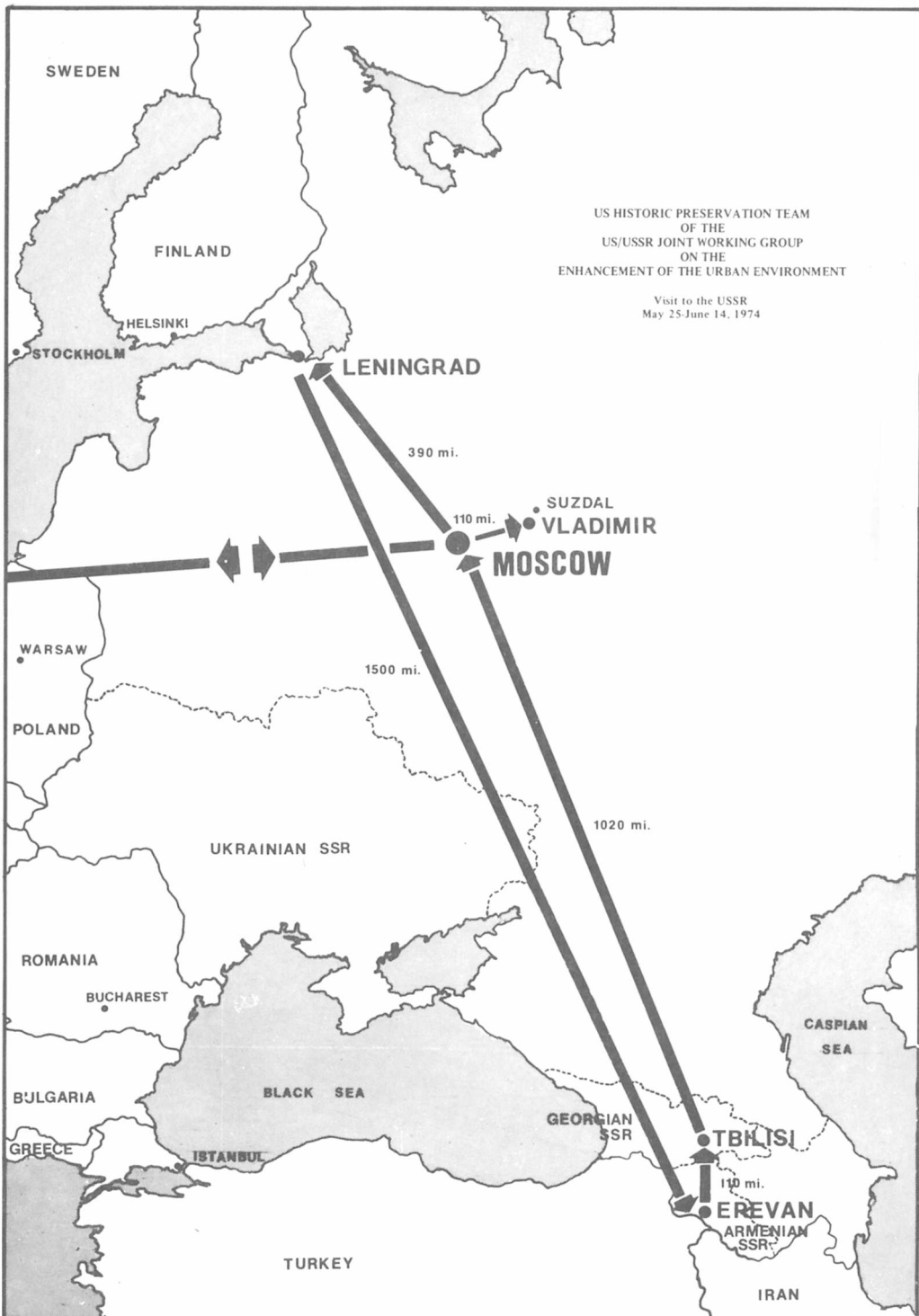




**A Report by the
US Historic Preservation Team
of the
US-USSR Joint Working Group
on the
Enhancement of the Urban Environment**



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May 25 - June 14, 1974

**Washington, D.C.
1975**

Foreword

The enhancement of the urban environment is one of the 12 substantive areas in which the US and USSR agreed to develop cooperation under the May 1972 US-USSR Agreement on Cooperation in the Field of Environmental Protection. A Joint US-USSR Working Group was organized shortly thereafter to carry out Section IV of the Memorandum of Implementations of the Agreement. The section deals with the enhancement of the urban environment.

During its first meeting in Washington in April 1973, the Joint US-USSR Working Group on the Enhancement of the Urban Environment defined the main aspects of the urban environment which would be studied under terms of the Agreement (see report). Accordingly, the US Working Group on the Enhancement of the Urban Environment established eight sub-groups to deal with the main topics for cooperation that had been agreed upon. The second meeting of the Joint US-USSR Working Group, held in the Soviet Union from November 18 to December 1, 1973, prepared the list of joint projects to be carried out in 1974 (see report).

