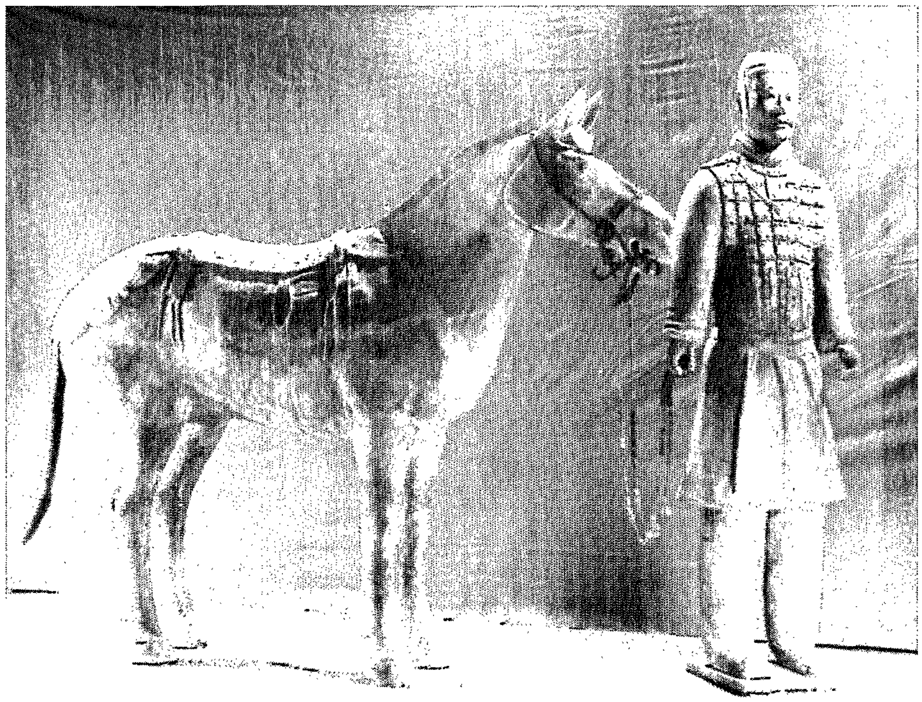
Pit No. 2, in the shape of a carpenter's square, lies 20 m north. It is 124 m long from east to west and 98 m wide from north to south, and covers a floor space of some 6,000 m². It is divided by partition walls into four parts and has over 1,500 pieces of chariots, pottery horses and warriors. The surface of Pit No. 3, containing life-size terracotta warriors and horses, has the shape of the Chinese character 凹, and is 17.6 m long from east to west and 4.8 m wide from north to south, covering a floor space of about 520 m². It has sixty-eight pottery warriors and a chariot with four horses. Now both pits are backfilled, so visitors can no longer see the scene, but some of the important unearthed pottery warriors and various weapons are on display in the southern and northern exhibition rooms.

20
The east corridor of Pit No. 1.



21
Plan showing the location of the Qin Shi Huang mausoleum and the terracotta warriors' pits: 1, inner wall of the mausoleum; 2, outer wall of the mausoleum; 3, Pit No. 1; 4, Pit No. 2; 5, Pit No. 3; 6, West Yangeun village; 7, highway; 8, river.

22
A typical cavalryman, holding the reins in one hand and probably a bow in the other. The skullcap is dotted with colourful lines resembling plum-blossom, held fast with bands on both sides knotted under the chin. Note the short armour and close-fitting trousers with riding boots. Note the size and sturdy constitution of the horse, robust, but not cumbersome, with lean, but not frail legs. Chariot horses or riding horses, they invariably have halters in their open mouths, and have their manes trimmed and tails bound, with ears pricking forward, proof that they are a breed of alert, strong and fast steeds.



23
A warrior drawing his bow from a standing position.

24
Bowmen, an independent army among the infantrymen, occupied an important place in Qin's army. Squatting warriors in armour, drawing their bows, stare solemnly into the distance.

A magnificent host

The formations of terracotta warriors reflect the organization of army units in China in the periods of Spring and Autumn (770-476 B.C.) and Warring States (475-221 B.C.) and especially in the Qin Dynasty. Thus the first just holds chiefly infantrymen, alternating with chariots; the second mostly chariotmen, and then infrantrymen and cavalrymen, forming a chariot-infantry-cavalry combined formation; the third seems to have been a command post. All the life-size terracotta warriors and horses in those pits face east, showing Qin Shi Huang's lofty aspirations—the extinction of the six states and the unification of China.

These pottery warriors represent vividly the heroic build and bearing of Qin's officers and men. Most are lined up separately in battle units, some follow chariots or horses. They were the foot soldiers. They are in battledress, carrying bows under their arms and arrows at their sides; they gaze fixedly and attentively ahead of them, at once calm and alert. Other armoured warriors next to chariots hold long weapons, e.g. spears.

The war chariots of the Qin Dynasty were single-shaft open carts. Armed charioteers were found holding the bridle and looking ahead, with their backs bent and legs stretched, seeming absorbed and adept in driving. Charioteers are positioned alongside, holding the frame of the cart with one hand, and their weapon in the other.

Qin sculpture forms a connecting link between the preceding Yin and Zhou dynasties and the following Han and Tan dynasties. The discovery of Qin terracotta warriors and horses opens a brilliant page in the history of Chinese sculpture. Judged either from their facial expressions (Fig. 26) and bearing or their postures and attitudes, these figures reflect the inner world and mentalities of characters of different ages, experiences, from different army services and ranks (Figs. 22-26, 28, 30), thus making the thousands of pottery figures in the pit show diversity in unity and unity in diversity, each having individuality, all being lifelike. Of the foot soldiers, some are self-assured and astute, some are vigorous and brave, some are burly and smart; of the generals, some are composed as if seasoned by many a battle, some are all severity, like undaunted law-enforcement agents.

Meticulous attention was given to the truthful rendition of details, for example the plaiting of various hairstyles, with each hair in its proper place. The suits of armour and their knobs are executed so finely that even traces of stitch lines can be detected. Neither are the teeth of the horses rendered negligently, as evidenced by the six in most of them indicating that they are just six years of age. In some cases, the resourceful artisans of the age applied, albeit with restraint, the method of exaggeration, for example moustaches, devoid of any elaborate stylization, but simply a pair of thin pieces of clay casually stuck on the upper lip, while some have a few boldly executed curves at the tip.

24

25
Clay warriors and horses in Pit No. 1

26
Head of a general in armour.

27
This four-horse, single-shaft luxury carriage consists of 3,462 separate parts. The carriage is divided into front and back chambers. A gorgeously painted curtain hangs down from the tortoise-shell-shaped canopy reaching the square floor of the back chamber and painted with stylized clouds and dragons on silk. Note the windows, decorated with gauze-patterned lattices. The windows on the left and the right can slide open and shut. The single-piece door at the back is connected by a hinge and can be shut tight with the aid of crook-handled latch. The floor is covered with a mat-like mattress, made of quality leather, soft and comfortable. Inside the chamber there are bars on all sides for the passenger to rest on. The headgear of the officer-driver is similar to that of the pottery generals in the pits, indication of his high rank. Note the satisfied expression on his face. The harnesses of the horses are exquisite down to the last detail: in order to imitate the leather texture they are all shaped in the form of chains, linked with hinges of various sizes so as to swing easily. Many parts of the harness are made of gold or silver, shining brilliantly.

Marvels of ancient workmanship

Most of these pieces were cast and methods such as casting and engraving combined, piece-by-piece fabrication, systematic assembling, kiln-baking and painting after baking were also used. The heads were in most cases two cast parts put together, the legs and bodies were moulded out of clay bars, and arms and hands were made through moulding or by hand.

Each separate part was executed individually by means of casting, moulding, kneading, filling, sticking, chiselling and painting. For instance, the head was made first by casting out a head-like mould as the base and then by adding pieces of clay to make up eyes, nose, ears, mouth and moustache. The same applied to the trunk: after casting the base, more clay was added and moulded into a semblance of armour, before chiselling out with care the pieces and stamping out the knobs with a press mould.

The pottery horses were also produced by means of piece-by-piece casting, filling and moulding. After separate pieces were made, they were stuck together with clay, baked and painted. Warriors' hands and faces were painted pink, while their armour was tinted with light green, light blue, dark green and brown. On the bodies of the pottery warriors were engraved the names of the craftsmen and their code numbers under the management of the Central Pottery-making Workshop of the age.

The chariots were made of wood, which rotted away with the passage of time, but the shafts, cross-bar, side boards, wheels, horizontal bars and hubs have left visible prints in the mud. All the copper parts of chariots remain intact. Judging from their traces in the pits, the chariots are of one shaft, which measures 3.90 to 3.96 m, with the front tipping and the back weighed down flatly under the carriage. The carriage is oblong, with the horizontal bar at the front and the door at the back. The wheels stand 1.35 m in height. The front of the shaft is connected with the cross-bar tied to which is a pair of yokes. The chariot is pulled by four horses with complete sets of harness. The chariot is polished all over, with patterns of painting in some places. Judging from the lengths and decorations, the chariots can be divided into commanding, supporting, riding and ordinary.

Tens of thousands of weapons (bronze swords, axes, halberds, spears, poles, hooks, bows, arrows and arrow-heads), all of excellent workmanship, have been brought to light. Some are still keen-edged and the swords in particular, treated with chromate oxygenation, glisten as if they were new and are razor-sharp, true wonders in the world history of metallurgy. This proves that 2,000 years ago, the technology of metallurgy and weapon-making in China was of a high standard.

On exhibition in the bronze chariot hall is a completely restored bronze carriage, the second of two that were discovered 20 m west of the grave mound of Qin Shi Huang in 1980. Both are single-shaft and pulled by four horses. They are approximately half the real size. Both were found smashed to pieces; the second one and its horses, for example, now on exhibition, were broken into

28
A general in armour. The bearded generals are tall and well-built, wearing swallow-tailed long caps and highly finished, colourful armour. They are firm, resolute and composed in their demeanour, reflecting the experience and assurance of countless battles.

29
Restoration of bronze horses.

1,555 pieces. Only after two and a half years' painstaking efforts by the archaeologists was it possible to present in its entirety this masterpiece of ancient metallurgy and craftsmanship (Fig. 27).

Cast mainly by the lost-wax process, the bronze carriages and horses are outstanding for their quality. For instance, the canopy is a large tortoise-shaped piece, only 4 mm thick, while the window is only 1 mm thick, with a multitude of ventilation holes. The use of such techniques as welding, riveting, filling, mortise-and-tenon joints, chiselling and polishing is an astonishing feature. It was of great interest to the archaeologists that when the bronze carriages were unearthed, the paint on them was still fresh and resplendent.

There was a great variety of such carriages in ancient China. Small-size luxury carriages were for senior officials; the medium-size ones for princes, dukes and ministers; and those of really large size for emperors alone. The No. 2 carriage belonged certainly to the imperial household; buried on the side of the tomb of Qin Shi Huang, it was used when the soul of the emperor made a voyage. The No. 1 carriage and horses were unearthed at the same time as the No. 2. In 1985 this museum will start restoring them in response to public demands.[2]

A young museum

Since its inauguration, the museum of Qin Shi Huang Terracotta Warriors and Horses has received thousands of visitors every day, the record being nearly 50,000 people per day. Statistics show that by the end of 1984, this museum had received over 6 million Chinese visitors and 400,000 visitors from abroad. Among these have been heads of state and heads of government from over eighty countries.

While the Qin Shi Huang terracotta warriors and horses belong to an ancient age in history, the museum itself is young, having been completed only five years on 1 October 1984. Much of its work has not been done well or has not been done for lack of time. This museum will expand its area step by step from 60,000 m² at present to around 300,000 m² in future. It is going to excavate and construct pits Nos. 2 and 3 as well as build up its new series of exhibitions, store-rooms, conservation and restoration laboratories, information and research units, parking lot and cinema, with a view to presenting the magnificent panorama of the whole imperial force.

The national authorities concerned are drawing up a plan for the development of the entire Qin Shi Huang mausoleum area. A series of units including the Bronze Chariots and Horses Museum on-site, the Stable Pit Museum, the Tomb Builders' Museum, and the Rare Birds and Exotic Animals Museum, will be constructed within the next five years. The above-mentioned museums, together with the Terracotta Warriors and Horses Museum, will form a museum complex for the exhibition of cultural relics on their ancient sites. It goes without saying that this will be a very difficult project, calling for tremendous effort on everybody's part.

With the completion of this series of projects, it is planned to set up the Qin Mausoleum Museum to oversee the operation and scientific research of the whole area.

[*Translated from Chinese*]

2. See Paula Swart and Barry D. Till, 'Bronze Carriages from the Tomb of China's First Emperor', *Archaeology*, Vol. 37, No. 6, November/December 1984.— Ed.

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An officer.

Modernization and Chinese museums: a professional dialogue

Alfonz Lengyel

Born in Hungary and now a citizen of the United States of America. He is at present teaching at Rosemont College, Rosemont, Pennsylvania, United States. He is a member of the American Association of Museums (AAM) and ICOM; active in the latter's International Committee for Museums of Archaeology and History (ICMAH).

In March 1984 the author presented a research paper on Chinese museums to a meeting of the International Committee for Museums of Archaeology and History (ICMAH). An abridged version of the paper, presenting its main observations and suggestions, is reproduced below. At Museum*'s urging, Dr Lengyel then presented his views to a distinguished Chinese museum director, Shen Zhi-yu, who heads the Shanghai Museum of Art and History. The latter was happy to discuss the text with the author, who has sent us this summary of their dialogue. In the course of the discussion a number of clarifications, facts and ideas emerged.*[1]

Mr Shen began by stressing the fact that the Chinese understanding and acceptance of Marxism-Leninism orients museum practice in China in a number of specific ways. He believes that cultural development cannot be separated from material and spiritual civilization. The two are inseparable in Chinese socialist construction, of which the museums are part. He added:

> In 1950 we had a saying that, along with economic development, a cultural high tide would come inevitably. Now we say that we build up material civilization and spiritual civilization simultaneously. The present 'four modernizations' have proved that material civilization provides the basics for spiritual civilization. Spiritual civilization moves material civilization forward and guarantees its progress. This is the most important

1. This dialogue was set up with the help of Vice-Director Gau of the Foreign Affairs Office of the East China Normal University, Shanghai. The interpreter on the Chinese side was Miss Zhou Xiuqin and for Dr Lengyel, his Chinese wife, Mrs Hong-ying Liu-Lengyel.

Museums — a vehicle for China's modernization

In the post-Mao period Chinese museums have arrived at a new and important stage of development. Their task is not spelled out in the official modernization programme, but it is evident that their educational potential would be a great help in achieving it.

In its acquisition policy China relies on the generosity of its citizens. Some of them have valuable artefacts in their family collections. Other major sources of acquisition are the new excavations. A Chinese law for the protection of the cultural heritage was passed in 1950. According its provisions, it is permitted to keep in private collections artefacts which were in private collections prior to 1949. Recently many objects previously in private collections have been given to museums.

There are many varieties and levels among Chinese museums. Some of them are as modern as the museums in any industrialized country. Others still lag far behind minimum modern requirements. The most modern large museums are the Palace of the Museums in Beijing and the Shanghai Museum of Art and History. Among smaller museums the Museum of Anhui Province in Hefei and the Museum of Henan Province in Zhengzou are the best examples. The Museum of the History of Maritime Commerce in Quanzhou, the Marine Life Museum in Qingdao, and the Museum of Astronomy in Beijing may be mentioned among the more modern establishments.

The provincial and municipal museums are engaged in collecting mainly history-related material and finds related to the Revolution and the changes which it brought about. The ultimate goal of the museums is to educate the visitors within the framework of Chinese Marxist-Leninist ideology. This has nourished a strong nationalistic feeling, which embraces with equal fervour China's past and present history. This tendency is particularly noticeable since the fall of the 'Gang of Four'.

In addition to historical collections, almost every museum has diagrams to illustrate the origin of man and his evolution. Often replicas of important objects are exhibited among originals. In ICOM's International Committee for Museums of Archaeology and History (ICMAH) we have also emphasized the use of copies. However, we have also recommended that those copies be labelled so as to indicate where the original is located. This labelling method has not yet been introduced in China.

The most important Chinese archaeological finds are centrally registered in Beijing and often end up in the Chinese History wing of the Palace of the Museums. The rest of the findings are stored locally. In certain important excavations a site-museum is attached to the excavation, and the site itself is roofed over. This has been done with the terracotta army of Emperor Qin Shi Huang Di, and with the prehistoric village of Ban Po near Xian, and the Neolothic site of Da He Tsun.

guiding ideology for us in running a museum.

According to this way of thinking museums have a threefold function: to carry out scientific study; to protect and maintain historical relics and natural specimens; to educate the masses. The inner relations of these functions should be in well-balanced union. As Director of the Shanghai Museum he felt that his main task was to maintain and link together the above-mentioned functions. He selects talented people for museum work who are trained as museologists while working in his museum. This method of training was necessary to answer the immediate needs of personnel because, as he put it, 'during the disastrous ten years many young people were deprived of a valuable education. This was a great loss.'

After the fall of the 'Gang of Four', degree courses in museology were introduced in several Chinese universities. The Bureau of Cultural Relics of the Ministry of Culture entrusted Fudan University in Shanghai with opening a two-year museology programme for high-school graduates. They admit fifty students of whom twelve are working in the Shanghai Museum. Shanghai University's Department of History is also offering a four-year programme. Most of its students are assigned to museums all over China.

Conservation needs

Although Shanghai's museum does have an attached conservation research laboratory, the author pointed out that this small facility will not be able to face the increased responsibilities created by China's ever-accelerating building programmes—many new important archaeological finds will be unearthed as roads, railways, bridges, factories, apartments and supply and storage facilities spring up. It is widely-known that when the Loyang-Xian railway was built, the most important remnants of the Chinese Bronze Age came accidentally to light.

Director Shen pointed out that, according to the Chinese Law for Protection of the Cultural Heritage, an archaeological probe is to be carried out before any new building is erected. If necessary, a scientific excavation will be arranged afterwards. The costs of the salvage excavations are to be paid by the construction company.

It was apparent to the author that China urgently needs to train a great number of new archaeologists and restorers. At present, for example, most conservators and restorers receive on-the-job training. Technically, they are excellent. However, to restore a badly deteriorated object of complex construction or composition calls also for knowledge of the history of art and artefacts. The expected high number of accidental finds could create a huge restoration backlog and the shortage of archaeologists might create a delay in building construction, although new buildings are urgently needed for the modernization of China. The interviewer also noted that internationally conscientious art historians, archaelogists and museologists are ready to co-operate if the Chinese authorities were to request it. They strongly believe that it is their duty to help because every historical find in the world is part of the universal human heritage.

As to this question of foreign help in archaeology, Director Shen felt that because of China's highly diverse geomorphology each area needs its own specialist. A Chinese archaeologist who specializes in the high plateau region

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In order to preserve the heritage of its numerous nationalities, China has recently opened specialized museums such as the Uygur Museum at Xinjiang or the Museum of the Zhuang autonomous region of Guanxi.[1]

Numerous commemorative museums, palaces and memorial houses are open for public visits. Buddhist temples, pagodas, caves and other sanctuaries, as well as famous gardens, are also serving the visitors' thirst for knowledge.

The cultural heritage is protected by law and restoration work is going on everywhere. Care of the cultural heritage was considered less important during the 'Great Cultural Revolution', although some important excavations were carred out even then. But lack of personnel and the small number of well-trained specialists are slowing down the progress of conservation and restoration. China's educational policy should not neglect this area of study.

The situation is similar in the field of archaeology. Most of the museums are carrying out archaeological excavations, authority for which is partly in the hands of the Bureau of Archaeological Data and Museums. The Chinese Academy of Social Sciences has its own archaeological Institute. The universities and museums under the Ministry of Education are also carrying out excavations and offering archaeological education. There are about 700 registered archaeologists in China. Considering the tremendous task that Chinese archaeologists could face during the next twenty-five years, this number is insufficient.

Museology, archaeology and art history are interrelated. Excavated material is interpreted by historians and is preserved by museologists. Therefore, in training future museologists, archaeology and art-history education should not be neglected.

Museums also should extend their educational functions. Guides should be well trained in history and the material culture of the displayed artefacts. An educational department should be attached to every museum for a great many schoolchildren, soldiers and interested adults are constantly pouring into museums for study purposes. In order to maintain a continuous great degree of interest on the part of the public, exhibition display techniques should also be part of museum research and should result in contant change.

1. A number of the institutions mentioned here were described in *Museum*'s special issue on 'Museums in China' (Vol. XXXII, No. 4, 1980) —Ed.

cannot be used in the Yangtze River area. How can foreign archaeologists be useful if they have never studied or worked in China? However, Director Shen agreed that immediate help in such 'hi-tech' domains as computer applications in field archaeology, electronic sounding and surveying would be useful indeed.

In the field of museology Director Shen believes that China would be interested in using advanced methods of protecting and preserving cultural objects, making use of audio-visual aids and other electronically monitored listening devices for the education of Chinese and foreign visitors, and installing electronic alarm systems.[2]

At the end of the discussion Director Shen remarked that he had found the author's research paper very objective but that he felt that some additional data were needed to present the situation of museums more clearly. At the Liberation in 1949, China had only 21 museums but at present there are about 500. The development of museums took place partly before the ten-year Cultural Revolution, which caused great damage to museum work. He feels that at present the task is to reorganize, to reform, to enrich and to improve. The author's response was that ICMAH could help to achieve these goals through a museum training programme in curatorship, conservation and museum management.

The spirit of the 'four modernizations' has already resulted in joint ventures between Chinese professionals and their foreign colleagues in many domains of industry and technology. Why not do the same for archaeology and museology? In fact, museums could be also one of the vehicles for China's modernization.

2. It would be useful to hold an international consultation between a number of foreign specialist and their Chinese counterparts in order to formulate a plan of co-operation in these domains.

Promoting professional standards in America's museums

Patricia E. Williams

Bachelor's degree in history with honours from George Washington University and in the process of completing her Master's degree in administration at the University of Maryland. Prior to joining the American Association of Museums, she served as archivist, eductation co-ordinator and personnel administrator for the National Trust for Historic Preservation. At present is Secretary to the Accreditation Commission of the American Association of Museums (AAM) and is responsible for developing and managing the association's accreditation programme for American and Canadian museums. She has written about the programme for *Museum News* and *Aviso*.

Allen S. Liff

B.S. from Cornell University. Master's degree in Public Administration from George Washington University. Works at present at the AAM and is responsible for developing marketing campaigns for the Museum Assessment Program and the Accreditation Program. He has worked extensively in the non-profit sector and specializes in non-profit marketing.

In 1970 the American Association of Museums (AAM) initiated its Accreditation Program as part of an ongoing effort to promote professional standards. Ten years later a new service, known as the Museum Assessment Program (MAP), was introduced to provide assistance to virtually any kind of museum wishing to improve the quality of its operations. These activities were based on a threefold concern.

Primarily, the AAM was, and continues to be, concerned with quality. Accreditation, with its emphasis on institutional performance, was recognized as an appropriate means for encouraging museums to serve the public in the best possible way.

Second, it was apparent that government departments and funding agencies were becoming increasingly interested in museums. The AAM felt that accreditation would recognize quality performance by museums and enable deserving institutions to obtain additional financial support.

Finally, the move toward accreditation occurred just prior to the passage of the Tax Reform Act of 1969, when the United States Internal Revenue Service was especially concerned with clarifying the definition of a non-profit institution. Some criteria were needed to distinguish between the museums performing a genuine public service and those that were nominally open to the public but were serving as a tax dodge. Signals indicated that if the museum profession did not police itself, someone else would, and not necessarily to the liking of the profession.

Common standards

It soon became apparent that the AAM could not possibly accredit museums unless it could clearly define a museum. From this conviction emerged the keystone of the accreditation programme, which was the following basic definition:

> For the purposes of the Accreditation Program of the AAM, a museum is defined as an organized and permanent non-profit institution, essentially

educational or aesthetic in purpose, with professional staff, which owns and utilizes tangible objects, cares for them and exhibits them to the public on some regular schedule.

In making this definition, the Accreditation Committee made a crucial decision: it would not dictate to an institution what its purposes or goals should be. Rather, the determination of goals was left to each individual museum. Therefore, each museum would be evaluated against its own stated objectives, together with such factors as location, staff size, resources and community needs.

Only by using this approach could the AAM accredit both the Boise Gallery of Art in Idaho and New York City's Museum of Modern Art within the same system. The committee wanted to avoid a system specifying classes of museums and raising the difficulties of distinguishing between large and small museums, art and history museums, and so forth. It thought that setting separate accreditation standards for museums of different sizes, budgets, staff sizes and disciplines would be untimately unworkable.

The committee also recognized that competent professional work can differ from museum to museum, not in terms of quality but in terms of specialization. By way of example, the director of a small museum in Montana may be a 'jack of all trades' while it takes a large staff, with many specialists, to operate the Museum of Modern Art. In the system developed by the Accreditation Committee, the same accreditation standards are applied to both institutions. The methods of achieving the standards may differ considerably but it is the outcome that is the final measure.

Two years after its first meeting in 1968, the Accreditation Committe established the AAM Accreditation Program, using college and university accreditation programmes as its model. The AAM's by-laws were amended to set up the mechanism for appointing an Accreditation Commission, with the authority and responsibility to function independently and make all final decisions concerning the accredited status of an institution. Seyen commission members are selected by the President of the AAM from a pool of candidates suggested by the staff and the current Accreditation Commission. They are selected from all regions of the country and possess expertise in all types of museums. Members serve six-year staggered terms. The accreditation chairman, also chosen by the president, serves a three-year term.

The procedure

The accreditation process is a seven-step procedure that normally takes eighteen months to two years to complete:

1. The museum submits a brief application with a $200 fee.
2. The museum receives a comprehensive questionnaire covering all aspects of the museum's operations. The museum has one year to complete this institutional self-study and submit the completed questionnaire with a $300 final fee.
3. The self-study material is reviewed by the commission which decides whether to grant interim approval or table the museum's application. If interim approval is granted, a visiting committee is appointed to evaluate the museum.
4. A visiting committee of two senior professionals conducts an on-site evaluation of the museum. The expenses of the visiting committee are reimbursed by the museum.
5. The visiting committee's report, completed checklist and recommendations for accreditation are submitted to the Accreditation Commission for action.
6. The commission makes a decision

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WADSWORTH ATHENEUM, Hartford, Connecticut. Curators sponge a tapestry from the Story of Jason series.

granting, tabling or denying accreditation.
7. No sooner than five years, and no later than ten years after initial accreditation, the accredited museum is notified that it should apply for reaccreditation.

The above steps contain three elements that are critical to the accreditation process: institutional self-study, peer review by an objective team of professionals from outside the museum and final review by an accrediting body.

Of the three, many feel that the self-study component is the most critical. 'We got a little decal and a plaque suitable for framing', says Carl Hansen, director of the Frankenmuth Historical Museum in Michigan. He continues:

> But what we really got out of it was a twenty-seven page operational manual governing the collection and the administration of the museum, a new fire and security system, redesigned permanent exhibit areas and defined roles of staff and board committee structure. We gained new awareness and interest in our image in terms of programs, publications, fund-raising efforts, training of staff and publicity. The museum staff and board saw that accreditation was a critical turning point for the organization; we were committed to the professional standards of the field.

Other professional accrediting organizations have noted similar benefits. H. R. Kells, in *Understanding Accreditation* (1983) has outlined eight purposes of self-study: helping institutions and programmes improve; providing the foundation for all planning; leading to ongoing institutional research and self-analysis; stimulating review of policies, practices, procedures and records; enhancing institutional openness; providing staff development; assessing the extent to which the institution or programme meets accreditable standards; providing useful written materials for the accreditation team.

All this and more have been true for museums that have successfully gone through accreditation. As Nancy Brennan, Director of the Peale Museum in Baltimore, Maryland, puts it: 'The process is really for professionalism. It's not for the "carrots" at the end.'

Self-study for museums seeking to be accredited begins with the completion of the Accreditation Commission's questionnaire. Often the process takes a full year, for the museum must review every aspect of its operations. Governance, board and staff relations, staff job descriptions and compensation, board and staff ethics, the museum's physical facilities, fiscal management, collections care and public programming—all are examined in relationship to each other to create a full picture of the institution. Often there are surprises. 'I thought we were doing everything right anyway', remembers Earl James of the Woodrow Wilson House, a property of the National Trust for Historic Preservation in Washington, D.C. 'It wasn't until after I'd gone through that it became a very valuable tool for self-study.'

Other museums discover that their policies require clarification. Jean Taylor Federico, former Director of the Daughters of the American Revolution Museum, also in Washington, recalls that her museum was

> Without clear written guidelines that defined the authority of the board and the role of the professional staff. In response to accreditation, we developed a policy statement, a code of ethics and guidelines for acquisitions and loans. The policies are now used as orientation for all new board members, staff and volunteers.

For the period of self-study to be fully rewarding, it must be carefully planned to include all staff and board members, and there must be a serious, museum-wide commitment to improving all aspects of operations. Effective leadership is essential and must be appropriately placed in the institution to make things happen. In addition, the board and management staff must be committed to the process and be ready to spend the time and resources necessary to make it work. The self-study should involve examination of the museum's policies, procedures and 'products' and should be an ongoing activity that leads to continued improvements.

Because the process is so rigorous, and demands concerted effort by both board and staff, accreditation should be undertaken only when the museum is fully ready. 'Pick the right time for your institution,' advises Brennan. 'It's expensive in time, resources and staff anxieties.'

The need for self-study is not limited to the twelve or eighteen months necessary for the accreditation process. It may begin long before; often museums spend as much as five years in advance preparation. Self-study becomes a part of the museum's way of doing things and continues long after the decal is proudly placed on the front door. The impetus toward self-improvement must be an integral part of the museum's management and planning cycle if it is to continue to meet high standards and be ready, when the time comes, for reaccreditation.

Maintaining standards and other complications

Maintaining professional standards is as vital as attaining them, and to be certain that acredited museums continue as the standard-bearers of the field, the Accreditation Commission reviews accredited status every five to ten years. The commission is in a unique position to monitor those improvements and reflect them back to the field.

In fact, this has been the greatest challenge faced by the commission since its inception—the ongoing struggle to define accreditable standards. Standards rise as a profession matures, and in the last fourteen years the museum profession has made substantial progress; the AAM itself has matured, both as a professional and as an accrediting body. Originally museums were asked to meet 'minimum accreditable standards'. But the standards have risen, and the commission now uses the term 'currently acceptable professional standards'. This means that museums applying for accreditation today must meet higher standards than their predecessors, and a museum accredited five to ten years ago must have improved over the years to be reaccredited.

A related and ongoing concern has been how to ensure the consistent application of 'objective' standards when a number of surveyors with different backgrounds are making the on-site visits. One solution has been to train surveyors using a common body of knowledge. AAM workshops and conferences stress current standards and the importance of their consistent application. Site evaluation teams are selected from a roster of those who have attended these workshops. Equity of treatment is also achieved through the process of multiple review by professional staff, on-site evaluation teams and finally the Accreditation Commission itself, which brings the perspective of the whole profession to its decisions.

The Accreditation Commission has effectively resolved other structural and policy issues of the programme during its fourteen-year history. Some have been mechanical or 'how-to' in nature. For example, the first visiting teams were large and took several days to conduct the on-site evaluation. It soon became apparent that a two-person committee working for two days would be sufficient for a thorough evaluation of most museums.

As time went on, it also became clear that the definition of a museum would have to be modified in some cases. Fortunately, the commission had established a mechanism to allow for changes as experience might dictate, always, however, within the framework of the basic definition of a museum. For example, the requirement that an institution own and utilize tangible objects caused problems for planetariums wishing to apply for accreditation. Planetariums do not have tangible objects in the same sense as most museums. The definition was expanded to allow planetariums to participate by replacing 'owns and utilizes tangible objects' with 'supplies educational information on astronomy and related sciences through lectures and demonstrations'. In a similar fashion the basic definition was expanded to include science and technology centres and art centres.

Accreditation is not without its legal complications, and they can be costly and time-consuming. Several years ago a suit was brought against the AAM by a museum whose accreditation had been suspended by the commission. While reviewing the museum's operations for reaccreditation, the commission decided that the care of collections was not adequate by current standards.

The museum asserted three points in its suit: first, that it had been denied due process; second, that the decision of the commission was not correct; and third, that suspension of accreditation had damaged its reputation and affected its ability to raise money. As to due process, the AAM maintained that the commission's procedures were fair and equitable. The second point—which suggested that the commission's decision might be subject to judicial or other outside review—was thought to be crucial. As to the negative impact the suspension of accreditation had on the museum, that seemed an inevitable risk of applying for accreditation. The effect would be the same on any museum that did so and failed. But even in this case, the AAM's principal concern was how to make the experience a positive one, for the process of accreditation as a benefit to the museum is the critical idea behind the programme. Throughout the litigation the commission urged the museum to consider and act on its recommendations for improvements in collections care.

In April 1982, the judge ruled that the decision of the Accreditation Commission was not subject to review by the court. He also ruled that the museum had been denied due process and deserved a hearing so that it could present evidence on the condition of the museum's collection at the time accreditation was suspended.

Almost two years had passed when the court handed down its ruling, and by then the museum had made substantial improvements in collections care. Another visiting committee was sent to review the museum. Noting these im-

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THE BOSTON CHILDREN'S MUSEUM.
At the 'Giant's Desk Top' where everything is twelve times life-size, visitors learn about relationships between size, shape and weight.

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THE CLEVELAND MUSEUM OF ART. Henry Hawley, Chief Curator of later Western art, discusses an object which a visitor has brought in to be identified.

provements, the commission voted to reinstate the museum's accreditation.

The above case reflects the Accreditation Commission's deep commitment to the conservation and care of collections. In fact, when museums fail to achieve accreditation, two reasons stand out. The single most common is inadequate care of the collection. Most prevalent in this area are: poor or non-existent records; incomplete cataloguing of the collection; inadequate storage, security and/or humidity and temperature control. The second area of greatest weakness is inadequacy of written policy.

Fortunately, most institutions applying for accreditation are successful. To date the AAM has accredited 595 museums. It is unfortunate, however, that this number represents a relatively small percentage of the museums in the United States—it has been estimated that there are as many as 5,500 museums in the United States. Two factors help explain why many museums may not yet be ready to participate in the Accreditation Program: first, 50 per cent of the museums in the United States were founded after 1960; second, the majority of American museums are considered small—74 per cent have budgets under $100,000 and more than half of these have budgets under $15,000.

As noted earlier, a museum should undertake the rigours of accreditation only when it is 'fully ready'. But the relative inexperience and lack of resources cited above means that accreditation may not yet be an option for many of America's museums. This does not mean that these institutions are operating at a lower level of quality. The AAM knows that many smaller and newer museums are working hard to achieve or maintain high levels of professionalism. Clearly, such museums deserve an alternative form of assistance.

The Museum Assessment Program

In 1980 the AAM began a general consulting service known as the Museum Assessment Program (MAP). Like the Accreditation Program, MAP functions through self-evaluation and peer review. But, unlike accreditation, MAP does not classify or judge a museum's performance. Its sole purpose is to provide the museum with specific advice and assistance for improving its operations and programmes.

Assessment begins with the completion of a summary questionnaire designed to initiate the process of self-evaluation and highlight areas of operational concern. The questionnaire provides the museum with the opportunity to review its scope and purpose, formal structure, staff, finances, building and grounds, collections, storage, conservation needs, exhibitions, programmes and membership. On the basis of this information, as well as the museum's location, type and size, the MAP staff recommends an experienced museum professional to serve as a consultant for a one-day, on-site survey.

Prior to the on-site visit, the consultant is given the museum's summary questionnaire as well as the professional-concerns checklist developed by MAP to highlight aspects of museum operations. The surveyor also requests copies of the museum's governing documents, long-range plans, collection policies, organization charts and personnel manuals, if available. An agenda is then set for the on-site consultation which usually includes meetings with the director, key staff members, and the chairman or executive committee of the board of trustees and a complete tour of the museum.

With information gathered from the above sources, the consultant prepares a written review of the museum's operations and programmes—from storage and record-keeping to the development of board policies and fund-raising strategies. The report emphasizes how the museum can initiate improvements and often serves as a starting-point for the formulation of re-evaluation of long-range plans.

The MAP process takes eight to twelve months to complete and is not nearly as rigorous or as in-depth as accreditation. None the less, it has provided significant benefits to its 900-plus participants. Last spring the MAP staff surveyed these participants and found that the programme produces a number of positive outcomes.

First, museum directors often claimed that MAP was directly responsible for awareness of the museum among local government officials, board members and other community leaders. Generally, these people were impressed that the AAM and a qualified museum professional thought their museum important enough to warrant careful review and a concerted effort at long-term planning and future growth and stability.

Second, MAP provided encouragement to strive for professionalism. Staff members in many museums expressed feelings of isolation and deflated morale

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THE NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY. Picture File Section of the Education Division Lending Service. Mrs Judith Astone, Supervisor of the Museum Docent Program, inspects picture selection under the watchful eye of the guard lioness.

35
CHICAGO HISTORICAL SOCIETY. The painting storage area.

based on experiences before governing boards, councils and legislatures unaware of the special needs of museums. The MAP visit was a 'shot in the arm' for many of these dedicated professionals.

Third, prior to the MAP visit, most MAP museums had not engaged in an organized planning process. Nearly all consultant reports recommended attention to long-term planning and several reports recommended the development of a five- or ten-year plan.

Fourth, obtaining specific guidance about collections records, policies and care was frequently mentioned as a positive outcome of participating in MAP. Many museums reported implementing conservation practices and the impact of MAP is reflected in the following comments:

> The surveyor was extrememly helpful in supplying information relating to the use of ultra-violet glass and acid-free matting. All of the recommendations that were offered in conservation areas were implemented the following winter.

> Installation of ultra-violet and fluorescent lighting and the proper hanging of 100-year old Indian rugs and baskets are recent improvements.

> The report lent some clout with the county board of examines. Architects were hired to do drawings for a new facility, and we now have a small building with climate control and some additional office, exhibit and storage space.

> Going through MAP reinforced the idea that certain things such as better collection care, cataloging and storage are necessary.

MAP and accreditation may be viewed as programmes offering assistance to museums at different levels of development. At one level, MAP provides basic guidance and support. At the other levels, accreditation challenges a museum to meet the highest standards of the profession. In between these two levels, however, is a gap that is often quite large and not easily bridged. Perhaps the biggest challenge for museums at this stage is to improve the care of their collections.

Recognizing this need, the AAM has developed a new programme called MAP II. Participants will receive an overview assessment of collection policies, related procedures and physical conditions. Emphasis will be placed on concerns related to legal and ethical issues, documentation, care and handling of collections in storage or exhibitions, movement of collections including packaging and shipping, insurance, and security and inventory control.