The US Historic Preservation Team, one of the eight sub-groups established by the US Working Group, was formed to deal with Topic IV.3 of the joint US-USSR cooperation program, entitled "Improvements of the environment with regard to places of historic monuments." Agreement of both sides during the second meeting of the US-USSR Joint Working Group to include historic preservation in the work program for 1974 provided the basis for the visit of the US team to the Soviet Union from May 25 to June 14, 1974. The purpose of the visit was to study the current principles, policies, and practices of Soviet historic preservation, with emphasis upon the procedural and legal aspects involved in the registration, protection, and adaptive use of historic monuments; on restoration programs and techniques; and on the role of the private and academic sectors in Soviet preservation.

The US Historic Preservation Team, the first of the US sub-groups to travel to the USSR under terms of the above Agreement, was composed of five representatives of the National Park Service, Department of the Interior, with primary concern in historic preservation, as well as of three representatives—one each—from the American private and academic sectors involved in preservation activity, and the Advisory Council on Historic Preservation.

The following report of discussions held by the US Historic Preservation Team was edited by Dr. Anatole Senkevitch, Jr., School of Architecture, University of Maryland, who represented the US academic sector. He also provided English translations of the various Russian-language documents and materials, supplied by the participating Soviet agencies, that have been incorporated into this report. The authors of the papers on selected aspects of the discussions are identified at the head of the papers and in the front matter. General Editor for this report is Dr. A. Russell Mortensen, Director, Office of Archeology and Historic Preservation, National Park Service, U.S. Department of the Interior. He was Head of the US Team.

Preface

The US Historic Preservation Team visited the Soviet Union from May 25 to June 14, 1974. Following two days of meetings and discussions in Moscow, the US delegation visited Vladimir, Suzdal, Leningrad, Yerevan, and Tbilisi. The team then returned to Moscow for further discussions and meetings.

The topics discussed in the series of meetings with Soviet officials and agencies were:

- policies and priorities governing historic preservation at the all-union (national), republic, and local levels
- methods and criteria for identification and registration of historic sites and monuments
- legal and administrative mechanisms for the protection of registered historic properties
- principles and techniques of restoration of historic structures, and the operations of restoration workshops
- the role of touristic development and city-planning in the historic preservation process
- participation of the academic community and private sector in the historic preservation process

The visit to Vladimir and Suzdal was focused on the preservation of historic buildings and ensembles in the two cities, and on the work of the central Research Institute for Experimental Design of Trade/Service Buildings and Tourist Facilities (TsNIIEP) on the design, planning, and construction of a major tourist complex in historic Suzdal.

In Leningrad, the focus was on the measures and priorities employed by agencies, answering mainly to the Chief Architect of the city, for the preservation of the city's historic buildings and ensembles, as well as on the work of the *Restavrator* (Restorationist) restoration workshop at near-by Petrodvorets and Pushkin.

The visits to Yerevan and Tbilisi were primarily concerned with acquainting the US team with the principal historic monuments in the two areas, and with current and proposed restoration projects.

The US team returned to Moscow for two more days of meetings and discussions. At the concluding meeting of the trip, held with the leadership of the Union of Architects of the USSR, the US team also reported its impressions of its trip and of the striking dispar-

ity between superior Soviet achievements in restoration of historic buildings and the problems with the quality of modern Soviet construction. Its report stimulated a frank and informative exchange of views.

The visit was generally responsive to American interests, although the itinerary tended to allocate too much time to peripheral activities while providing too little time for organizations whose work was far more germane to the interests and needs of the US team. It was the first visit to the USSR for all but one of the US team members, and was most informative both in general terms and in regard to the specific interests of the participants.

There were many lengthy and detailed meetings with Soviet agencies on matters of common concern. These proved to be very productive, and exchanges of information were generally carried out with considerable good will on both sides. At opportune times members of the US team raised the question of areas for future exchange and cooperation. Most Soviet officials expressed great interest, both individually and collectively, in continuing cooperation on historic preservation. However, the State Committee for Civil Construction and Architecture—the Soviet lead agency for implementing the US-USSR Agreement on Cooperation in the Field of Environmental Protection—cancelled its final scheduled meeting with the US team. As a result, there was no possibility to conduct discussions or negotiations at the end of the trip with respect to the degree and nature of any further exchanges in the area of historic preservation.

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Introduction

Background, Findings, and Recommendations

Soviet Administrative Structure

The US Historic Preservation Team was briefed by the Soviets on their policies and criteria governing historic preservation at the all-union (national), republic, and local levels. Implicit—though never fully explained in the various briefings—was the recurrent theme of the centralization of decisions on preservation policy in Moscow. Despite such centralization, however, numerous procedural and working relationships could be seen to operate among the various levels of the Soviet government in the formulation and implementation of preservation policy. These relationships, which will be noted in the reports that follow, can best be comprehended by briefly sketching the administrative structure of the Soviet government.

All-Union Level. At the apex of the administrative pyramid stands the Council of Ministers of the USSR, a large body of more than fifty members. The administrative units which make up this body include ministries, state committees, and other specialized agencies.

Ministries administer specific sectors of the nation's economic, political, military, and socio-cultural life. Their names ordinarily indicate their field of responsibility. All-union ministries, which are organized on a highly centralized pattern, directly administer activities and enterprises under their jurisdiction. They also operate through counterpart ministries bearing the same name in each of the republics. Thus the Ministry of Culture of the USSR will transmit its directives pertaining to preservation policies, which it is empowered to formulate, for execution by the ministries of culture in each republic.