Before 1970, a museum seeking to improve its operations or gain recognitition from the museum profession had few options. Since that time, accreditation, MAP and MAP II have provided an ongoing and evolving set of programmes which have helped the entire museum profession mature. Today, virtually any museum in the United States can obtain assistance to improve its operations or achieve recognition—by the museum profession—that it has achieved professional standards.

Ciudad Bolívar's Museum of Modern Art (The Soto Foundation)

Hélène Lassalle

Born in Toulouse, France. Arts degree at the Sorbonne. École du Louvre. Curator at the Musée de Grenoble and the Musée de Rouen. Research fellowships at New York and Stanford universities. Prepared a *catalogue raisonné* of the ancient art collection of the De Menil Foundation, Houston. Curator at the Musée National d'Art Moderne, Paris. Now active as an art critic and specializing in aesthetics, semiotics, the sociology of art and psychoanalysis. Secretary-General of the International Association of Art Critics (AICA).

36(a), (b), (c), (d)
Architect Villanueva's sketches for the museum.

It was no mean feat to establish a Museum of Modern Art deep in the heart of Bolívar country, on the banks of the Orinoco, 600 km from Caracas, in a tropical region of Venezuela lacking all cultural facilities. Especially since it was to be a museum that would also function as an international centre of research on structural, constructivist, geometric and kinetic art, unique in its design and mode of operation, exclusively devoted to the reputedly austere art it was to promote as well as display, as an investment for the future.

A combination of circumstances and a concordance of wills of three individuals led to the undertaking of this audacious enterprise. The three were Jesús Rafael Soto, the Venezuelan kinetic artist, his friend the architect Carlos Raúl Villanueva and Dr Carlos Eduardo Oxford Arias, Governor of the State of Bolívar.

It was Soto's dream to provide his home town, Ciudad Bolívar, which still had no policy in the arts and showed no interest in artistic creativity, with something that he had missed as a child—an art museum. What he had in mind was not a historical museum but a place where the public would have an opportunity to come into contact with the most representative trends, as he saw them, of contemporary society, its most advanced and truly modern achievements; in a word, today's art.

In Paris, Soto was forever exchanging his works with those of his friends or acquiring new ones. His coherent collection, aesthetically and artistically of a piece, bearing the stamp of a strong and exacting personality, was to constitute the core of the museum's collection, supplemented by a selection of the most important and meaningful pieces from different periods in the twenty-year artistic career of the artist himself. From its inception, therefore, the museum had a distinctive character marked by his personal taste and choices both as man and artist. Time and the contributions made by new personalities would enhance the character of the museum without deflecting it from its initial design.

Development of the project

The Municipal Council of Ciudad Bolívar welcomed the idea of a Soto Foundation and in 1968 put at its disposal the Casa Wantzelius, a large mid-nineteenth century neoclassical edifice in the heart of the city. Soto's friend, the architect Carlos Raúl Villanueva, began drawing up a plan for the conversion of the building that would house the future museum. Unfortunately, the condition of the building proved much worse than had been expected, and in November 1969 Dr Carlos Eduardo Oxford Arias, Governor of the State, offered them instead a site in the southern part of the city between the old and the new city.

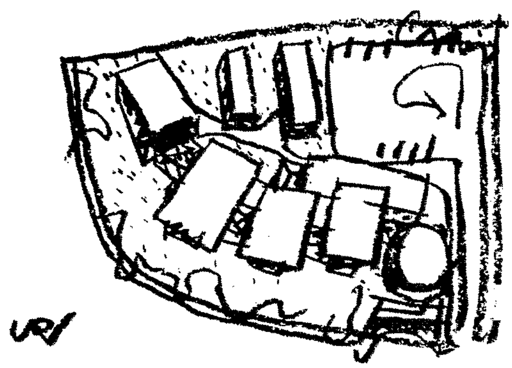
It was now possible for the project to take shape and develop its own orginality. There was no one better qualified than Carlos Raúl Villanueva to undertake the project, as he had a clear understanding of its scope and distinctive nature. He was himself a collector of works of art that had much in common with those in the collection of the Soto Foundation; and, for his personal use, he had already succeeded in making use of space in such a way as to harmonize with and set off works of this kind. A friend of Calder, Moholy-Nagy and Arp, he appreciated the formal precision of their works, but he displayed no less interest in the technical innovations in the visual arts made possible by present-day technological progress. For his major work, the Ciudad Universitaria of Caracas (1944-57), he had already enlisted the co-operation of such artists as Calder, Pevsner, Léger, Arp and Vasarely. In this architectural and functional complex, he had succeeded in the difficult feat of marrying the works adorning the buildings with the buildings themselves; he had found satisfactory ways of displaying free-standing open-air works as well as of incorporating paintings, sculptures and decorative features in the buildings themselves. His simple architectural style was particularly well suited to powerful works marked by clear-cut lines and structure: powerful architecture for powerful works. It was important to focus attention, to reduce interior spaces to the bare essential by eliminating showcases, decorative details, small rooms and labyrinthine intricacies. Villanueva himself in 1970 described the process as follows:

> In planning Ciudad Bolívar's long-awaited Museum of Modern Art, I did not want to limit myself solely to exhibition rooms: taking a broader, ampler and more optimistic view, I endeavoured to make provision for a cultural centre that would incorporate a theatre with auditorium, a bookshop, a library, workshops and a cafeteria.
>
> That is the reason why I conceived of a flexible and elastic system that could and should lend itself to further stages of development and the gradual fitting out of various exhibition rooms, of varying size and purpose and, above all, designed on a human scale. It was not my intention to accord any special value to the exterior spaces and volumes, for it is inside that visitors make their way, enjoy, appreciate and, in particular, enter into contact with the works on display, in a way that is essentially affected by the different accents created by direct and by soft lighting; and care has been taken to ensure the ventilation that is so necessary.
>
> In conclusion, I would mention the importance paid to the open spaces surrounding the architecture—gardens, trees, flowers, arcades and patios—the object being to ensure that the whole building complex is, in turn, a reflection of and part and parcel of the natural landscape.

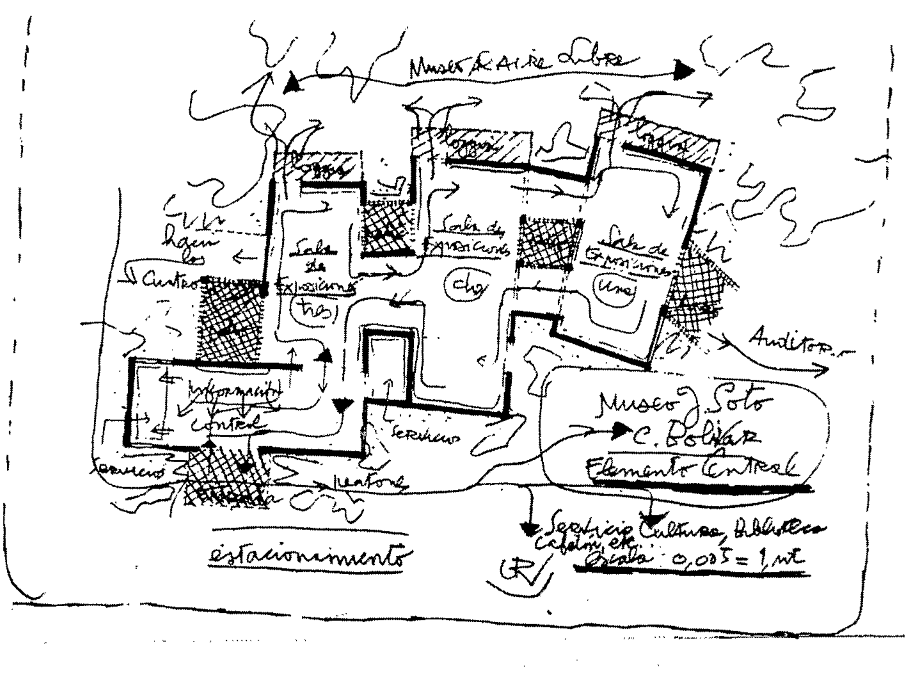
The initial financial restrictions obliged the archtect to adopt what is, incidentally, the best option for a museum—the one Le Corbusier had dreamed of for his Museum of the Twentieth Century at La Défense in Paris: a museum capable of gradual expansion. He thus thought in terms of a small initial building to which new blocks would subsequently be added.

The preliminary plan comprised an exhibition room, a multi-purpose area (entrance hall and information service), sanitary facilities upstairs, an administrative area and a reserve storage area in the basement. The revised preliminary plan was limited to a single level, which was inadequate. A larger area had to be provided. Owing to the increasing interest of the authorities in the Foundation, Villanueva was eventually able to consider filling the entire site with a library, an auditorium, workshops and public services (Fig. 36(a) and (b)). The blueprint that was to lead to the present structure was drawn up: the buildings were separate from each other, but sheltered passageways linked one place to another. Dimensions, height and light varied with the building. Each area would therefore have its specific function and atmosphere. This chain structure, which allows the visitor to select his route, has the further advantage of leaving open the option of further extensions. The idea of an open-air museum was also introduced. In this first plan, the open-air museum and the green spaces were on the periphery (Fig. 36(c)).

The final version is more complex. The



(b)



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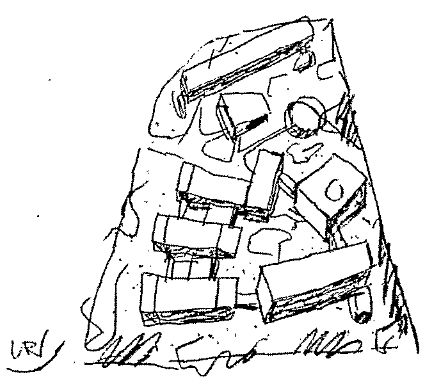

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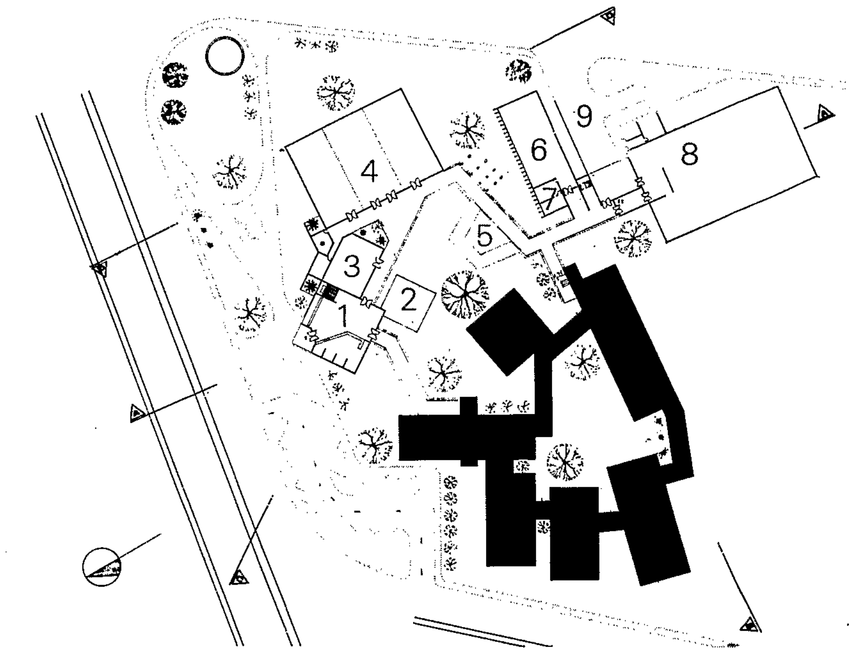


37
Plan of the museum. Black area: first stage of construction (already built); white area: second stage (under construction); grey area: paved zone. Key: 1, functional area (museum entrance and sales counter); 2, pond with floating sculpture; 3, library; 4, large multi-purpose hall (theatre, cinema, auditorium and hall for temporary events); 5, restaurant; 6, laboratories (video, photography and film) with underground parking; 7, flatlets for artists or guest researchers and director's apartment; 8, restoration workshops, reserve collection, store; 9, service entrance.

layout has been determined in accordance with function. It integrates the open-air museum into the actual museum area, which forms a closed circle around a garden patio containing sculptures, while the meeting and research centres and the technical buildings occupy a separate area from that of the museum. Figure 36(d) shows how the museum is confined to the rectangular buildings arranged in a circle in the lower part of the sketch, while the library, the workshops and the auditorium are relegated to the narrowest part of the site, at the top of the drawing.

Today, only the museum has been completed (Fig. 37: areas shaded in black). It was inaugurated in 1973 and comprises six large exhibition rooms, an enclosed garden patio with sculptures and an enormous cube that dominates the other buildings and houses a 15-metre-high 'penetrable' by Soto.

After an interruption in building and in activities brought about by a shortage of funds and by administrative difficulties the Foundation rediscoverd its vitality with the appointment of the artist Getulio Alviani as director of the museum in 1981, soon to be joined by the young philosopher Gloria Carnevali as co-director. The two run the museum jointly, each having equal scope for independent initiative. As the 'international director', the Italian Constructivist artist Getulio Alviani wears two hats. Outside the museum—abroad and inside Venezuela—through his former acquaintances as an artist, critic and theoretician, he is responsible for investigating the art market and visiting artists, with a view to increasing the collection of new works, on the best possible terms, so that the artists themselves feel jointly responsible for a museum in which they must be the driving force as well as beneficiaries, and he explores the various possible sources of finance (gifts, aid and subsidies). At the museum he supervises the progress of construction, in liaison with Villanueva's practice in Caracas, which is still operating despite the death of its founder. Gloria Carnevali, who is Venezuelan and a philosopher by training, is responsible for day-to-day management and the theoretical considerations that govern the hangings, exhibition programmes, symposia and educational activities.

'Apart from the permanent staff [which is still small but due to be enlarged],' says Gloria Carnevali, 'Venezuelan and foreign researchers will periodically join us and those who are already working towards what we want to do at Ciudad Bolivar, either by chance or as a result of our initiative: to create a museum, based on knowledge, in which the power of decision will reside solely with whoever has the best ideas.'

The administrative area, the restoration, publishing and photography workshops, the accommodation for the guest teachers and students, the library, the restaurant and a multi-purpose area that will be used as a theatre, cinema and lecture hall and will include an exhibition wing, are at present under construction. For Ciudad Bolívar's Museum of Modern Art will not be just the cultural centre the region of Guayana has lacked; it will also be an international research centre dedicated to *visualidad estructurada*, structural art, a meeting-place for teachers, experts, students and artists, who will find there laboratories that can provide them with the technical facilities, information and assistance they need to produce works on the spot. The experience of the museum's first few years of operation has demonstrated the museographical difficulties inherent in this very special type of work and in the climate of the region. These years of trial and error have also made it possible to refine the initial intentions and define them more accurately.

Conservation and restoration

When Getulio Alviani took the affairs of the Foundation in hand the works in the collection had deteriorated considerably.

The problem of the conservation of constructivist works and, more particularly, kinetic works was starkly posed here. These works consist of fragile structures. They include metallic components and friable or breakable plastics drawn out into threads or ultra-thin sheets. They are liable to damage in transit, sensitive to the slightest shocks and, particularly, to climatic variations and changes in humidity. They are subject to deterioration, deformation, rusting, distortion, crazing and fissuring. Mobiles are fitted with delicate electrical mechanisms. They resembly experimental prototypes rather than well-run-in machinery. Moves and exposure to change may cause irreparable damage to them too.

The climate of the region of Guayana, which is watered by the Orinoco, is particularly humid and unstable, changing all the time. Carlos Raúl Villanueva had envisaged natural ventilation for the museum in Cuidad Bolívar, as in most of his buildings in Caracas, whether public buildings or private villas. But the climate is more temperature in Caracas, which is farther north and situated at an altitude of 1,000 m. The ventilation grilles that form friezes of vertical slats at the level of the terrace roofs are both effective and aesthetic and have become, in a way, the signature of the architect. However, they proved ineffective at Ciudad Bolívar, and their effect on the works was disastrous.

The first major task in the new phase of the project in 1981 was to install air conditioning. The second was to carry out restoration. Each piece required special treatment. One unfortunate feature of modern art is the lack of previous experience that can be drawn on in the work of restoration, for each case is unique. The skills of an electrician, a mechanic, a chemist and coach-builder are, at times, required in equal measure for kinetic art, which is a very special art form involving extremely complex structures. Each case of damage demands innovation.

This will most probably be one of the more important subjects of study for which the Museum of Modern Art of Ciudad Bolívar will become the leading centre.

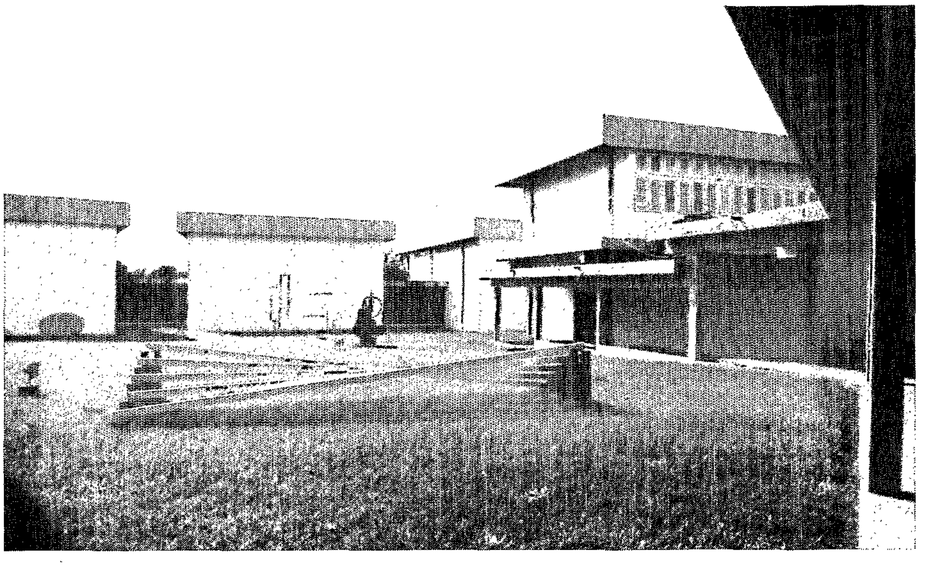
Development of the collections, an international vision

The years of experience were also years of reflection. It was the wish of the founders to establish an international museum of modern art. During this first stage the personality of Jesús Rafael Soto somewhat obscured this initial purpose in the eyes of the public and concealed the real character of the museum.