The state committees and other specialized agencies differ from ministries in that their duties ordinarily involve developmental, coordinative, and planning functions rather than direct administrative operations. Thus, as a result of the Central Committee decision of November 1962 to recentralize the structure of Soviet administration, the

State Construction Committee (*Gosstroï*) was reorganized on the pattern of an all-union ministry, with branches in the republics, to which all building organizations have been subordinated. The State Committee for Civil Construction and Architecture (*Gosgrazhdanstroi*) was established at this time as an overall planning agency under the jurisdiction of *Gosstroï*.

Republic Level. Each republic of the USSR also has its own council of ministers, with ministries, representatives of state committees and other specialized agencies. The republic ministries operate under the immediate supervision of the councils of ministers and legislative organs of the individual republics. Legally, the ministries in the constituent republics are also responsible to their superior ministry in Moscow, as indicated in the above example of the Ministry of Culture of the USSR transmitting directives for execution to its counterparts in each republic. In the unlikely event of a conflict between all-union and republic authorities, it is a reasonably safe presumption that the views of the center in Moscow will prevail.

Local Levels. Below the level of the republic, there are usually at least three subordinate layers of administration. The first involves the autonomous republics, which constitute regional administrative units for ethnic minorities within each constituent republic. The second involves the territorial (*oblast'*) or enlarged rural district units. The third is comprised of towns, villages, and hamlets, which may be described as local units.

The urban areas operate under a separate regime. The largest cities, such as Moscow, Leningrad, and Kiev, are directly subordinate to their respective republics and are themselves broken up into regions (*raïons*).

At each level of this hierarchy there are various departments and administrations which are responsible both to the executive committees of the council elected at that level and to the administrators exercising corresponding functions at the next higher level. This, for example, is the manner in which the network of offices of State Inspection for the Protection of Monuments is operated. In the event of conflicts arising out of such double supervision, the higher council organs are vested with the right to resolve the dispute. As might be expected, the administrative structure diminishes in complexity as it descends from region to locality.

The structure of Soviet public administration is thus built around differential treatment of various types of administrative functions and activities. In the case of an all-union ministry—such as the Ministry of Culture of the USSR—and similarly organized central agencies—such as those institutes organized under the State Committee for Civil Construction and Architecture—the pattern remains one of

extreme centralization, with the field organizations responsible directly to Moscow. In the republic ministries and agencies, policy control is centralized, but some administrative decentralization is achieved by utilizing the republic and its subordinate layers of government as instruments of supervision and operation. Where administrative activities are of diversified local significance, the point of policy control is the republic, with operational responsibilities lodged at the regional, district, and local levels.

Legal and Legislative Framework. For purposes of clarifying the basis for legal mechanisms in the field of preservation, brief mention should also be made of the Soviet legal and legislative framework. The Soviet legal system is organized around the concept that the law is the official instrument for carrying out the policy of the Communist Party. In theory the sole legislative bodies are the Supreme Soviets of the USSR and of the union and autonomous republics. In practice, all major decisions which are intended to serve as guidelines for activity in the major sectors of the Soviet economy and life are frequently enacted by the Soviet administrative leadership at the all-union and republic levels. Many important laws are initially issued as resolutions or decrees in non-legal form but usually vested with the authority of a statutory mandate. Such resolutions are usually adopted for the express purpose of promulgating important new goals that party and administrative organs, deeming them to bear directly on the main policies and procedures pursued at the time, fully intend to be properly implemented by Soviet public administration agencies.

Thus numerous important statements of party and governmental policy regarding historic preservation have been issued in recent years by the Council of Ministers of the USSR and of the Russian Soviet Federative Socialist Republic (RSFSR), the latter viewed implicitly as the *primus inter pares* among the constituent republics. Other agencies which have likewise been involved in issuing such proclamations and resolutions are the Academy of Sciences of the USSR and of the RSFSR, and the All-Russian Society for the Protection of Historical and Cultural Monuments, which has been granted legal authority by the Council of Ministers of the RSFSR to pass on all planning and redevelopment projects bearing upon preservation activity in the Russian Republic.

Soviet Public Preservation Agencies

The involvement of the State Committee for Civil Construction and Architecture (*Gosgrazhdanstroi*) in the Soviet historic preservation process is subsidiary to that of the Ministry of Culture of the USSR: its responsibility relative to historic preservation is more nearly

one of implementing and complying with—chiefly through the work of its physical master planning institutes—preservation policy formulated by the Ministry of Culture of the USSR. In view of its being the Soviet lead agency in the US-USSR Joint Working Group for the Enhancement of the Urban Environment, however, the organization of the State Committee bears clarification.

State Committee for Civil Construction and Architecture. Created in the fall of 1963 to replace the former Academy of Construction and Architecture and to augment the expanded authority of the State Construction Committee of the USSR (*Gosstroï SSSR*), the State Committee on Civil Construction and Architecture was conceived as the chief national agency for developing and coordinating standards and norms for all types of civil construction in the USSR. Particular emphasis was placed on combining for the first time in one agency responsibility for conducting both theoretical and practical work on development of master planning and design projects. Nine central institutes were created under the State Committee to develop and administer on a national level various specialized aspects of physical master planning; the sole exception to such scope is the Central Institute for the Theory and History of Architecture, a direct carry-over from the former Academy. Five administrative departments were also created within the State Committee to review and supervise the work of the institutes; Aleksei O. Kudriavtsev, Chairman of the USSR Joint Working Group, is Chief of the Department of Town Planning and Development. In addition to the central institutes in Moscow, five complex zonal institutes were likewise organized to coordinate planning activity for regions encompassing the five major climatic zones in the USSR. The US Historic Preservation Team met with five of these central and zonal institutes:

1. Central Research Institute on the Theory and History of Architecture. Yuri S. Yaralov, Director.

Apart from conducting general research on the country's architectural history, the responsibility of this Institute in preservation matters concentrates on visual and written documentation of registered monuments and ensembles (comparable in scope to work by the Historic American Buildings Survey) for town-planning agencies developing projects under the aegis of one of the State Committee's institutes.

2. Central Research Institute for Experimental Design of Trade/Commercial Buildings and Tourist Facilities. Mark A. Orlov, Director.

Projects for major tourist complexes produced by this institute are developed on the basis of an effective synthesis of touristic, economic, and preservation criteria. The US team inspected the Institute's project for a major tourist center in

Suzdal, currently nearing completion. The Institute's planning work was impressive in detail, scope, and level of effort, providing innovative information, and material relating to the economic and touristic rationalization of historic urban center restoration. In contrast, measures to develop criteria for introduction of modern construction in historic urban centers was not fully developed or resolved in the Suzdal project.

3. Central Research and Design Institute for City Planning.
Vladimir N. Belousov, Director.

The Institute's Department of Town Reconstruction is producing some highly innovative work in developing mathematical criteria, by use of computer programming and plotting, for preserving and enforcing the spatial and compositional integrity of the protective zones (roughly comparable to our scenic easements) established around registered monuments and ensembles in urban centers. Important work is also being conducted on development of criteria for preserving and integrating historically-evolved planning systems and related historic structures into urban redevelopment projects. At present, this work is chiefly experimental and consultative in nature, and does not carry the force of policy guidelines.

Although these avenues of research are not yet a high priority area of interest for the US, the Soviet studies appear to provide valuable information, innovations, and guidelines for implementation.

The Leningrad and Tbilisi Zonal Research and Design Institutes, in contrast, have no appreciable involvement with the historic preservation process, except in having to comply with the protective zones of registered landmarks and ensembles situated in their various project areas.

Ministry of Culture of the USSR. It is the Ministry of Culture of the USSR that has been given responsibility to formulate and administer national preservation policy in the Soviet Union. It is also responsible for coordinating the work of its republic counterparts on the registration and preservation of cultural monuments. The US Historic Preservation Team met with representatives of the two agencies within the national ministry which have been created to conduct this work:

1. Office of Fine Arts and Protection of Monuments. Dmitry N. Kulchinsky, Deputy Chief.

This agency has responsibility for development of criteria for definition and enforcement of the projective zones, zones regulating construction, and preservation zones, established for registered monuments, ensembles, and entire districts. This agency also houses the office of State Inspection

for the Protection of Cultural Monuments, which has responsibility for administering a network of offices of Inspection for the Protection of Monuments at the republic and local levels.

This agency also has responsibility for administering a number of restoration workshops which plan and supervise the actual restoration and maintenance of registered monuments. Certain members of the US team visited the All-union Production and Scientific Restoration Center of the Ministry of Culture of the USSR, which is administered by this agency.

2. Institute of Art History. Oleg A. Shvidkovsky, Deputy Director.

The Institute houses both the Office of the Register of the Historical and Cultural Monuments of the Peoples of the USSR and the Editorial-Publication Council for the Register. These two special preservation sectors within the Institute are responsible for developing criteria for the identification and registration of cultural monuments, as well as for supervising the preparation, publication, and maintenance of the Register for the entire country.

The administrative system of these preservation agencies within the national ministry is augmented at the republic and local levels. Each has its effective counterpart within a republic ministry of culture, as well as representatives at major levels of local jurisdiction. The exceptions to this administrative framework occur in the Soviet republics of Armenia, Estonia, and the Ukraine, where administration of these preservation agencies is assumed by the state construction committee (*gosstroï*) at the republic level.

Major Cities. A similar exception occurs for such major Soviet cities as Moscow and Leningrad; there, agencies supervising work on the preservation of cultural monuments answer both directly to the central ministry and to the Office of the Chief Architect of the respective city, which in turn reports to the executive committee (city council). Moreover, these cities also have their own restoration workshops. The one in Leningrad, the "Restavrator" Amalgamated Workshop, which was visited by the US team, is the largest and most comprehensive restoration workshop in the entire Soviet Union.

Findings

Although the differences between Soviet and US political,

planning, and land development systems limit the application of criteria used by one country to the other, the Soviets have done considerable work on norms and standards to regulate both preservation and restoration activity. This development is related to current US efforts to improve criteria for determination and implementation of national preservation policy. It is believed that much can be learned from a comparison of the criteria and standards employed and the results obtained.