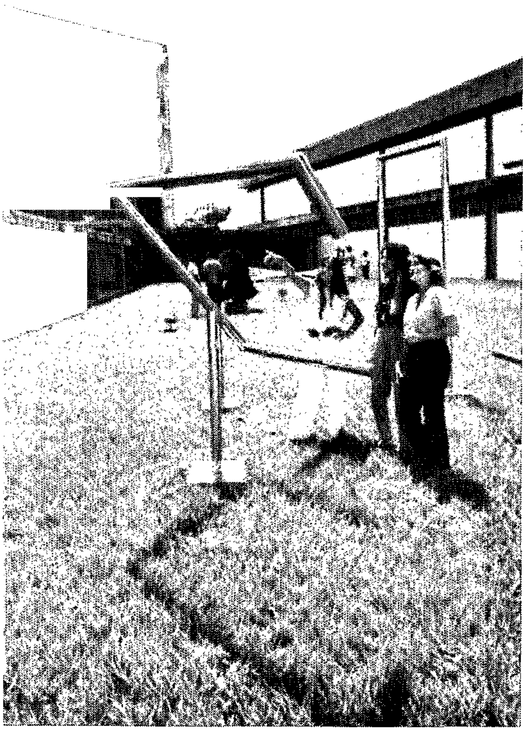
Taking advantage of the restoration work on the collections, Getulio Alviani reduced the original donation by some 20 per cent, retaining only major works that would contribute to the purpose of the undertaking, without the divergences or distractions introduced, as it were, out of friendship or by chance. A programme of acquisitions was also set up: the museum would present a complete survey of structural art. In this way, an entire chapter in the history of art would be 'made visible', as exhaustively as possible, through the works of different periods and different trends. Obviously, attention was given to the pioneers, the first Constructivists and the Suprematists: Malevich, Lyubov Popova, Ilya Chashnik, Lajos Kassak, Natalya Goncharova, the De Stijl artists, Theo Van Doesburg, Mondrian, Vassily Kandinsky, Herbin, Jean Arp, Magnelli, Sonia Delaunay, Josef Albers, Hans Richter and Johannes Itten. Recent generations were not neglected: Serge Poliakoff, Ben Nicholson and sculptors such as Robert Jacobsen, Max Bill and even Jean Tinguely and Kenneth Snelson, however much they might differ from one another. Among the artists from later generations are Fontana, Gorin, Agam, Vasarely, Rickey, Schöffer, Camargo, Cruz Diez, Tomasello, Debourg, Richter, Mack and Le Parc. New trends among the youngest artists are well represented: Enrico Castellani, Jeffrey Steele, Ludwig Wilding, Gianni Colombo, Almi Mavignier, Grazia Varisco, Ryszard Winiarsky, Richard Anuszkiewicz, Agostino Bonalumi, Marina Apollonio, Andreas Christen and Alberto Biasi. Through its correspondents abroad the Ciudad Bolívar museum has become the centre of attraction for everything being done in this field and presents works that would have remained unknown in their place of origin. For instance, Irina Subovič, a curator in Belgrade, drew attention to the Zenith Group, which was active in the 1920s and is now represented in Cuidad Bolívar. In the words of Getulio Alviani: 'The choice of programme has offset the eccentricity of the site.'

Today, the collection possesses the works of over 200 artists, from the Russian avant-garde to the latest serial works, from geometric abstraction in the painting of Ben Nicholson, to the more systematic version of the Swiss, Camille Graeser, and, in sculpture, from that of

38
Patio garden with sculptures, seen from the south. In the foreground, sculpture by Carrino; in the centre, sculpture by Lardera; in the background sculpture by Agam standing out against the wall of the exhibition wing.



39
Sculpture by Agam.



Gilioli to the extreme experiments of Yves Klein.

The character of the museum was shaped by an artist and an architect. It lacked theorists: the next stage involves a definition of goals and of the means needed to achieve them.

The lessons of the visible

While the Foundation claims to be a research centre, its major asset is, of course, its collection. Here, the historical view is not just a concept based on documents and partly illustrated by a few sporadic touches: it achieves reality, above all, through the works themselves. As the museum is limited to a specific aesthetic it can extend the range of examples and set up series, groups and contrasts, unlike museums of more general scope with diversified and more limited collections.

The eye is first instructed by the way in which the works are hung. This arrangement establishes the comparisons, differences, relationships and parallel developments. As the visual expression of a theoretical conception, it constitutes the first critical comment on the works. The museum also isolates the object, locating it in space, situating it in a certain light and comparing it with other forms. In instructing the eye the museum presentation not only educates the critical judgement and imparts knowledge, it also educates the perception. At a time when the work of Merleau-Ponty is again in favour in both the United States and France it is revealing that a specialist centre should be established in order to study and systematically analyse art that in the twentieth century has been based, as a matter of principle, on the mechanisms of perception: the relative values of colours, the relation of background to form, of technique to function and of the mobile to the immobile, contrasts, transparency effects, etc., phenomena investigated by the author of *La phénoménologie de la forme, Sens et non-sens* and *Le visible et l'invisible* and taken up again today by philosophers, theorists of art or the psychology of art, semioticians and semiologists.

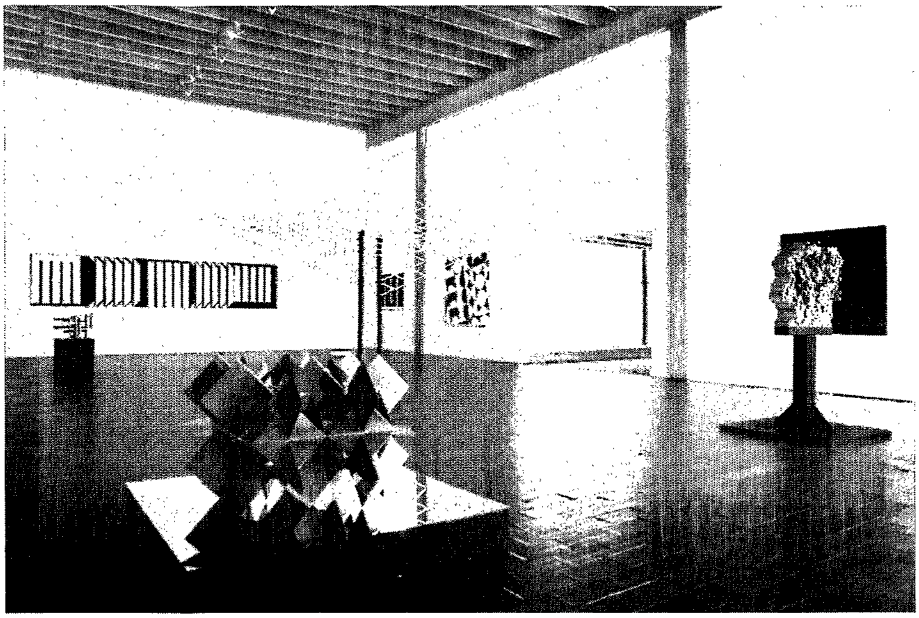
The museum's collection will not be the only source of material for these experimental presentations. A programme of exhibitions on specific themes has already been set up. Each exhibition will form the subject of a historical study that will be as precise as possible and will also provide an opportunity for research and experiments of a perceptual, descriptive and theoretical nature. The first exhibition will be a general one. It will pose both historical questions concerning the evolution and development of structural art and aesthetic and epistemological questions. Two sections are planned. One deals with the pioneers such as Tatlin, Malevich, the Constructivists, the Purists and the Cubists; the other covers the subsequent generations who developed or modified these innovations. The names of fourteen artists have been selected.

Later exhibitions will deal with the works of single artists: Albers (or didacticism), Sonia Delaunay (more intuitive), Michel Seuphor (poetry), Bruno Munari (when all aspects of activity become art).

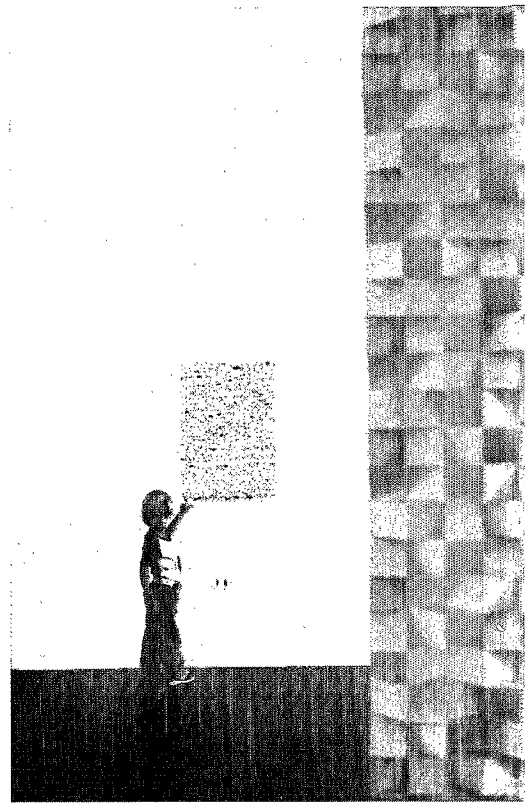
Theoretical inquiry

Reflection, which is both complementary and indispensable to the material works themselves, is brought face to face with them for the elaboration of theory. Each visual experiment will also be an opportunity to gather together the information supplied directly by the artists and that provided by the historians and critics. This information will be used to back up analysis of the public orientation of the works and of the types of reaction they provoke. The future will tell whether new models of perception will be created in this way and whether the traditional historical view will be altered. That is, at all events, the hope of the museum's directors: *'Ver para creer,'* as Gloria Carnevali puts its.

Thus, research is stimulated by the museum's experiments. Each experiment will review or clarify the facts of art history that have already been established and may open the way to a new methodological approach. In return, research provides guidelines for these experiments: seminars, symposia and working groups will give rise to plans for exhibitions, hangings and teaching activities. The first proposals for exhibitions and seminars developed in this way in the course of meetings with historians and artists such as Umbro Apollonio, Giulio Carlo Argan, Mauro Reggiani, George Rickey and Ivan Picelj. Umbro Apollonio's considerable archives on the subject will form the library's initial collection, which will be enriched by accessions, gifts and contributions produced by the discussions, seminars and meetings. This collection of documentation will combine all the sources made ac-



40
Setting up the *White, Negative, Positive and Colours* exhibition (presentation of the works in the collection after restoration), 1982: Raya, Schöffer, Sobrino, Morellet, Syckora and Richter.



41
White, Negative, Positive and Colours exhibition (presentation of the works in the collection after restoration), 1982: two works by Sergio de Camargo.

cessible by modern techniques, including sound and video recordings on magnetic tape, extracts from works, film slides and documentation in its most traditional form.

At the first seminar, in June 1984, on the theme 'Research towards a New Terminology for Constructivist Art' researchers assembled in the company of Stephen Toulmin from the University of Chicago (a pupil of Wittgenstein), Hermann Bauer from the University of Munich, Richard Gregory from the University of Bristol, who is well known for his studies of perception, artists such as the sculptor Kenneth Snelson, and Wilfred Wilding, who is continuing his research in the field of optics. Small groups of researchers in all areas of the human sciences will come together in similar fashion in the coming years to deal with selected themes.

The proceedings of the seminars will be published. The museum plans to circulate its news widely. The construction programme provides for a printing shop. The task of publication is indispensable not only in order to record and make public the work carried out but also for the fulfilment of the museum's local role.

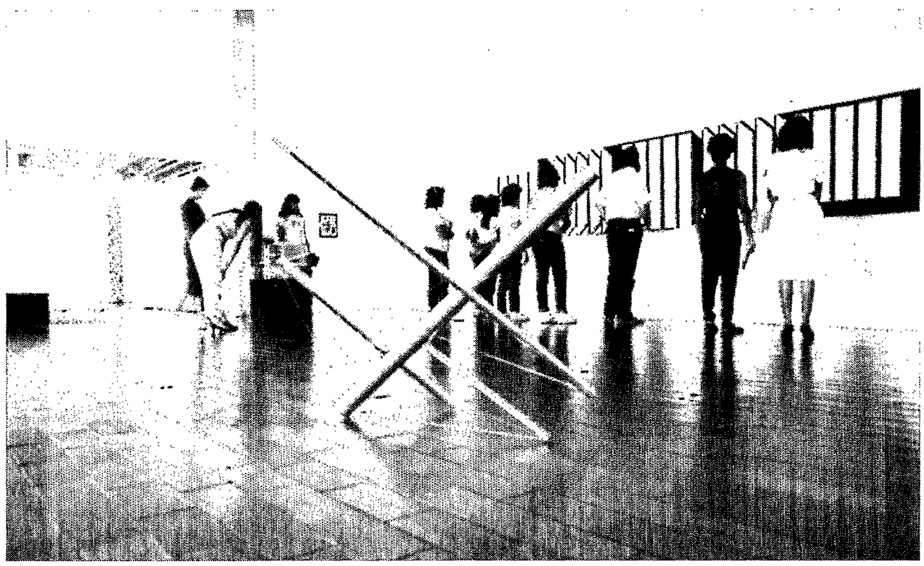
A national role

Up to this point we have stressed mainly the goals of the museum at the international level. But the museum's directors have not forgotten the first wish of its founder, Soto: to provide his region with a museum of modern art.

The provision of daily teaching is currently being organized in collaboration with teachers of the visual arts. The educational publications will support the museum's work and will also enable it to be continued elsewere. This educational programme will be carried out at different levels: introduction, basic research (which we have seen) and creation.

In fact, the first school of industrial design in Venezuela is to open opposite the museum. The students' training and practical work will be carried out with the participation of the museum's staff and in conjunction with its activities, in accordance with proposals made by Getulio Alviani himself, who is also a consultant to the school. For the first time, a genuinely Venezuelan centre for design, development and manufacture will provide an alternative to the mass importation of everyday objects or models from Europe and, especially, the United States. In this way, Ciudad Bolívar's Museum of Modern Art is truly fulfilling its national role.

How can so many projects be carried out? Will those in charge have the resources to realize such large ambitions? Working capital has so far been guaranteed by a regular subsidy from the Corporación de Guayana (a government institution for the development of the regional amenities of the province of Guayana). This capital guarantees the smooth operation of the museum. Specific events, exhibitions and seminars, such as the seminar on the terminology of Constructivist art, will be financed by patrons. This form of patronage, like all others, is uncertain and limited. It will therefore be one of the tasks of the directors to interest potential private patrons in Venezuela



42
Foreground: a work by Kenneth Snelson.

or abroad and international bodies in their work. It is their hope that the programme drawn up, the quality of the initial results and the promise of the forthcoming projects will demonstrate the originality and the necessity of the enterprise and will attract attention. Finally, marketing of the publications is being studied. In addition to publishing scientific and educational works, the Foundation will also produce multiple copies. The multiple copy has been quite logically seen as one of the consequences of the creative principles of kinetic or geometric art, which is serial, impersonal and capable of duplication. It is quite natural that the workshop equipment to be made available to the artists should also be used for the production of multiple copies under the supervision of their creators, to be sold for the benefit of the museum.

The success of these projects takes on a very special importance on the national level in view of the situation of modern art in South America. Much is proposed and little achieved there because of the political and economic vicissitudes of the Latin American continent. How many projects have been launched only to be swept away at the next change of regime or the next crisis! Venezuela enjoys stable democratic government, and over the years the project at Ciudad Bolívar has been able to take shape.

Concentration and confrontation: kineticism in question

Moreover, while the biennial festival of São Paulo is one of the poles of the international art scene, there are few modern art museums in this part of the world that have a permanent collection. One of the most important, in Rio de Janeiro, was burnt down. Within Venezuela itself, the museums of Caracas have been established too recently to have genuinely representative collections. The Museum of Modern Art of Ciudad Bolívar, which concentrates on a certain type of work, manages to illustrate major stages in the art of the twentieth century by following a specific line of development.

For kinetic art was born here in this broad crescent on the shoulder of the South American continent between the primeval forest on the confines of Amazonia and the accelerated growth of technology. And it is here that it acquires its meaning. Europe welcomed it and took it over, losing sight of its origin.

The Cuidad Bolívar museum restores to kinetic art its aesthetic forerunners, identifies its relations and its heirs and relocates it in the line of artistic development. The museum's site, the town on the banks of the Orinoco, brings kinetic art back to its origins and re-establishes its true meaning. For its organic roots are here in this country of prevailing fragmentation, discontinuity, break-up of space (which is never organized or ordered here) and time (always relative, infinitely extendable, unstructured and non-homogeneous); this country where anything may at the same time exist and yet not exist, just like the optical variations produced by thin sheets or tiny cubes, these articulated sculptures, fascicled, fluted compositions which are visible yet eclipsable, present and yet unstable; this country in which art, like life, is a game, a game providing pleasure or drama, the interprenetration of the real and the unreal, the opaque and the transparent, which, in this ancestral union of opposites, has been launched headlong with the discovery of oil into a hypothetical conquest of the future, propelled suddenly in all areas into a fascination with systems at the forefront of the avant-garde.

Is the Ciudad Bolívar museum an impossible venture or a risk? It is certainly a wager but, in the area in question, a necessary one.

[*Translated from French*]

Our museum is itself a theatre

Arkady Matveevich Drak

Born in 1925. Graduated from the faculty of theatre criticism of the Theatre Art Institute, Kiev. Has worked in the State Museum of Theatre, Music and Cinema (Kiev) since 1952. Scientific director for exhibitions and deputy director of the museum. Author of a number of studies on problems connected with the theatre.

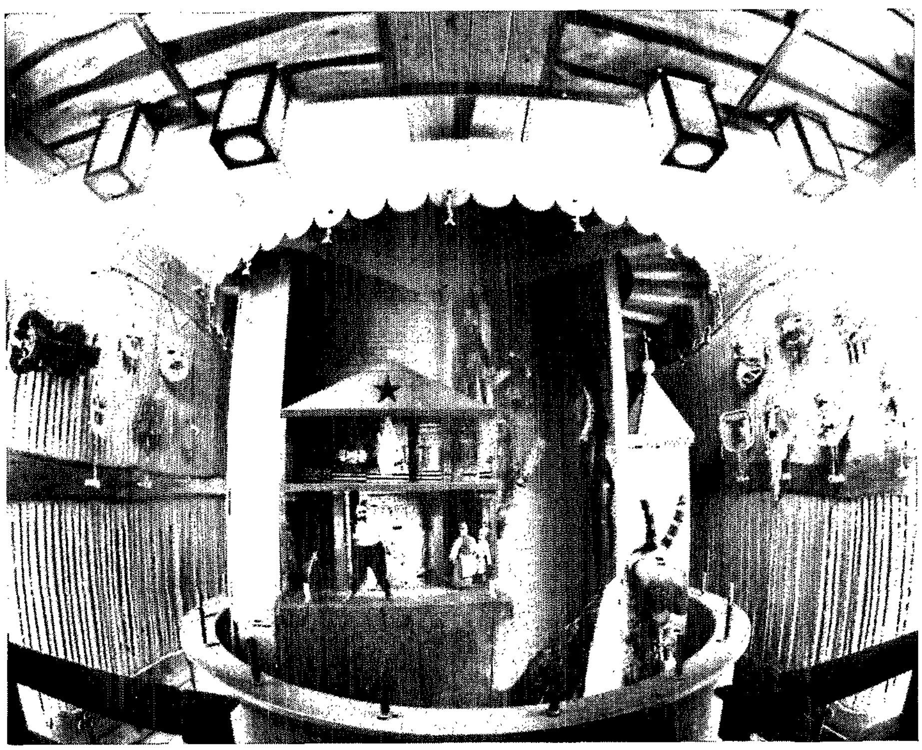
This article describes the organization of an exhibition by the Ukrainian State Museum of Theatre, Music and Cinema in the grounds of the historical and cultural reserve of Kiev's Pecherskaya Lavra (Monastery of the Caves). The author describes the efforts devoted to making the exhibition realistic, the unusual working methods of those who set it up, the new display methods adopted and the special rapport established with the public.

All museum exhibitions without exception are composed of three structural elements: the objects displayed, the space used and the artistic layout or 'design' of the exhibits. More often than not, designers of displays have to deal with a museum environment in which the space and the objects on display clash with one another. Every object seems to have been torn or cut off from its natural environment, being accommodated for display in a space that is usually not suitable for the purpose. The greater the aesthetic incompatibility between space and object, the deeper the contradiction between the two, the more complex and important the role of the display designer, whose job it is to achieve compatibility by every means at his disposal. There is a wide range of means, but they must be used with circumspection so as to preserve what is essential: the rapport between the public and the objects on display.

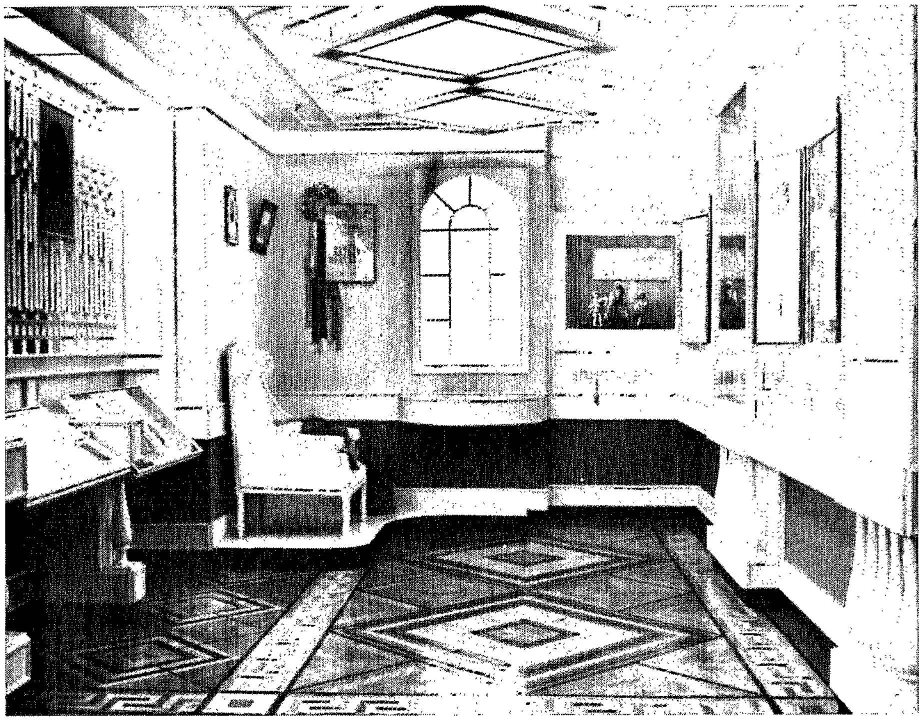
According to a 'theory' quite common among artistic circles, there are displays that are effective and others that are not. And whenever the exhibits are considered 'ugly' or unprepossessing in appearance an effort is made to 'save' the display and make it spectacularly attractive by introducing into its natural 'fabric' stained-glass panels, monumental reliefs, decorative panels, tapestries, mosaics and other costly pieces of monumental decorative art.

Primacy to the objects themselves

When designing the exhibition of the Ukrainian State Museum of Theatre, Music and Cinema we worked on the premise that what counted most of all were the exhibits themselves. We proceeded from the further premise that there is no such thing as an unaesthetic exhibit, as long as it is genuine—every



43
Room 1: The Popular Origins of the Theatre.



44
Room 2: The Theatre in the Late Eighteenth and Early Nineteenth Centuries.

45
Room 12: The Theatre during the Second World War (1941-45).

exhibit being artistically expressive in its own way. The designer's task is to bring out the artistic essence of the exhibit and convey it to the viewer.[1]

The museum collection contains some 200,000 objects and documents related to the theatre, 5,000 of which were selected for display in accordance with a thematic plan. The overwhelming majority of the items were two-dimensional: small photographs yellowed by age, documents, manuscripts, books, posters sketches for theatrical productions and drawings. The three-dimensional objects consisted of special chests for puppets (from the National Puppet Theatre), theatrical properties, costumes, models and a few souvenir pieces of furniture. While not particularly striking to look at, these objects are unique and irreplaceable and, above all, are imbued with the image of the theatre, thereby embodying the theme of the museum.

In the process of mounting the exhibition we made a very important discovery: a museum exhibition is a spatio-temporal art form and as such is comparable only with the art of the theatre. The museum unfolds in time, revealing itself little by little and involving the visitors in its own kind of theatrical performance.

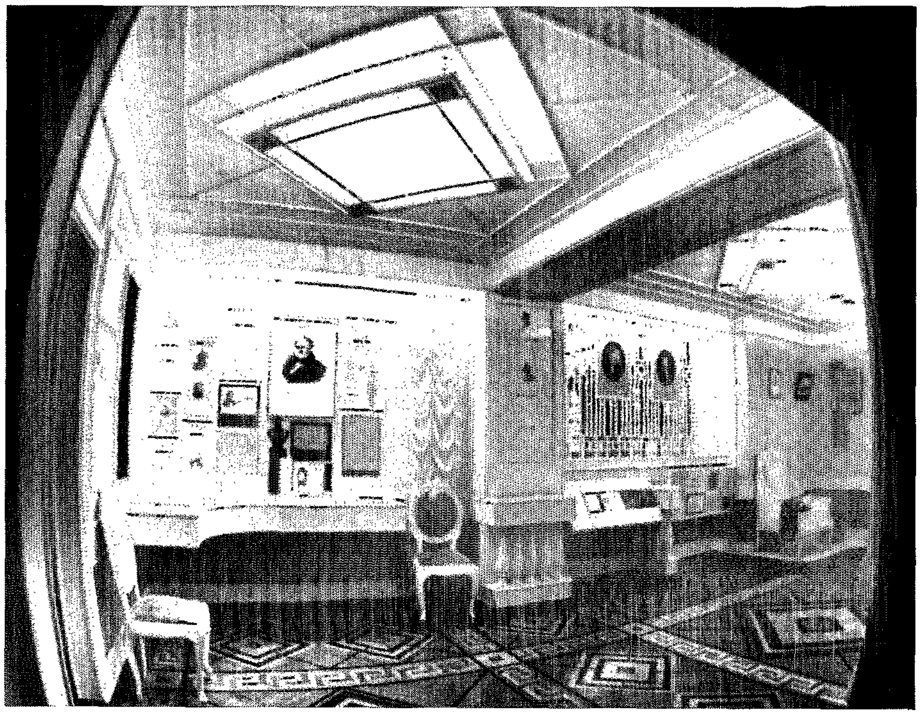
Realizing that a museum of the history of the theatre has to be theatrical in spirit, in mood and in the element of make-believe, we decided to create in each section a distinctive expressive and emotional environment embodying the features of an epoch and—particularly important to us—recreating the style and atmosphere of the theatre of a given period. In order to give artistic unity to the multiplicity of ideas that developed spontaneously it was necessary to work out in accordance with a well-thought-out thematic exhibition plan, a scenario or kind of play for the coming exhibition, which had to unfold before the visitors' eyes the evolution of the Ukrainian theatre from its early beginnings in folklore up to the present time.

The principle of the primacy of the object on display also dictated the adoption of special working methods. Contrary to the rule usually applied in the preparation of a design sketch, whereby one proceeds from the general to the particular, that is, from an overall plan to a detailed treatment of the interiors and of the focal points of the exhibition, we proceeded from the particular to the general, from the object displayed to the representation of the thematic focus of the interior arrangements and of the museum as a whole.

Space constraints and scenographic solutions

The realization of our artistic design was hampered, as usual, by the space to be filled—the element that stands in opposition to the actual exhibit. A two-storey building that had formerly been

1. Overall responsibility for the organization of the exhibition was vested in V. Kozienko, Director of the museum, A. Drak, Scientific Director for Exhibitions, and V. Baturin, Chief Exhibition Designer.



46
Room 2: The Art of the Actor during the First Half of the Nineteenth Century.

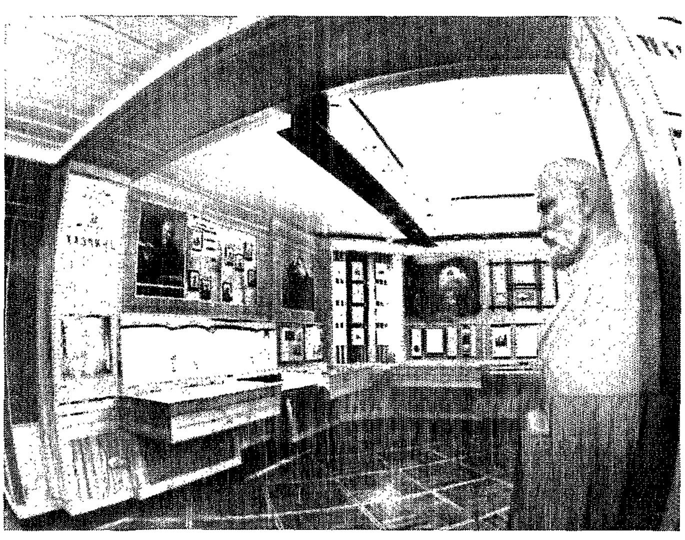
the infirmary of the Kiev Percherskaya Lavra was given over to the museum for the exhibition; it had low ceilings (3 m high) and narrow concrete stairs. It immediately became clear that the internal architecture of the building was unsuitable for use as the museum interior. It was therefore converted, in accordance with plans drawn up by the chief designer, V. Baturin. All non-bearing structures were removed, the vestibule and stairways were enlarged and faced with marble and the floors were covered with inlaid parquet.

The original interior features (walls, windows and ceilings) were concealed behind 'decorations', thereby creating an 'interior within an interior', a 'setting within a setting'. These vivid settings contrast with and are 'in conflict with' one another, that is, they are in keeping with the principles of dramatic art. The result is a sort of 'montage of attractions' in which the participants are the visitors to the museum.

Thus the visitor goes from the first room, with its fairground atmosphere of mummers' plays and popular sideshows, straight into the theatrically refined atmosphere of a salon in the Empire style of the beginning of the nineteenth century. Or, having momentarily stepped outside on to a paved roadway, by a street lamp, blood-spattered by the violent outburst of the first Russian Revolution (1905), our 'hero' (dramatic art), with the visitor in his wake, is transported into the exclusive, elegant and somewhat cold ambiance of the Art Nouveau style of the early twentieth century. From there, sweeping up the marble staircase, the theatre breaks out of its élitist seclusion

47
Room 4: The Theatre of the Second Half of the Nineteenth Century. Theme: Leading Figures of the Ukrainian Theatre.

48
Room 13 (detail): Theme: Ukrainian Scenography.



and goes out into the street, on to the square and on to the railway platform: it has entered the Soviet period.

Our museum grew up amid controversy over the exhibition design that for the past twenty years has exercised enormous influence on the art of museum display, but a temporary exhibition is surely quite different from a museum, both in origin and in purpose.[2]

At the time when we began work on the exhibition the traditional system of presentation (show-cases) was very widespread. If occasionally a place was made for so-called 'live tableaux' (the reconstitution of an everyday scene or interior, for example) which were supposed to provide a moment of relaxation to the mind and eye amidst the monotony of a thematic display, they were few and far between. We decided not to leave it at that and to make such tableaux the backbone of our exhibition, the frame work of the displays, for in this way, even if only as a matter of pure convention or by association, they would seem to find themselves once again in their natural surroundings. The visitor is, therefore no longer just a spectator: he is a participant in the 'action' taking place in the museum.

We rejected not only the idea of traditional show-cases but also the idea of modules or standardized units. The interior designers sought to organize the space and the form of each room or section in accordance with the models we had designed in keeping with the nature of the objects that had been selected for display. This was particularly relevant to one extremely important element of the artistic presentation, that is colour, or, to be more precise, the interplay of light, colour and texture. For the most part we made use of natural materials, various kinds of wood and fabrics, and the decorators avoided as much as possible the use of 'artificial' bold colours (for the painted surfaces, for example). By providing each room and each section with a distinctive chromatic microclimate they built up a light-and-colour climate for the museum as a whole. Our source of inspiration for the visual presentation of our museum is surely to be found in modern scenography.

New techniques

The museum invented, perfected and used for the first time new exhibition techniques: revolving stands, display columns (for posters), gangway planks, horizontal and vertical revolving panels, trihedral prisms and movable wing flats (as can be seen, even the nomenclature is borrowed from the theatre). These new devices allowed us to put on display a maximum number of objects and considerably increase the display area. But what is most important is the fact that the visitor, with a touch of the hand, can set the revolving panels in motion in any direction and in any order he chooses and has a feeling of participating and being personally involved in the history; he feels that he is accepted.

Living, direct contact with the spectator—that is the watchword of the theatre today. A museum of the theatre, our museum, could not ignore this categorical imperative of our time. After a visit to the museum the well-known Soviet actor Georgy Taratorkin wrote in the visitors' book: 'Your museum is itself a theatre!'

We shall try to live up to this reputation. When, at the start of this article, I noted the three structural elements that went into the making of an exhibition (the objects displayed, the space and the artistic layout), I failed to mention the fourth 'element', to wit, man, whose presence is felt in three ways. First, the object displayed always bears the personal imprint of the person who made it or the person who owned it. Second, there is the visitor, for whose sake the object has been preserved, studied and exhibited. Finally, there is the guide, who establishes the link between the first and the second. And then the miracle takes place: through the object on display, contemporary man enters into a sort of mysterious contact with man of the past.

The human speech that is heard in the exhibition rooms takes on special meaning in our museum. For it is meant to infuse life into inanimate objects, to resurrect out of the past a short-lived but real theatrical event that disappeared with its creator. The explanations of the guide, who himself is a sort of actor-improviser, can stimulate the visitor's visual imagination and enable him to rediscover amongst these objects the living and pulsating heart of the theatre.

The museum interior is frequently transformed into a small stage, becoming the sort of 'chamber theatre' that has become popular. With the assistance of the museum staff and professional guest actors, the museum has organized literary and musical events, using some of the threatrical memorabilia from its collections. With the help of artistes from Kiev's Variety Theatre we put on an experimental performance of a play entitled *From the Buffoons of a Bygone Day to the Present, the Theatre has Always Been a Herald of Peace*. This experiment opens up the alluring prospect of organizing dramatized tours, vivid pageants taking place in the museum. Thus the stage is now being set for the development of new genres at the confluence of the museum and the theatre.

[*Translated from Russian*]

2. Fairs were the scene of the first temporary exhibitions. At the dawn of civilization the first exhibitions were those of the merchant displaying his wares. An exhibition is always a temporary display of something—showy, alluring and aimed at the masses. Its elements are vivid presentation, embellishment and the use of modern technology (special lighting effects and *son et lumière*, for example). Moreover, it derives its language from its mobility, the need to be able to adapt itself rapidly to a different location and to be transported. The museum, on the other hand, is élitist in origin. The first museum in the world (the Mouseion of Alexandria) was a centre for academic thought in the Hellenistic period. Museums were born in the silence of temples, in the palaces of kings and noblemen and in the private collections of patrons of the arts. It is only in our day, marked by the sweeping proliferation of museums, that it has become impossible to contain the torrential flow of visitors that threatens their peace. Unlike temporary exhibitions, the exhibitions of museum collections must have a durable character and be such as to throw light on the underlying nature of the pieces on display. The scientific importance of museums, their research activities and the unique character of the exhibits confront curators with particular problems and prohibit them from chasing after the latest fashion.

MUSEUMS AND THE HORRORS OF WAR

The General Conference of Unesco at its twenty-second session (October-November 1983) adopted a resolution which recognized that 1985 'marks the fortieth anniversary of the end of the Second World War, the most devastating and bloody of all wars, that cost the lives of over fifty million human beings and annihilated untold riches brought into being by the labour of many generations'. The resolution called upon Member States to commemorate this anniversary and recommended that Unesco take part in the commemoration as well. Museum *is happy to be associated with this initiative, thanks to the contributions of two distinguished Soviet colleagues, Irina Antonova and Boris Piotrovsky.*

These two articles take us back graphically to those years of reconstruction and hope, when profound shock at the damage suffered by the cultural heritage moved whole nations to rebuild their shattered cities and the international community to define Unesco's first international normative instrument in the cultural field. Adopted at The Hague on 14 May 1954, the Convention for the Protection of Cultural Property in the Event of Armed Conflict marked the culmination of twentieth-century efforts to safeguard unique historic or artistic treasures from the ravages of war.

The Convention sets out in great detail the specific problems raised by the protection of the cultural heritage and lays down practical measures to solve them. Yet it has been acceded to or accepted by only seventy-three states. Wars and acts of military aggression continue to impoverish the collective memory of humanity, destroying masterpieces of its creative genius and laying waste to the ancient fabric of its cities, as the destructive power of military technology daily assumes more awesome proportions.

So this year's commemoration must also serve as a sobering reminder of the very considerable efforts still needed to be made, an uphill struggle to 'build in the minds of men the defences of culture' as Dr Manfred Lachs, Judge at the International Court of Justice, The Hague, has paraphrased the famous sentence in the Preamble to Unesco's Constitution ('That since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed'). He was delivering an address at Unesco Headquarters on 14 May 1984, at a ceremony held on the thirtieth anniversary of the Hague Convention. An extract from his address is reproduced below.

'The defences of culture'

While man's yearning for peace has been his innermost desire from time immemorial, his march through history has, as we all know, been accompanied by frequent armed struggle. Looking back over a period of thirty-five centuries, less than three hundred years have been free from wars. The search for wealth, plunder and domination, but also the goal of freedom and independence, have motivated man's resort to armed force. Little need be said of the destructive effect of wars on all continents or of the misery and death brought in their wake. They have become part of our lives, unfortunately, and are viewed as inescapable. Armies have become important parts of societies—war itself is considered an art and is so described by historians. Obviously it has been the arch-enemy of culture and civilization, particularly when ravaging whole countries, destroying men and what human labour and spirit has tried to build for centuries.

Hence the continuous efforts made throughout history to make war disappear from its pages; to make it only a part of the past. We have made some progress in this respect. We have outlawed war, but not very successfully. Even after the gigantic destruction caused by the Second World War we have witnessed so many armed struggles. While trying to abolish war we try to make it more humane, to limit its destructive possibilities. It is true that sceptics express serious doubts as to the value and effect of these efforts. To remind you only of Moltke's famous letter to Bluntschli and the Portalis memoire to the Academy of Toulouse. And the letter published in the London *Times* in 1869, in which a famous Cambridge professor said: 'To attempt to disarm war of its horrors is an idle dream and a dangerous delusion; let us labour at the more practical task of making it impossible.'

However this practical task has proved almost impossible. We must therefore make war more humane, a task initiated by great men like Dr Francis Lieber, Jean Gaspard Bluntschli and Antoine Pillet—followed by the adoption of a series of international instruments and the Convention for the Protection of Cultural Property in the Event of Armed Conflict. For it is rightly claimed that there is 'nothing illogical in trying to eliminate war and to regulate its conduct'. Thus we must pursue our efforts to achieve the goal of a world without war—and meanwhile try to limit the ravages of reality whenever and wherever we have to face them.

The call for protection went beyond men in uniform, the wounded, prisoners of war and civilians, to objects requiring special attention. Have we made progress in this respect? I think we have, and the first inklings to this effect are to be found in the earlier work done at The Hague and Washington. But the Convention concluded thirty years ago under the auspices of Unesco, the thirtieth anniversary of which we are celebrating tonight, constitutes in this respect a very special event.

First, it reminded man that the culture of nations is the most precious jewel he possesses. Not only royal mausolea, not only mummies saved by history and accident; but the real cultural monuments: towers, castles and churches—from the stone tombs, the Stonehenge which had been built and rebuilt before the Mycenean civilization began in Greece; developed in the ages of the Gothic Renaissance, Baroque, up to yesterday. Here as elsewhere the Eurocentric approach is outdated: we are bound to think in worldwide dimensions. It is through war and other careless actions that many treasures of culture on other continents were destroyed or few traces left. Whether or not these monuments bear testimony of what some historians describe as 'sun and light' or 'dusk and darkness', they reflect the history of nations.