Recommendations for Further Exchanges

It is not clear that the State Committee for Civil Construction and Architecture believes that the subject of historic preservation can be dealt with profitably, from their point of view, under the Environmental Agreement. In the opinion of the US Historic Preservation Team, however, it seems clear that both countries might benefit appreciably from the continuation of exchanges of information and specialists begun during the US delegation's recent visit to the USSR. The US team believes, further, that its visit has afforded valuable opportunities for continuing rewarding contacts between US and USSR specialists concerned with various aspects of the historic preservation process as it relates to the improvement of the urban environment.

In the interest of Historic Preservation in both countries, it is strongly recommended that the USSR send a delegation of planning specialists to the US to study American achievements in the touristic development of historic urban areas, and that the US send a delegation of restoration specialists to the USSR to study the Soviet approach to the restoration enterprise. A Soviet exhibit of graphic and illustrative material together with representative artifacts depicting the work of their restoration workshops at Pushkin, Moscow, and elsewhere would be most valuable and profitable for US preservationists as well as the general public. A comparable American exhibit showing our latest achievements in the adaptive preservation and restoration of historic urban areas could be sent to the USSR. Continuing cooperation should be pursued through the active exchange of publications and specific information on innovative preservation and restoration methods, as well as in the sponsoring of joint conferences and exchanges of visiting lecturers and specialists. In view of the role of the U.S. Department of the Interior as a participating organization in the US Working Group, it is strongly recommended that the Ministry of Culture of the USSR, its relative counterpart, be likewise included as a participating organization on the Soviet side in order to facilitate the development of a long-range program for continued cooperation and exchange on historic preservation under the Environmental Agreement.

Papers on Selected Aspects of the Discussions

Preservation Policies

F. Ross Holland

There is no question of the Soviet commitment to historic preservation. Many agencies are involved in one way or another—and with at times differing purposes—in restoring old structures. Money seems to be no obstacle, for the Soviets are lavish—at least by American standards—in their expenditures for historic preservation purposes. Their willingness to expend large sums of money on preservation has enabled the Soviets to engage in a broad range of ambitious undertakings, from the reconstruction of stone temples in Armenia to the massive restoration of magnificent palaces outside Leningrad.

Historic monuments have assumed a number of significant roles in the Soviet Union. They are viewed, to begin with, as basic architectural elements that give a town its visual identity and special character. They are also viewed as objects to be studied by those who are concerned with the history, civilization, and art of the Soviet Union and of its various regions. That the widest sections of the Soviet population are now becoming more and more interested in historic monuments is indicated by the growing voluntary participation of youth and adults alike in projects to preserve and restore historic complexes. Not least, historic monuments have become important stimulants in the phenomenal growth of tourism, both domestic and foreign, in the Soviet Union. Whatever the emphasis, it is abundantly apparent that the role and importance of historic preservation has increased considerably in recent years.

Perhaps the watershed date marking the great upsurge of Soviet public involvement in preservation is 1965, the year when a group of Soviet intellectuals, seeking to rescue numerous historic buildings from a senseless demolition being carried out in the name of progress, acted to found the remarkable Society for the Protection of Historical and Cultural Monuments. The biggest centers of this unprecedented wave of popular protest were, paradoxically, two of the

complexes that have since become showpieces of modern architecture in Moscow: The Hotel Rossiya and the Kalinin Prospect. Though erected in the mid-sixties on the ruins of some of the more significant surviving portions of Moscow's historic urban fabric, these two complexes nonetheless managed—after considerable and, for the most part, successful protests—to preserve an appreciable number of important historic landmarks, which are now being restored.

It is apparent that architects and architectural historians have become the driving force behind the modern Soviet preservation movement, and that monuments of architectural, rather than historic or archaeological significance are the prime objects of its activity. Consequently, Soviet preservation policies that could be deduced from observations of practices and from our conversations with Soviet officials reflect a conception of the historic structure more as a work of the architectural and city-planning art than as something that experienced human activity.

Specific Policies

Reconstructions. There were numerous examples of reconstruction of historic structures in the Soviet Union. Indeed, many of the buildings located in the suburbs of Leningrad had to be virtually reconstructed as a result of the 900-day siege by the Germans during World War II. The Great Palace at Peterhof, for example, a considerable section of which was destroyed by explosives detonated by evacuating Germans, has been virtually rebuilt. The ancient classical temple at Garni, in Armenia, destroyed in an earthquake numerous centuries ago, is now being reconstructed. About 60% of the old granite blocks, which have survived in usable conditions, are being utilized; new stone, obtained from a

nearby quarry, is being used to fill in the pieces, employing the same silhouette but none of the ornamental details of the original fabric. In Armenia, outside Yerevan, authorities have been planning for some years to reconstruct the ancient Church of Zvartnots, a complex circular building of unusual design. Plans call for the full reconstruction of the enormous building, even though its surviving remains are not more than six feet tall.

These are but a few examples of reconstruction. It is evident that reconstruction is an active policy, that the Soviets do not hesitate to rebuild if the architectural significance of the structure warrants it, and that reconstruction is by no means restricted only to those buildings that have suffered damage in World War II.