This leads me to the second subject, namely history, and the Convention of 1954. History, need I stress, history is a very precious part of our lives. By condemning history, we condemn it to oblivion and make nations lose their identity. History, as Jules Michelet rightly claimed: 'Cette grande épopée nous est donnée sur les tombes, murmures des âges s'adressant au fond de chacun de nous, afin qu'il s'y reconnaisse et ce serait là, signe et critère de vérité historique.' What I have in mind is the eternal silence created by the destruction of culture. As Michelet continued: 'Adieu le passé, c'est aussi adieu la postérité.' Here is a second element which is so essential in preserving works of culture of the past.

The third is the recognition that the cultural heritage of every people taken together constitutes the cultural heritage of mankind as a whole. In protecting the past culture of others we protect our own, part of the whole. Here lies the great symbolic meaning of that achievement which was the Convention concluded thirty years ago. I think we have matured enough to realize the meaning of the words in that Convention: 'damage to cultural property belonging to any people whatsoever means damage to the cultural heritage of all mankind'.

Thus it is this Convention which, for the first time, uses the legal notion of common heritage of mankind in the domain of culture—embodied in so many forms. That great historian Jacob Burckhardt once claimed that culture and state were entirely different phenomena, and culture must not be submitted to power—he saw in their link an evil, an evil to be avoided. But obviously it is threatened. Who can protect culture if not the state? It is the power of the state which has to yield to culture, by protecting it. That is the great importance of the Convention of 1954 which extends the boundaries of culture into the domain of international relations, and brings the notion of the 'cultural heritage of all mankind' into the legal dictionary which, with the passage of time, has been enriched by other concepts of common heritage: outer space and the ocean floor. This, I think, is Unesco's great achievement on which I wish to congratulate it: it has made culture a legal notion.

Though a lawyer, so far I have spoken little of law, but it should not be surprising, because when you speak of culture you mean law. For law itself is a meaningful part of culture; it is called upon to defend it. For the real meaning of its task is to help history to recover and rescue what is or may be in danger. But there is much more to it: history and culture are closely interwoven with each other and their fate is linked with law.

The Convention is very explicit on the subject. It lays down, you will recall, the prohibition of direct hostilities against objects of culture. To breathe life into it—to make it what it should be—is Unesco's great task.

The protection of cultural property has become part of the generally accepted laws of warfare—whether it is international or not of an international character. These provisions should have become new chapters in military instructions and manuals of the laws of warfate distributed to members of the armed forces. Consequently respect for property becomes part of man's education. It is interesting to note how here, as in other areas, the functions and tasks of Unesco overlap. The Convention is not only an instrument binding states but its continuous operation implies teaching, so essential in shaping the minds of man and nations to reach beyond the subject, the destiny of the international community. Thus in all three spheres which I referred to, the Convention should prenetrate the minds of hundreds of thousands, make them realize its importance; and Unesco's future work is essential for the fulfilment of this task.

Manfred Lachs

The destruction and restoration of Leningrad's palace museums

Boris Borisovich Piotrovsky

Member of the USSR Academy of Sciences. Has worked since 1931 at the State Hermitage Museum, Leningrad, of which he was appointed Director in 1964. An archaeologist by training, he has conducted excavations in the Caucasus and Egypt. From 1930 to 1971 he directed the excavation of the vestiges of the ancient state of Urart. He is the author of major works on Urart, ancient Egypt and the culture of the ancient East. Chairman of the Leningrad section of the society for the Protection of the Historical and Cultural Monuments of the Russian Soviet Federated Socialist Republic (RSFSR).

Leningrad is often called a museum city, and rightly so. In appearance it is unique, with its regular street plan, architectural groups and individual buildings designed by famous architects, parks and gardens, statues, the broad Neva flowing between its granite embankments and innumerable rivers and canals. The people of Leningrad love their city and are eager to preserve its historical heritage.

Very soon after the Great October Socialist Revolution of 1917, the Soviet state issued decrees, signed by Lenin, on the preservation of the cultural heritage and the protection of historical monuments. This important and responsible task was entrusted to the museum department of the Commissariat for National Education in the Russian Soviet Federated Socialist Republic (RSFSR) and to town councils, the local authorities, which had their own departments or inspectorates for the protection of monuments.

The onslaught of 1941 and emergency measures

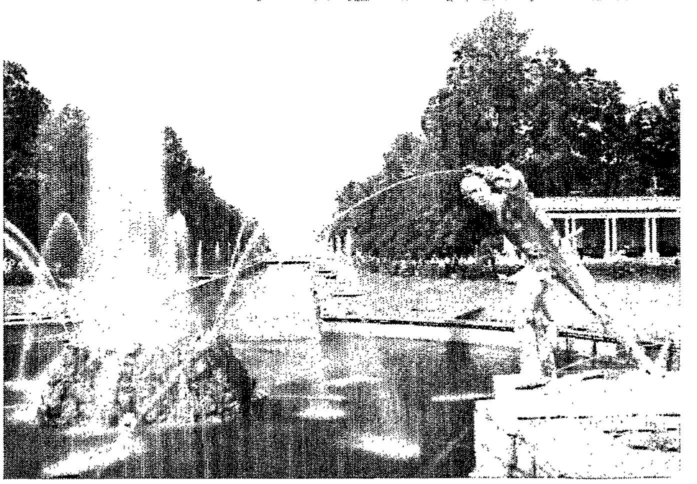
On 22 June 1941, Nazi Germany attacked the Soviet Union. Fascist forces crossed the Soviet border without a declaration of war and rapidly began to develop their offensive. The people of Leningrad responded to the news of the outbreak of hostilities in an organized way. Many left for the front in regular army units or detachments of the people's militia. The systematic evacuation of the contents of the museums and of the civilian population towards the interior of the country began, and the first measures were taken to protect the city from enemy air attack.

June in Leningrad is the season of 'white nights'. On such nights the streets and the embankments of the Neva are usually crowded, but after the outbreak of war and the declaration of a curfew the city was deserted. In this wary atmosphere, the grandeur of Leningrad's archictecture made a particular impact. The fortress of St Peter and St Paul, the Admiralty and St Isaac's Cathedral were sharply etched against the bright sky; the palace buildings seemed exceptionally massive. The threatening atmosphere was intensified by the huge barrage balloons floating overhead. The city lay still in the calm before the storm.

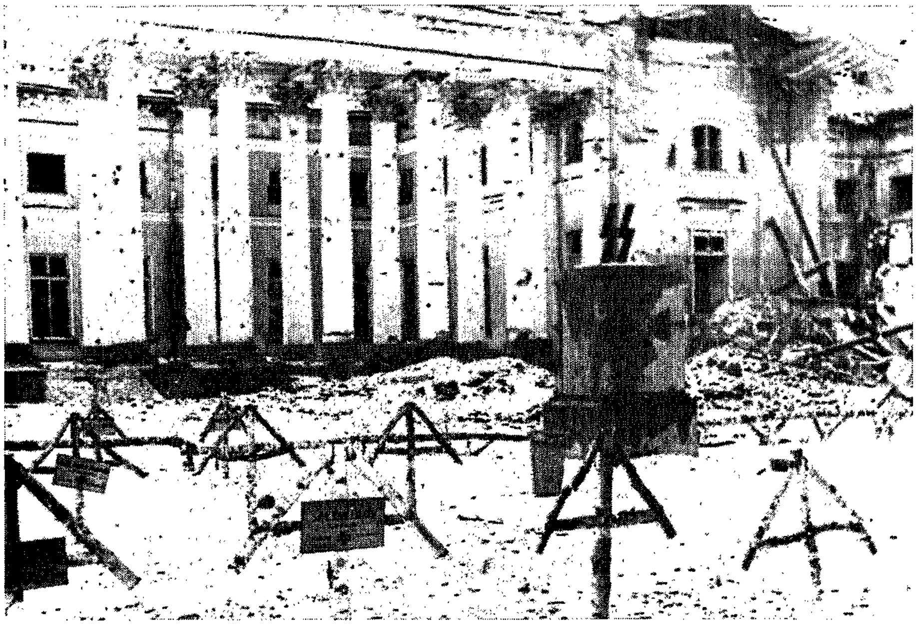
As from 22 June 1941, the State Inspectorate for the Protection of Monuments of Leningrad embarked on the systematic task of safeguarding the city under conditions of war. Plans were drawn up to protect scheduled monuments and statues and to camouflage tall buildings. A damage-repair unit, with 150 members, was set up.

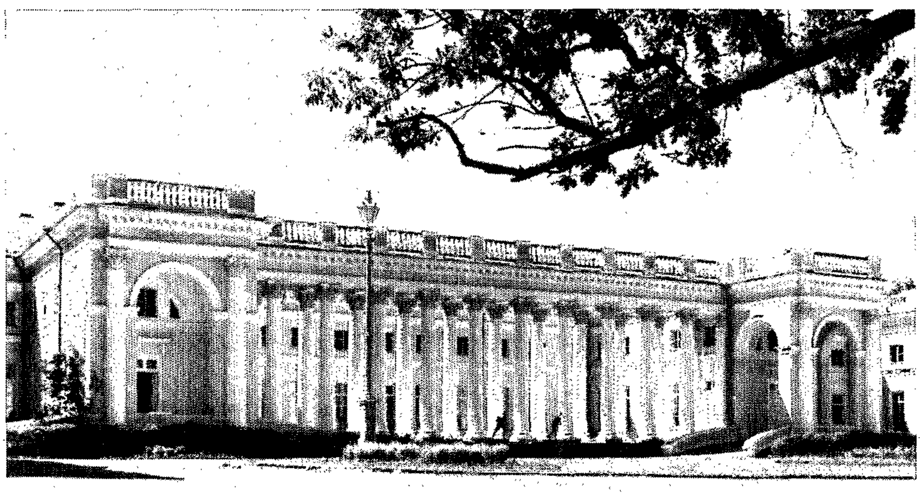
The dome of St Isaac's Cathedral and the spire on the bell tower of the St Peter and St Paul fortress were given a coating of camouflage paint, while the spires of the Engineers' Castle and the Admiralty were draped in camouflage sheeting—at once the soaring 'Admiralty needle' lost its spendour. The difficulty and danger of carrying out this work, without scaffolding, at a dizzy height can well be

49
Petrodvorets: the damaged cascade of fountains.



50
Petrodvorets: the restored cascade.





51
Pushkin: the war-damaged Alexander Palace.

52
Pushkin: the Alexander Palace after restoration.

imagined. Experienced climbers were brought in.[1]

The famous statue of Peter the Great —the 'Bronze Horseman'—in Senate Square, the work of Etienne Falconet, and the statue of Nicolas I by P. Klodt, were covered with sandbags and boarded over. Others, such as the statue of Peter the Great by Rastrelli the elder, father of the architect of the Winter Palace, which stands in the Engineers' Castle, and the Klodt horses which decorate the Anichkov Bridge on the Nevsky Prospekt, were removed from their pedestals and buried in well-protected pits. Both methods proved their worth and the statues, which are the pride of Leningrad, remained undamaged.

Although the front was drawing closer, Leningrad up to the beginning of September 1941 was tense but calm. The evacuation of industry and the population continued, bookshops remained open, concerts were still being given at the Philharmonia and a few theatres were still open.

Enemy planes bombed the city for the first time on 6 September, destroying some houses on the Nevsky Prospekt. Two days later, during a mass raid on the city, more than 6,000 incendiary bombs were dropped, causing 178 major fires. The attack was aimed at the food warehouses, which were devastated and burnt out. This formed part of Hitler's plan to strangle the defiant city with the bony hands of famine. At the same time, the rail link with the rest of the country was cut and the city was encircled. The 900-day siege of Leningrad had begun.

In the eye of the storm

By the first half of September the enemy was already approaching Pavlovsk, Pushkin and Peterhof. Evacuation of cultural objects was still proceeding at the palace museums, although by July the principal exhibits had already been sent away to the Volga and Siberia. The bare pavilions and park buildings were boarded up, while the park and palace sculptures were buried in the gardens or walled up in cellars. Entries made by museum staff in official logs, and their own recollections, bear eloquent testimony to their heroic and selfless labours during this period. The director of the Pavlovsk Palace Museum, A. I. Zelenova, recalled that when the final lorry carrying valuables to Leningrad was being loaded, she began to check the consignments of archive materials and discovered, to her horror, that the folders containing sketches by Cameron, Gonzago, Quarenghi and Veronikhin had been forgotten. They were put on board and, bearing these priceless documents which were later used to restore the devastated palace and park when the war was over, the lorry departed, leaving the museum staff behind. Soldiers who arrived reported that the Germans had already entered the town, and the link with Leningrad was severed. This was on 17 September. Gathering up the evacuation documents and the diagrams showing the hiding places of statues in the park and cellars, the staff set off on foot through the gathering dusk towards Leningrad. Among the fires blazing round

1. The techniques used to protect the statues were described in detail in an article by S. Davydov and J. Matsulevich, in *Museum*, Vol. IX, No. 4, 1956.

them, they noticed the Chinese Theatre in Pushkin burning particularly brightly.

At midday on 18 September, they reached St Isaac's Cathedral, where their colleagues from Pushkin, who had arrived that morning, anxiously awaited them. They were later joined by the museum staff from Peterhof. St Isaac's Cathedral became the storehouse for the museum exhibits from outlying palaces that could not be sent far away to the rear. Part of these collections was dispersed in the cellars of the Kazan Cathedral, the Russian Museum and the Hermitage. The combined staffs of the outlying museums lived in the cathedral for the entire duration of the siege of Leningrad, protecting and preserving the museum treasures in their care.

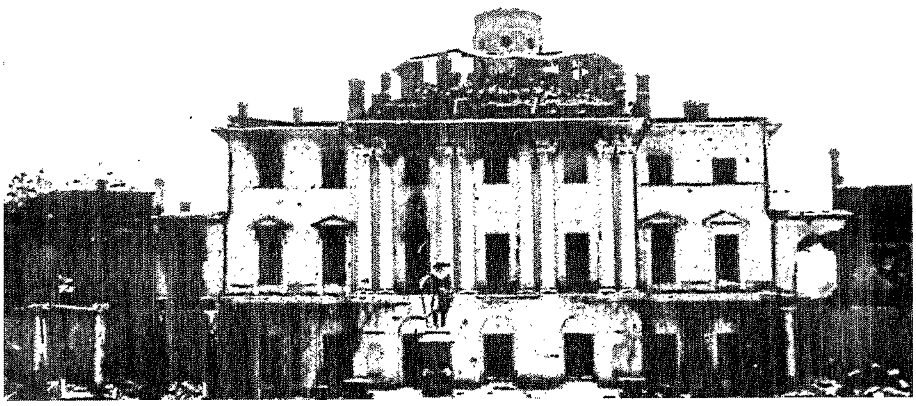
During the final months of 1941, enemy air attacks became a routine event in Leningrad. They began at 8 p.m. and, as the days drew in, at 7 p.m. The air attacks were combined with long-range artillery shelling, which took place at different times and against selected targets, causing great destruction and loss of life.

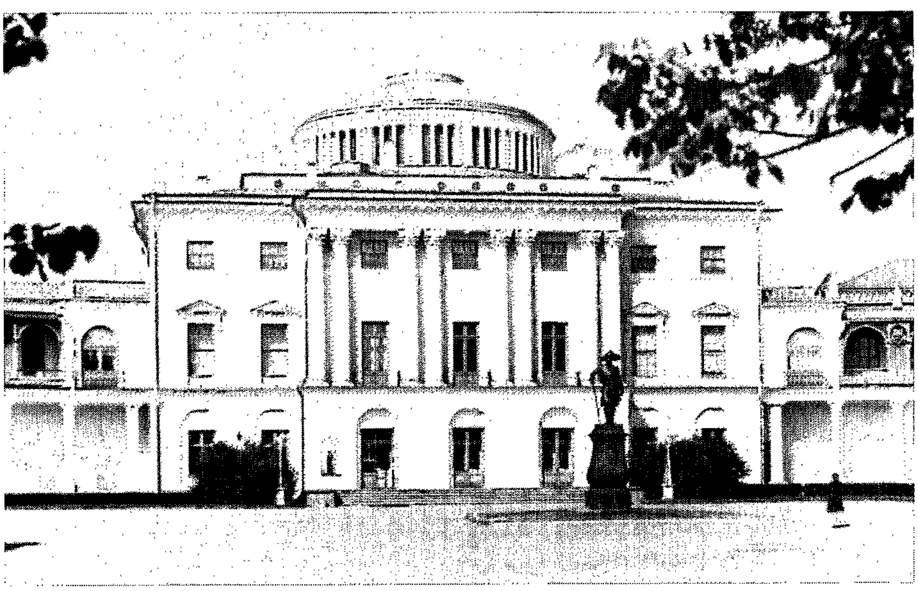
During the siege, from September 1941 to January 1943, the city suffered greatly. Of the 210 buildings listed by the preservation bodies, 187 were damaged to a greater or lesser degree and only 23 remained unharmed. Damage was caused not just by direct hits but also by the blast from bombs or shells falling in the vicinity, which shattered windows and window-panes or tore off roofs, letting snow into the buildings. In addition, the interiors suffered severely from frost and wind, which penetrated inside before the windows were sealed up. Almost all the most famous buildings were damaged, sometimes very severely, particularly in the western part of the city which suffered the heaviest shelling. The palace on Elagin Island, which had belonged to Catherine II's High Master of the Court, P. I. Elagin, was destroyed. Between 1818 and 1822, when the old city walls were being restored, the palace was completely remodelled by Rossi, who created a virtually new building in the classical style. The palace was particularly noted for its interiors, marbling, multicoloured wall hangings, parquetry and decorative sculptures. In January 1942 the building was subjected to intense bombardment, and what the shells failed to destroy, fire wiped out, gutting the whole building. It is difficult to imagine how the restorers, after careful study of the ruins and the relevant records, managed to return the building to its original splendour.

The Gostiny Dvor on the Nevsky Prospekt in the town centre was badly damaged. The building was erected in 1785 to the plans of Rastrelli and De la Mothe, and became the model for similar buildings throughout Russia. Deliberate bombing and shelling of this commercial centre went on for almost two years. The building was partly destroyed and partly ruined, mainly as a result of a fire started by incendiary bombs. On 21 September 1941, a direct hit killed or wounded 140 innocent inhabitants.

War records mention the heavy damage caused to the fortress of St Peter and St Paul, the State Bank, the Pavlovsky barracks and the Smolny Convent. Peter the Great's Summer Palace, the Winter Palace, the Hermitage buildings and the Admiralty also suffered.

53
Pavlovsk: the war-damaged Great Palace.





54
Pavlovsk: the Great Palace after restoration.

Restoration under siege

During the difficult days of the siege, beset by cold, hunger and darkness, the population of Leningrad did not submit passively to their fate. In spite of all privations, and particularly hunger, from which people grew weak and died, the inhabitants of Leningrad even in their darkest hour believed in victory. They continued to do their work, often with great enthusiasm. This was certainly the case of the State Inspectorate for the Protection of Monuments, composed of fourteen members in all, under the leadership of N. Belekhov. Upon an urgent summons they would go at once in the freezing cold to the scene of destruction, pinpoint the bomb or shell impacts, photograph the damaged buildings and take the necessary measurements for the subsequent work of restoration. This heavy and at first sight thankless task later paid off, as it facilitated the rebuilding operations.