Adaptive Use. Adaptation of historic buildings to modern use is very much a part of current Soviet preservation practice. There were perhaps more examples of this than any other activity viewed by the US Historic Preservation Team. It was interesting to note the variety of modern uses to which these buildings were adapted. One preservation official informed the team that churches were the most difficult building type for which to find viable new uses. Generally, about the best use developed for them thus far was transformation into museums. Two noteworthy examples of this kind of adaptive use examined by the US team were the Slavic Revival church in Vladimir, dating from 1914, which had been converted into the Vladimir Museum of Glass Works, and Rastrelli's sumptuous mid-eighteenth century Rococo cathedral for the Smolny Convent in Leningrad, which has recently been converted into a museum of "Leningrad Today and Tomorrow."

One of the most extensive restoration-adaptation projects that we saw centered around the Monastery of the Saviour and St. Ephremius in Suzdal. This monastery, one of several in this ancient Russian town, has a long and significant history, including service as a repository of unwanted female members of the Russian nobility. Today the monastery is being converted into a hotel complex: the refectory is being transformed into a music hall, a restaurant is being developed in the church, and log-cabin hotel units are being erected on the site of the early structures, long since disappeared, which the historic inhabitants originally occupied.

The determining factor in restoring a structure is often the question of whether the building merits restoration on the basis of its architectural value. In the past, Soviets have tended to restore a building and then find a use for it. The US team saw a large number of buildings, especially churches, which had been restored, but for which no adaptive use had been found. Most were rather remote, and there was some difficulty in finding an appropriate use for them. Much more emphasis has begun to be placed in recent years, however, on finding an

adaptive use as soon as possible, preferably before development of plans for restoration.

Usually, buildings are restored fairly faithfully on the exterior. However, in the interiors of buildings being adapted to modern use, only the unique or distinctive architectural or decorative features will, as a rule, be restored. In cases where the buildings are of outstanding architectural and artistic significance, however, as in the case of the splendid palaces at Petrodvorets (Peterhof) and Pushkin (Tsarskoe Selo), no effort or expense is spared in duplicating faithfully and with consummate skill the whole of the ornate interior fabric.

Intrusion on Historic Scenery. Though the Soviet Union has instigated a nation-wide policy regarding rigid control of new construction in an important historic district and compatibility of old and new buildings within less significant areas, it was abundantly apparent that this policy had, until recently, been often violated. The setting of several historic structures in Moscow, for example, had been severely compromised and physically intruded upon by the Hotel Rossiya, Moscow's largest and principal tourist hotel (even though the very survival of these few buildings represents an enormous and unprecedented victory for the Soviet preservation movement). The small but delightful mid-twelfth century Church of the Intercession of the Virgin at Bogoliubovo, outside Vladimir, has an enormous regional system of power lines passing within 100 feet of it. And in the town of Vladimir can be found a mix of modern and historic structures that is not compatible.

Soviet preservation architects and planners with whom we talked both recognized and deplored the existence of these examples. Most of these intrusions, however, had occurred years before preservation policies were either formulated or carried much weight. As will become apparent in the discussion of the legal framework for Soviet preservation, the Soviets have now begun both developing and enforcing stringent policies to control intrusion; generally, it was apparent that they have been largely successful.

One other example of intrusion which should be mentioned is the one of tying cables and wires, such as those needed to operate trolley cars, directly to historic structures. This practice was particularly evident in Leningrad, and involved such marvelously restored buildings as Montferrand's St. Isaac's Cathedral and de Thomon's Exchange and rostral columns at the apex of Vassily Island. In both cases there seems to be no better solution, and one must admit in these instances that practicality is a better course than purity, for the alternatives could have intruded far more harshly on the scene than do the cables attached to the structures.

Moving Historic Structures. It is evident that Soviet preservationists

would rather leave historic buildings in their original setting. They will however, move historic structures in certain circumstances. In cities, for example, a background historic building of marginal significance might be moved to a compatible historic setting rather than be compromised by—or demolished to make way for—overpowering modern construction. A group in the Central Research and Design Institute for City Planning (under the State Committee for Civil Construction and Architecture), for example, is presently involved in developing projects to establish criteria for the relocation of such buildings in registered historic towns.

Another trend involves the moving of significant wooden and vernacular structures from isolated parts of the country, where access, maintenance, and protection are minimal, to selected sites for the purpose of establishing so-called outdoor architectural museums. In Tbilisi, the capital of the Georgian Republic, preservationists have established a museum-village “under the open skies” of ancient and vernacular Georgian architecture. Buildings ranging from dirt and stone dug-outs to rather elegant wooden structures have been moved from their original site and arranged systematically in sections of the park intended to depict particular regions of the country. In some cases, subsidiary buildings have also been moved, and it was evident, even from a cursory examination of the facility, that a serious attempt is being made to restore not only buildings but their original settings as well. In Suzdal, the US team saw another outdoor museum, this time concentrating expressly on wooden structures. These buildings, which include churches, houses, windmills, and assorted farm buildings, have been brought over from various parts of the Russian northeast and re-assembled on the site. Though not arranged as systematically as those in Tbilisi, these buildings exhibit different architectural styles and techniques, making it a very interesting and popular display.