In buildings of exceptional merit, such as the Mining Institute, the Laval House, the Yusupov Palace and the Senate and Synod buildings, repairs were carried out, new ceilings were built, walls were reinforced and window openings were bricked up. Conservation and provisional repair work went hand in hand with the selection of records and the compilation of historical reference material concerning the damaged buildings. The architects who remained in the besieged city organized a conference on the protection and restoration of war-damaged property, and a competition was held in September 1942 for plans for the restoration of damaged buildings.

On 19 January 1944, after the raising of the siege, Soviet forces entered Petrodvorets, which was completely devastated. On a slight eminence stood the shell of the gutted Great Palace. The fountains had been vandalized; the statue of Samson and certain other pieces of sculpture had been removed to Germany. The parks had lost most of their trees and the grounds had been disfigured with trenches and mined. All other buildings, such as the Hermitage on the shore of the Gulf of Finland and the Monplaisir and Marly palaces, had been plundered and wrecked.

A huge task begins

The difficult and dangerous task of clearing the mines from the park, pavilion and cellars of the palace began. Altogether, 20,000 mines and 100,000 shells were rendered harmless in Petrodvorets. In spring 1944, large detachments of volunteers arrived at Petrodvorets from Leningrad to clear the land and tidy up the park. Meanwhile, the architects continued to work on a plan for the restoration of the site as a whole. For the gigantic task of restoration, which required highly skilled workers, the V. Mukhina Higher Institute of Art was opened in Leningrad in 1945 to train the craftsmen/restorers without whom the rebuilding would have been impossible.

At the end of August 1946, the Leningrad Municipal Executive Committee decided to give top priority to restoring the fountains. The task was a daunting one since the entire water-supply system had to be rebuilt, the places where the sculptures were buried had to be located and the statues brought out of their hiding places, restored and replaced. In addition, the whole area in front of the ruined palace had to be cleared. The day on which the restored fountains were turned on again — 25 August 1946 — was declared a public holiday, but a great deal of work still remained to be done. On the pedestal once occupied by Samson and removed by the Nazis, stood a flower urn. The figure of Samson tearing open the jaws of a lion was re-created by the sculptor V. Simonov a year later, since the work required careful study of the original by Kozlovsky.

The outcome of all this work was the restoration of 130 fountains of the cascade, 15 large statues and over 300 decorative features. These figures illustrate the enormous effort made by the restorers in their various crafts, and also their great skill. No less daunting was the restoration work carried out on the Great Palace and the other buildings in the group. The first part of the palace to be restored was the façade, after which work on the interior continued for many years.

On 24 January 1943 the Soviet army liberated the towns of Pushkin and Pavlovsk, bringing to light scenes of barbaric destruction perpetrated during the enemy occupation. Catherine's Palace had been heavily damaged and pillaged. Ceilings had been torn out, parquet floors ripped up, hangings stripped from the walls and carted off to Germany. The trimmings of the 'Amber Room', presented to Peter the Great by Friedrich Wilhelm I, King of Prussia, had been entirely removed and have still not been found. The palace had also suffered from a fire in March 1943, when Rastrelli's 'Golden Suite' was burnt down and the ceilings of the Great Hall collapsed. In the palace cellars and some of the rooms, eleven large time-bombs were discovered. Sappers were able to defuse them in time, preventing the building from being blown up, which would have destroyed all traces of the occupants' criminal behaviour. Considerable damage had also been done to the park, in which not a single pavilion or footbridge remained intact, while the trees had been ruthlessly chopped down. The other palaces in Pushkin had also been ruined, in particular the Alexander Palace, former residence of the last Russian tsar, Nicholas II.

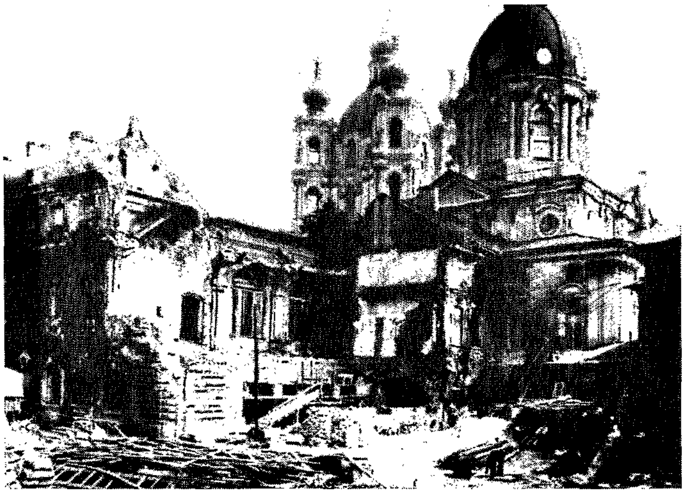
A vast army of restorers, headed by A. Kedrinsky, laboured for many years to rebuild the park pavilions and monuments, and as from 1959 the palace itself. The *Annals of Rebirth* list the names of ninety restorers and craftsmen who worked with great devotion to return the parks and palaces of Pushkin to their former state.

When Soviet forces entered Pavlovsk on 24 January they found the palace in flames. Before their very eyes the blazing floors and dome fell in — on abandoning the town the occupying army had set fire to the building and in the circumstances the blaze could not be put out. I visited the Pavlovsk palace two years after the fire and the ruins were a depressing sight. I had known the palace well and could recognize in the burnt-out shell the remains of rooms designed by great architects. It seemed impossible to believe that the devastated palace could ever rise again. The savaged park and its ruined buildings produced the same impression.

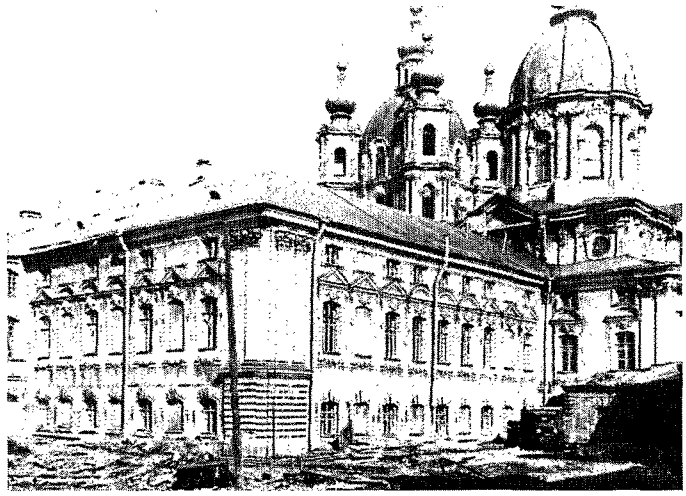
At the time I was not aware that as early as 1944, the architect F. Oleinik had been demobilized from the army and was working on restoration plans, actively supported by the Director of the Pavlovsk palace and park, A. Zelenova, and the Chief Curator, A. Kuchumov. The park was set to rights and the palace rose from the ruins, although the casual visitor strolling through its rooms today would scarcely credit it. In the course of the work, the palace was not only restored to its former state, but projects left unfinished during the original construction were completed. For instance, when the Throne Room was rebuilt according to Gonzago's sketches, the ceiling was painted, creating an illusion of height that considerably enhanced the artistic effect.

A detailed description of the restora-

55
Leningrad: The war-damaged Smolny Convent.



56
Leningrad: the Smolny Convent after restoration.



tion of the damaged buildings of Leningrad and its environs can be found in the book *Annals of Rebirth*, to which I have already referred, published by the Leningrad section of the Publishing House for Architectural Literature in 1971. This book not only describes the restoration process but lists almost all the names of the many people who played a part in this great and worthy task.

Even before the end of the Second World War, in 1943-44 a commission was set up to investigate the damage inflicted by the invading army. Its members included reputed scholars, academicians of various scientific disciplines, architects, writers and artists. The commission estimated that the damage inflicted on the architectural and cultural monuments of Leningrad and its environs amounted to over 2 billion roubles (under the new reckoning system). The commission also drew up a plan and guidelines for the future restoration work.

The question was also raised of the training of the personnel needed for this exceptionally demanding effort and in May 1945, the USSR Council of People's Commissars decided to create special workshop in towns that had suffered severe damage during the war. One of these workshops was set up in Leningrad, where it developed into a special scientific production unit made up of restorers.

By 1945, total expenditure on the restoration of historical and cultural monuments amounted to 3.9 million roubles and this amount gradually increased to 20 million roubles a year in 1976-80. Concern for the protection of monuments is enshrined in the Constitution, the fundamental law of the Union of Soviet Socialist Republics. Responsibility for this task in Leningrad lies with the State Inspectorate for the Protection of Monuments in the chief architectural and planning department, and with the chief cultural department of the Leningrad Municipal Executive Committee.

A public body called the All-Russian Society for the Protection of Historical and Cultural Monuments provides considerable assistance for the work of protecting, studying and explaining the significance of historical monuments forming an integral part of socialist culture.

The well-known Soviet art historian, Academician I. E. Grabar, appalled by the scenes of devastation in Leningrad and its environs, once wrote: 'The world has never witnessed such monstrous acts of destruction as those perpetrated by the fascist invaders on the territory of the Soviet Union.... For the first time in history such acts were committed deliberately, systematically.'

At the present time the threat of nuclear war is hanging over mankind. Monuments of worldwide significance are in danger of destruction. But it is safe to say that common sense will prevail and the great cultural heritage of the past will be preserved for the further development of the culture of all peoples of the world.

[*Translated from Russian*]

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Architectural Leningrad

The city was founded in 1703 by Peter the Great and named St Petersburg. The earliest construction was the fortress of St Peter and St Paul, with its majestic cathedral, built by Domenico Trezzini, the spire of which soars to a height of over 100 m. The foundation stone of the cathedral was laid in June 1712 but the building was not completed until 1732. In 1725, a wooden church was built inside the still unfinished cathedral for Peter the Great's funeral. Today the fortress houses the State Museum of the History of Leningrad.

In 1712, when St Petersburg became the capital of Russia, the city began to expand rapidly in accordance with a master-plan drawn up by architects. The main thoroughfares converged on the Admiralty, which was rebuilt in 1823 by A. Zakharov.

Some buildings from Peter the Great's time still remain in Leningrad. In the Summer Garden stands the small Summer Palace (nowadays the Peter the Great Palace Museum), built by Trezzini, while on the right bank of the Neva rises the oldest of the city's stone buildings, the palace of Peter's companion, the first Governor-General of St Petersburg, Alexander Menshikov (today a branch of the State Hermitage Museum). Its magnificence was such that it surpassed the tsar's own palace and was used for state receptions and the famous 'St Petersburg Assemblies', at which all the city's nobility and foreign guests forgathered.

In the eighteenth and early nineteenth centuries the city was further graced by the works of outstanding architects. Bartolomeo Rastrelli (1700-71) designed the Smolny Convent, with its tall five-domed cathedral, Catherine II's Winter Palace and the Stroganov Palace. Giacomo Quarenghi (1744-1871) built the Academy of Sciences, the Hermitage Theatre and the former State Bank. Carlo Rossi (1775-1849) is celebrated for his outstanding Palace Square, which skilfully links the stylistically disparate General Staff building and the Winter Palace, and for 'Rossi Street' leading to the Alexandrinsky Theatre. The massive St Isaac's Cathedral (now a museum), the dome of which is visible from a long way off, was built by A. Montferrand (1786-1853). He also designed the column erected in Palace Square to commemorate the victory of 1812, on top of which stands an angel holding a cross. In the first half of the nineteenth century, the city was also graced by such outstanding buildings as the Kazan Cathedral (which now houses the State Museum for the History of Religion and Atheism), built by A. Voronikhin (1758-1814), the Pavlovsky regiment barracks and the court stables, designed by V. Stasov (1769-1848). All the architectural masterpieces I have listed contributed to the city's fame.

The country palaces and mansions, standing in their classical or landscaped parks, which were converted into museums after the Great October Socialist Revolution, are also world famous. Here special mention should be made of Peterhof (now known as Petrodvorets), the ceremonial residence built in 1714 on Peter the Great's orders. Petrodvorets is a huge complex consisting of the Great Palace, various other buildings, an extensive park, and, in front of the palace, a cascade of fountains completed in 1723. The 'Peterhof Fountains' are noteworthy for their magnificence, scale and the complexity of the water-supply installations. The fountains were in the form of gilded bronze statues by such leading Russian sculptors as F. Shchedrin, F. Shubin and I. Martos. The central fountain of the group consisted of a statue of 'Samson tearing open the jaws of a lion', which symbolized the victory of Poltava. The mighty jet of water gushing from the lion's jaw reached a height of 20 m. In 1802, when the sculptures were being restored, the original statue of Samson was replaced by a new and more accomplished one by M. Kozlovsky.

A no less remarkable palace and park are to be found in the town of Pushkin (the former Tsarskoye Selo). The nucleus is formed by the Great Palace of Catherine II, completed in 1756 by Rastrelli, the designer of the Winter Palace in Leningrad itself. Round the palace a vast park was laid out in which were a large number of smaller buildings designed by leading architects. In addition to the Great Palace, other palaces and buildings of equally high artistic value were constructed in Tsarskoye Selo in both the eighteenth and nineteenth centuries.

Catherine II's son, Paul, while still heir to the throne, chose Pavlovsk as his summer residence. Here the architect Charles Cameron, with the help of Brenna and Gonzago, built a palace in the classical Russian style (1782-99) with sumptuous interiors. A huge park was laid out round the palace, partly landscaped and partly classical, with a regular pattern of alleys decorated with sculptures. The design of the park and the choice of trees with contrasting autumn foliage to produce an artistic effect were the work of the palace architects. The Leningrad area offers other examples of impressive palaces and parks such as Oranienbaum (now known as Lomonosov), Gatchina, Strelna and Rogsha, but lack of space prevents me from mentioning more than the three most widely known.

A saga of protection – Dresden's old masters at the A. S. Pushkin State Museum of Fine Arts, Moscow

Irina Alexandrovna Antonova

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In the autumn of 1984 thirty paintings from the world-famous Staatliche Kunstsammlung (State Art Collection) in Dresden were on show at the A. S. Pushkin State Museum of Fine Arts. The exhibition was timed to coincide with the observance in the German Democratic Republic of the eve of the fortieth anniversary of the end of the Second World War.

The news that the Dresden pictures were coming to Moscow aroused great excitement and enthusiasm among many thousands of art lovers in the Soviet Union, for it took them back to those unforgettable, historic days in the spring of 1945, the last days of the war.

On 8 May Soviet troops entered Dresden to find a city in ruins. The building that housed the world-famous Dresden picture gallery had been completely destroyed, but not a trace could be found inside of any pictures. It was a matter of prime concern to find and save these masterpieces of world art; and it was reasonable to assume that they had been hidden away. Strenuous efforts were made therefore to search for them.

The credit for discovering the treasures belongs to two officers: V. Perevozchik and L. Volynskiy (Rabinovich), the second of whom was an artist by training. They found a slightly torn piece of paper marked 'Secret' in the bricked-up and mined valult of the Albertinum, and deduced that it contained a coded map of the hiding-places. There were many places on both sides of the Elbe, fifty-three in all, where the paintings had been 'buried'. The pictures—most of them not wrapped—had been put in mine shafts, tunnels, cellars and attics.

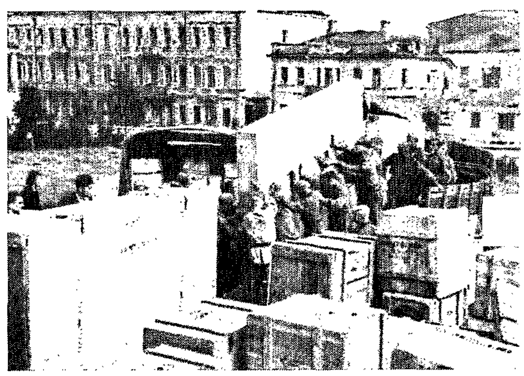
The first hiding-place to be discovered was in the village of Gross Kott, several kilometres away. In an abandoned quarry they found inside a deep tunnel, the entrance to which had been mined, Raphael's *Sistine Madonna*, packed in a box. Beside it, propped up against the wall, stood Giorgione's *Sleeping Venus*, Rembrandt's *Self-portrait with his Wife Sitting on his Knee*, Ribera's *Saint Agnes*, Dürer's *Dresden Altarpiece* and Ruisdael's *Jewish Cemetery*, along with other paintings. Pictures by Vermeer, Mantegna, Tintoretto and Velázquez were found hidden in Wesenstein Castle, while the utmost care was needed to salvage a hoard of paintings threatened with flooding in a limestone quarry near the settlement of Pockau-Lengefeld. These included Rubens' *Bathsheba*, Botticelli's *Four Scenes from the Life of Saint Zenobius*, and pictures by Cranach, Titian and Guercino.

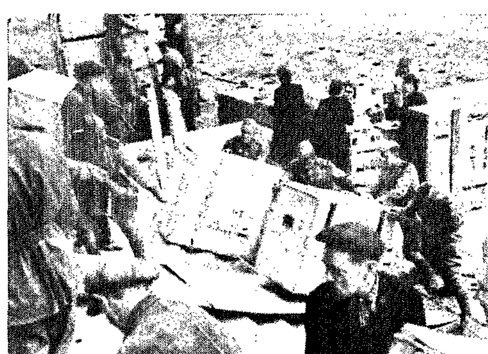
Gradually more and more hiding-places were uncovered. The work was done over a period of two and a half months by a team of artists, restorers and art experts from Moscow, including S. Churakov, a well-known restorer who subsequently worked for many years at the A. S. Pushkin State Museum of Fine Arts. The art historians N. Sokolova and S. Grigorov, the then young painters N. Ponomarev and M. Volodin, and A. Rototaev from the Arts Committee of the Council of People's Commissars of the USSR. In a very short time they had accomplished the unprecedented task of discovering the missing works and administering 'first aid' to most of them. The pictures were then moved to the relative safety of the Pillnitz Palace, provisionally inventoried, and a guard was mounted on all the places where they had been found.

From first aid to long-term treatment

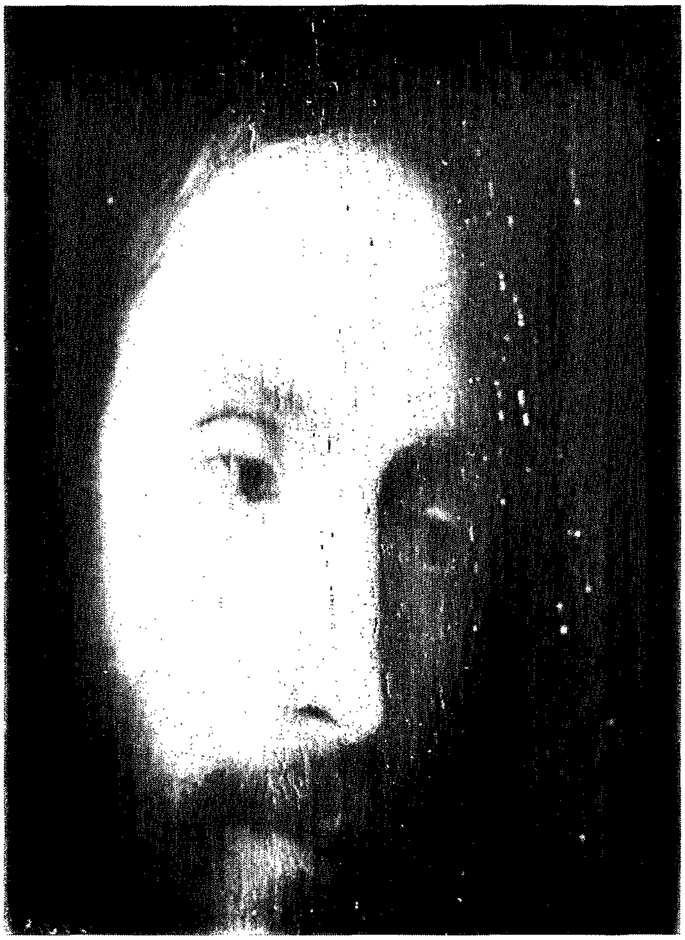
Many of the pictures had suffered a very great deal from having spent long periods in damp places, at low temperatures, and in close proximity to subterranean water. Swellings had appeared on the surfaces of some of them. The paint layer and ground had started to come away, and the varnish had begun to decompose. The backs of the canvases were covered with a thick layer of mould which in some cases was coming through to the front. The alabaster on the frames had softened, and the gilt came off on the hands. S. Churakov did an enormous amount of work on the spot, where the pictures had been found. As one of those who took part in the operations said, he ran a field hospital for priceless works of art. He dried the pictures, removed the mould,

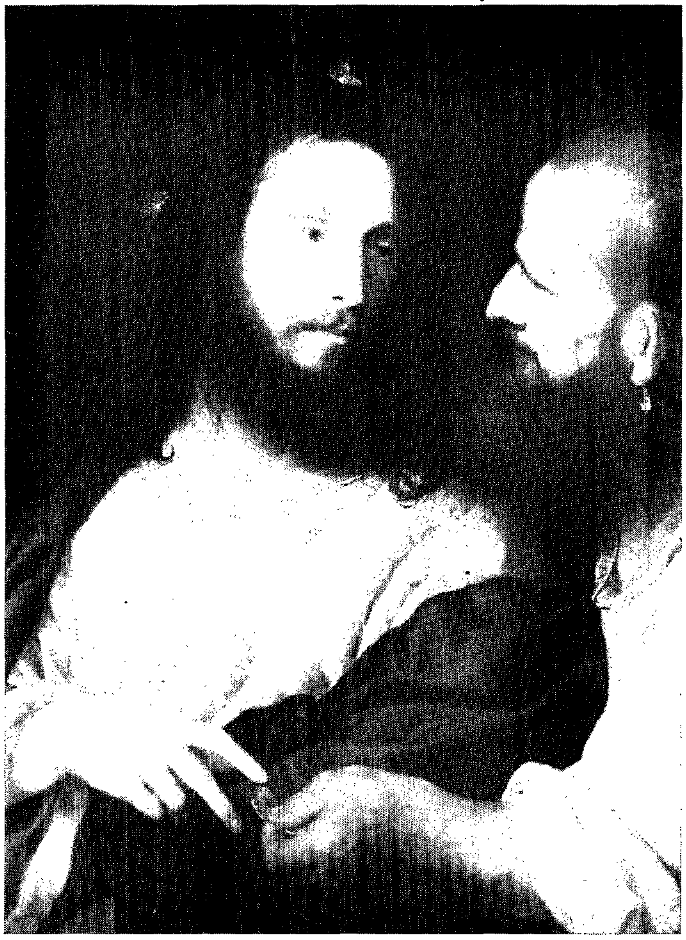
57, 58
Arrival of the boxes containing the Dresden gallery pictures at the A. S. Pushkin State Museum of Fine Arts, Moscow, 10-12 August 1945.





59, 60
Titian's *Christ and the Tribute Money*. The head of Christ before and after restoration.





secured the swollen areas of the paint layer with sturgeon glue, and did some patching with tissue-paper. Known as the 'virtuoso of scientific packaging', he managed to transfer all the pictures to Pillnitz (and later to Moscow) in conditions of complete safety.

At the same time it became clear that it was impossible to organize the proper storage and restoration of the pictures *in situ*. Furthermore, there was the danger of their being lost. In those circumstances there was only one decision to be taken: the Soviet Government gave permission for the Dresden Gallery pictures to be taken temporarily to the Soviet Union for storage and restoration. In the report which the head of the team, A. Rototaev, sent ot Moscow he wrote:

> I want to inform you that an extremely alarming situation is developing. All the paintings we have gathered to-ether at Pillnitz are—from the museum safety point of view—being stored in unfavourable conditions. The weather is very hot here. The pictures, which have been brought from the damp cellars and mines where they were hidden by the Fascists, have been transferred straight away to a very dry location. We are doing all we can in the circumstances . . . but it is clearly not enough.
>
> What gives greatest cause for concern is the actual safety of these masterpieces of the world's art. There are still cases of Fascists remaining in the rear of our army organizing diversions of carrying out explosions, arson, etc. And in spite of the twenty-four-hour military guard on the Pillnitz Palace, frequent night alarms, the existence of fire extinguishers and other measures, we are all in a constant state of great anxiety.
>
> We are convinced that the time has now come for an urgent decision on bringing our work to an end and dispatching the works of art to Moscow.

Official authorization for their dispatch was received on 12 July, and in a short space of time boxes were prepared, the pictures packed away and a special train marshalled. The very complicated task of rolling the large pictures on wooden shafts was undertaken. All the necessary documentation was carefully prepared, and the large canvases, which had been packed away in boxes, were carried on specially equipped flatcars over which awnings covered with tarred felt had been erected. A paramilitary guard was mounted, and in many aspects of their work the Soviet specialists and military personnel were helped by German civilians. The train left for Moscow on 31 July.

In the middle of August 1945 I was among the staff members of the A. S. Pushkin State Museum of Fine Arts who received the precious cargo. With what great emotion, responsibility and pride did we curators and restorers prepare to take this collection from a famous museum into temporary custody, in accordance with the instructions we had received from the government! It was a far from simple matter; our own museum had suffered badly from bombing during the war and major restoration work was under way in its galleries. A few months before the train arrived with the Dresden pictures, the museum's own exhibits had been returned from their places of safekeeping well behind the war front. The museum authorities were preparing for the opening of a permanent exhibition, and so August saw the collections of two great museums being shown under one roof. However, in these circumstances there was no question of the museum staff dividing the work into more important and less important. The people of Moscow were waiting with some impatience for their favourite museum to open, and the staff did not let up for a moment in their work of putting the exhibition together. It opened in October of the following year.

At the same time the pictures from the Dresden gallery were in need of urgent attention; it was a matter of preserving a great artistic heritage of all mankind.

A special committee was set up at the museum under its Director, one of the Soviet Union's leading artists, the famous sculptor S. Merkurov, and the head of the restoration workshops P. Korin. Directing the scientific work were the eminent scholars, Professor B. Vipper and the Senior Curator of the museum, A. Guber. A. Ghegodayev was put in charge of taking delivery of the items received.

It is hard to describe the emotional excitement with which we unpacked the boxes containing the treasures of the Dresden gallery. Each succeeding moment brough before our eyes one more great creative achievement of the human spirit.

61, 62
Van Dyck's *Portrait of a Man in an Overcoat* before and after restoration.

The memorable day when Box No. 100 was opened up will never be forgotten. It contained Raphael's legendary *Sistine Madonna*. We removed the lid of the box to see the white woollen sheets in which the picture had been carefully wrapped. There was a long and profound tradition in Russia of studying and interpreting this painting; for a century and a half Russian artists, writers and ordinary art lovers who had visited the Dresden gallery had been writing about it. The painting was renowned as the epitome of artistic perfection and the ideal of spiritual purity, moral greatness and selflessness. The artist Kramkoy called it 'the portrait of what the peoples think'. For the great Russian poet A. S. Pushkin it was 'the purest example of the purest charm'. A. Odoyevsky wrote: 'You unwittingly feel in your heart a striving towards the good; great thoughts burst forth in your mind.' F. Dostoevsky saw it as 'an ideal of mankind'. N. Ogarev confessed: 'I can weep before that Madonna . . . and it is a moment of marvellous pleasure.'

63
The ceremonial closure of the exhibition in Moscow, 25 August 1955.

64
The return of the *Sistine Madonna* to the German Democratic Republic, October 1955.

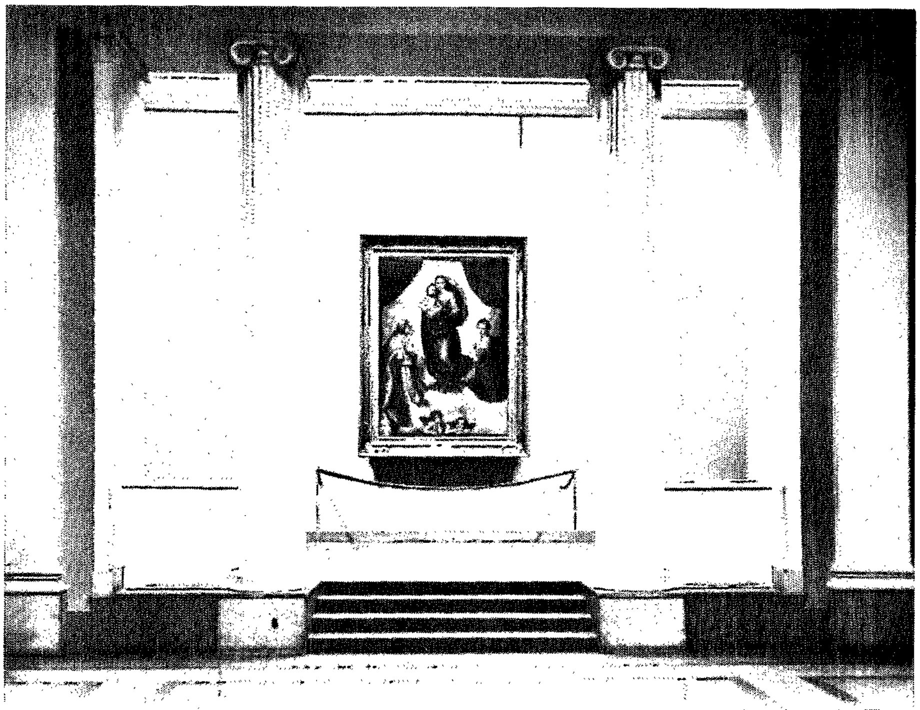
But on that August day in 1945, when the white sheets were at last removed to reveal the picture, we had no thought of those beautiful words. We saw the *Sistine Madonna* as nobody before could ever have seen it. Behind the beautiful young woman with the gentle, worried face, tenderly holding the frightened child to her breast, one could see the image of war. Devastated cities, millions of women and children killed, hundreds of thousands of monuments reduced to rubble, and hundreds of museums lying in ruins. Among those who had remained alive, who had been saved from certain destruction, there was also this woman, with her child in her arms.

As soon as the Dresden gallery pictures arrived in the museum they were accommodated in galleries which had been specifically prepared for the purpose. There they all came under the keen eyes of the curators and restorers, who set about the task of registering and documenting them, compiling accession notices, inventory entries and topographical and location cards. Each item was studied carefully and its condition entered on the accession notices. Stretching onto subframes large canvases which had been rolled before being dispatched on shafts was a lengthy business. The pictures were glazed to make sure they were kept in the best possible condition and the curators who were to be responsible for the different items were appointed by special order of the museum.

As they inspected the pictures and drew up the documentation for their safe-keeping, the museum experts and restorers realized, with enormous sadness, that many had been spoiled. According to the Deputy Head Curator of the museum, N. Eliasberg: 'Nearly a third of the pictures which came to Moscow needed special treatment. Many required immediate attention.' A detailed plan of restoration was drawn up. The museum's restoration registers show how painstakingly the work was planned. The most complex operations were photographed at various stages of their completion. Pictures in which the paint layer and ground had swollen gave the restorers particular cause for concern. When the boards which many of the great masters used to paint on had become wet through, it was a real disaster as it was urgently necessary to strengthen the paint layer because of the danger of flaking and loss of the painting. At the same time, it was impossible to start on restoration operations before the boards had dried out completely. The masterpiece of the great Venetian artist Titian, *Christ and the Tribute Money*, had suffered very badly. According to the entry in the accession notice, there was 'blistering and scaling of the ground and paint above the head of Christ, on his face, on his pink tunic and blue cloak', in other words over almost the entire surface of the painting. There were also long vertical cracks. The slightest shake would have led to irreparable flaking. The picture was housed in the restoration workshop and kept in a horizontal position. We had to wait two and a half years for the board to dry out so that we could embark on the work of restoration. And that took four months. P. Korin wrote:

> We put them all [the little fragments of the paint layer and ground that had come away] very accurately in place, not losing so much as would fit on a pin-head in the process. It was really intricate work. We used a magnifying glass. The painting was merely consolidated, without retouching and without recourse to the brush.

Among the many paintings which required serious attention from the restorers were such world-famous works as Rubens' *Bathsheba*, Correggio's *Madonna of Saint Sebastian*, Andrea del Sarto's *Holy Family with Saint*



65
Raphael's *Sistine Madonna* was exhibited in a room of its own.

Catherine, Lucas Cranach's *Portrait of Duke Henry the Pious* and Francesco Francia's *The Crucifixion of Christ*. In the case of the Francia painting the board took so long to dry out that work could not begin on it before 1950. A large number of the paintings, including Poussin's *The Realm of Flora*, Van Dyck's *Portrait of a Man in an Overcoat* and others, had been spoiled by the varnish which had been applied to their surface. In all such cases the varnish had to be removed by exposing the paintings to alcohol vapour in special boxes.

The work of removing mould, which is also very harmful to paintings, had begun in Germany and continued for a long time afterwards. Many pictures were completely covered in it, for example, Velazquez's *Portrait of an Old Man with the Gold Chain of the Order of Saint James*, Veronese's *The Finding of Moses* and Rubens' *Crowning of the Hero*. All the surface damage to the pictures—scratches, rub marks and small areas that had flaked away—was put right with the utmost care.

For the next ten years—day in, day out—the work went on to restore the treasures of the Dresden gallery. At the same time they were subjected to intensive scientific treatment and study. The process of identifying the pictures was not always easy, for some of them arrived without any identification marks. It was a good opportunity for the younger members of the museum staff to improve their professional skills and the high quality of the Dresden collection encouraged a steady stream of articles, dissertations and theses.

A great exhibition and return to Dresden

On 31 March 1955 the USSR Council of Ministers decided that the time had come to return the paintings to the German Democratic Republic. On the initiative of the Government of the German Democratic Republic, however, it had also been decided to put the Dresden pictures on show at the A. S. Pushkin State Museum of Fine Arts from May to August 1955 before they were returned.

At the ceremonial opening of the exhibition on 2 May it was pointed out that the Kunstsammlung pictures had been saved twice—first by Soviet troops, and second by Soviet museum staff and restorers. The exhibition was open for 114 days, from 8.30 a.m. until 10.45 p.m., i.e. for 15 hours every day. It received between 10,000 and 11,000 visitors a day—a total of 1,218,000 people saw it. It was an amazing festival of art.

An enormous amount of work was put in before the exhibition opened, and all in a very short space of time. Fourteen of the museum's galleries were cleared to take the pictures from Dresden. The museum produced a plan of the exhibition layout. Some 515 of the more than 700 pictures were selected for display. Their excellent knowledge of the paintings themselves allowed the museum experts to mount an extremely instructive and memorable exhibition.

The pictures were arranged in the various galleries according to the national schools they represented. The most significant works were given pride of place. Raphael's *Sistine Madonna* had a gallery to itself, and there were always visitors standing before it in reverent silence. I recall what someone said way back in 1945 when the picture was first removed from its box in the Pillnitz Palace after its long incarceration. 'Hats off!'

The museum did a great deal to prepare its Soviet visitors for the Dresden gallery exhibition. A handbook was produced for the museum guides, who had an extremely difficult task to perform. In a single, unusually long tour of between two and two and a half hours they had to acquaint their group of visitors with the most important pictures in what was a vast exhibition, tell them something of the various national schools, and describe the main features of the various stages in the development of European painting from the fifteenth century to the beginning of the twentieth century. It was a tour of great masterpieces of painting, and of its greatest masters.

The guides were on the go from morning to evening. Before they were allowed to lead a tour they all had to prove themselves before a special committee. Experts were always available, and in the three and a half months that the exhibition lasted 1,796 tours were conducted, and 1,133 special talks were given by experts. In response to numerous requests, the museum staff prepared lectures with slides, and took them out to educational institutions, factories, scientific research institutes and various other institutions in the country. More than a thousand lectures were given during the exhibition. Right up to the present day the museum is still meeting requests for lectures on the pictures of the Dresdener Staatliche Kunstsammlung.

The numerous publications that were prepared for the opening of the exhibition were completely sold out in a very short period of time. The catalogue written by museum staff was published in an edition of 125,000 copies. The guidebook had a print run of 150,000 copies and sold out in just three weeks. Specialist booklets on some of the more important pictures were printed in large numbers of copies, and in addition 150,000 photographs, 120,000 colour reproductions and 30,000 sets of postcards were also available. A colour-slide programme about the Dresden gallery enjoyed widespread popularity. Much effort was also devoted to popularizing the exhibition through the cinema; apart form general coverage, films were also made on individual parts of the collection.

As viewers were becoming acquainted with the gallery's treasures the museum curators and restorers were preparing the pictures for their return. Yet again they set about drawing up documentation. A registration certificate was completed for each work, which had to show the condition of the picture on the day of transfer and all the restoration work that had been done on it while it was in the museum.

The exhibition closed on 25 August 1955, and the first painting was handed over to the German museum authorities. It was Dürer's *Portrait of a Young Man* which is now known as *Portrait of Bernhard von Reesen*. The remarkable image of a Renaissance man which he created, full of inner fire and unquenchable conviction, was as it were a symbol of this unparalleled epic in the history of the world museum movement, in which some of the greatest and most valuable works of art were saved, given new life and returned whence they came.

The museum archives contain a remarkable book of visitors' comments. Here are just two of the many hundreds of remarks entered in the book by visitors to the exhibition (both by people who were in the war):

> I was badly crippled in the war with the Fascist aggressors, but uncontrolled rancour is alien to us Soviet people, and together with the people of the German Democratic Republic, who have broken with Fascism once and for all, I rejoice with all my heart at the wise and magnanimous step our government has taken in returning to the people of Germany such a very great cultural treasure as the Dresden gallery. I consider myself fortunate to have been able to see this treasurehouse of art.—*B. Zinov (disabled in the Patriotic War)*.

> I first saw the *Sistine Madonna* and the unforgettable work of the great Dutch and Italian painters ten years ago, in May 1945. It is with sadness that I now bid farewell to these pictures whose fate it befell me to share and take to heart in those first post-war days when I was concerned with organizing the search for them . . . cherished pictures from the Dresden gallery, may you still have before you many centuries of life, and awaken a sense of the good in the hearts of future generations.—*D. Kotel'nikov*.

The summer of 1956 saw the opening of a permanent exhibition of the Dresden gallery's pictures in the Staatliche Kunstsammlung's restored premises. And now once again these master paintings have been on show in the A. S. Pushkin State Museum of Fine Arts. For some visitors it was a meeting with old friends; for others it was an encounter with history, passed into the realm of legend.

[*Translated from Russian*]

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Constantly rising printing and postage costs are forcing newspapers and journals the world over to raise their prices. Unfortunately, *Museum* is no exception.

To our great regret, therefore, we must announce that in 1986 the price of a single issue of *Museum* will go up from its present price of 40 French francs to 43 francs. The cost of a one-year subscription will increase from 128 French francs to 138 francs.

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