Tourist Complexes. The Soviet Union has found that historic sites have great value in promoting both domestic and foreign tourism. Such recognition has, in turn, supplied a compelling rationale for advocating historic preservation. One of the institutes under the State Committee for Civil Construction and Architecture, the Central Scientific Research Institute for Experimental Planning of Trade/Service Buildings and Tourist Complexes, has responsibility for developing master plans for tourist complexes and regions. Mark A. Orlov, Director of the Institute, has placed considerable emphasis in his projects upon inclusion of all historic monuments and ensembles within a region as an integral basis for developing a tourist complex or region. Thus far, these complexes have been based primarily on a collection of historic towns and sites within a region, one defined by geographical and historical circumstances creating an area which can be considered a whole.

For each region, the Institute begins by identifying not only the historic sites and structures, but also the indigenous traditions of folk art and cuisine, together with noteworthy archaeological and literary sites and landscape scenes. Next, the Institute devises a master plan for development of a region, every aspect of which is rationalized in terms of careful economic analysis. The salient parts of such a master plan include the determination of historic buildings requiring restoration as museums and rehabilitation for adaptive use; prescription for the number of hotel and/or motel facilities needed; specification of the number and type of various tourist orientation and service facilities, together with the particular aspects of native traditions and crafts to be promoted in each; and location of both existing and projected highways needed to provide tourist and service access to the various parts of the region. After the plan is approved, at the national and then the local levels, implementation of it is undertaken by the local—usually the district (oblast)—level of government.

The earliest and in many ways the most ambitious undertaking by the Institute is the project for the so-called “Golden Ring,” a tourist complex encompassing such historically-important ancient Russian towns as Vladimir, Suzdal, Pereyaslavl-Zalesky, Rostov, Zagorsk, and Yaroslavl. The territorial and historical framework of these towns, whose development is fundamentally associated with the rise and consolidation of the Muscovite culture and state, combine most effectively to provide the basis for developing a single touristic network of routes and centers.

The first and most important step in the development of the “Golden Ring” is the creation of a tourist center in the ancient town of Suzdal, currently nearing completion. Designed to accommodate over 500,000 tourists annually, the project consists of a large motel unit, an orientation center, assembly rooms, and a transportation center. In the general region, historic structures are being refurbished, restored, and adapted to modern use. For example, the refectory in the Bishop’s Palace in the Suzdal Kremlin has been converted to use as a restaurant; the US team was feted with a sumptuous dinner there, which consisted of authentically-revived medieval Suzdalian dishes, prepared in earthen pots in the traditional manner, and mead-like drink. As has already been mentioned, the Monastery of the Saviour and St. Ephemius is being converted into a hotel complex. Historic structures throughout the town are being restored. Restaurants serving native dishes are being established in several of these buildings, and plans call for the use of others as museums, exhibition centers, souvenir shops, and cultural and recreational facilities. New buildings to house administrative and service facilities are being erected in restrained designs to blend into the historic urban fabric. In time, these new developments, combined with what is already there, will create a region that will give tourists an exhilarating educational experience.

It might be well to mention, in passing, that the quality of restoration work in the Soviet Union has considerably overtaken the level of that country's modern construction techniques. This discrepancy, which was the subject of considerable discussion at our last meeting with the leadership of the Union of Soviet Architects, is perhaps nowhere more apparent than in Suzdal, where the rather high quality of restoration work stands in sharp contrast to the decidedly mediocre quality of construction exhibited by the modern Motel Suzdal nearing completion. The latter case, of course, is indicative not of preservation practices but of the problems endemic to new construction in the Soviet Union, particularly in respect to the poor detailing and finishing of buildings.

Interpretation of Historic Structures

The Soviets engage in a wide range of interpretation and employ many techniques, from simple mechanical devices to grand museums. An ancient church in the hills of Dzhvari, Georgia, had hidden sound equipment, constantly playing a record of chanting monks. The Golden Gate of Vladimir, the ancient entrance to the city and the last vestige of its ancient defensive wall, has been restored to house a museum of arms; it also includes a large, dramatic diorama depicting an attack upon the city walls, in which the Golden Gate is constructed in its original appearance. The home in Tsinandali of I. Chavchavadze, one of Georgia's leading nineteenth century poets, has been restored and refurnished in the period. Restaurants in historic old buildings, such as the one in the refectory of the Suzdal Kremlin, serve traditional native dishes from historic recipes resurrected from oblivion. In the more grand and imposing structures, trained docents conduct guided tours.

Only on occasion did the US team experience the interpretive treatment accorded the ordinary visitor. The interpretations usually provided our team, which most of our Soviet counterparts believed to consist entirely of architects, was heavily object-oriented. Much was said about the art work, architectural features, and museum objects; little was said about the people who lived in the structures or used the objects. Some members of our team who did experience the regular interpretations supplied for the guided tours given to Soviet visitors, however, indicated that their scope and format did not differ appreciably from those encountered at major American historic sites. It was obvious that interpretation is an important activity, and the Soviets devote much time and attention to it so that visitors may be properly served.

The people respond, for they obviously take pride in the historic objects and structures which illustrate their roots. The Soviets

go in great numbers to visit their historic sites, and it was abundantly apparent that they enjoy them.

Monuments to Recent History

Leningrad and Moscow experienced severe military activity during the Second World War. Though the Nazis did not penetrate either city proper, innumerable historic structures were shelled in Leningrad. Seeing the recovery of Leningrad and its environs, one cannot but have tremendous admiration for the Soviet people. It is possible to obtain a sense of the Soviet dedication to historic preservation by comparing photographs of Peterhof following the departure of the Germans with the actual restored buildings today. All of these restorations are, in a very real sense, not only indicative of the Soviet people's profound regard for their past, but also monuments to recent Soviet history.

More conspicuous commemoration of this horrid chapter in recent Soviet history is found in the form of monuments, such as the one signifying the defense line around Moscow as well as the World War II tank marking the deepest penetration by the Germans into the Leningrad defensive lines. Perhaps the most poignant monument to the effects of the war upon the fabric of Leningrad, is the assortment of pock-marked monuments which, rather than be repaired, have simply been allowed to stand with a plaque indicating that they had been damaged by German shelling during the 900-day siege of the city.

Conclusions

Prevailing policies and general attitudes about historic preservation in the Soviet Union are not much different in their ideal state from those operating in the United States. In many significant instances, however, the Soviet Union has come closer to achieving this ideal than has this country. That this has occurred, for all practical purposes, within the space of a decade indicates the extent to which preservation has become the object of both popular support and official policy at all levels of the Soviet government.

Identification and Registration of Cultural Monuments

William J. Murtagh and Anatole Senkevitch, Jr.

The Ministry of Culture of the USSR and its republic counterparts have been given responsibility to formulate and administer national preservation policy in the Soviet Union. The Ministry of Culture of the USSR is responsible for coordinating the work of its republic counterparts on the identification and preservation of cultural and historic monuments. This includes the development of criteria for the registration and protection of landmarks, urban centers, and entire towns, as well as the administration of a network of offices of state inspection of monuments and a number of restoration workshops which plan and supervise the actual restoration and maintenance of registered monuments.

The US Historic Preservation Team met with representatives of the two agencies within the Ministry of Culture of the USSR which have been created to conduct this work. The first is the Office of Fine Arts and Protection of Monuments, which also houses the Office of State Inspection for the Protection of Cultural Monuments. The second agency is the Institute of Art History, which houses both the Sector of the Register of the Historical and Cultural Monuments of the Peoples of the USSR and the Editorial-Publication Council for the Register. It is in these two agencies that the actual implementation of survey, registration, and publication of cultural monuments takes place.

Scope of the Undertaking

On October 2, 1967, the College of the Ministry of Culture of the USSR and the Presidium of the Academy of Sciences of the USSR issued a joint resolution directing the Academy of Sciences and the Ministry of Culture to develop a codex of Soviet cultural monuments to be preserved, which was to be called the Register of Historical

and Cultural Monuments of the Peoples of the USSR. The two organizations were likewise instructed to develop organizational and scholarly measures to facilitate the preparation and publication of such a compendium. In January of the following year, the Ministry of Culture of the USSR and the Academy of Sciences of the USSR also established the Editorial-Publication Council for the Register, which includes over fifty leading Soviet scholars from all the major humanistic disciplines, to oversee the preparation and publication of the Register.

The primary task of developing the methodological basis for the Register and its publication was assigned to the Institute of Art History within the Ministry of Culture of the USSR, which had advocated the creation of such a compendium. By the end of 1967 a special Office of the Register of Cultural Monuments of the Peoples of the USSR was established within the Institute to direct work on the compilation and publication of the Register. The process began with the attempt to review anew the vast body of existing material pertaining to thousands of cultural monuments in order to verify the data and facts known about them, as well as to conduct extensive supplementary research in order to establish monuments which have heretofore been little-known.

Procedures for Identifying, Surveying, and Registering Cultural Monuments

The process of identifying and surveying cultural monuments in the Soviet Union, though only recently developed, reflects the Ministry of Culture's belief that the preservation of monuments must have basis in scholarly documentation. Conceived as being preliminary to the official inclusion of cultural monuments in the Register, this survey

process was systematized in the spring of 1972 by the introduction of two successive phases of identification and documentation: completion of the "registration card" (*uchetnaia kartochka*), followed by the more comprehensive "registration certificate" (*pasport*).

Registration Card. Representing the initial record in the registration process and preceding the more comprehensive registration certificate, the registration card is also used for developing statistical analysis pertaining to the indexing and classification of cultural monuments. The same form, a single card 14.5 cm. by 20 cm., is used for recording all stationary archaeological, historical, architectural, and monumental sculptural landmarks.

On the face of the card are noted general data pertaining to the monument, including its name, type, date, location, present use, physical condition, type of protection, and available scholarly documentation of the monument and its site. An index number, designed to convey both location and type, is affixed at the upper right-hand corner; this number is subsequently employed to identify all documentary material pertaining to the monument. A photograph and schematic plan, together with a brief history and description, is provided on the reverse side of the card.

Though initially intended to be handled only by trained professionals this card can now be filled out by knowledgeable amateurs as well. It thus provides a basis for volunteer involvement in preservation work by local Soviet citizens, and creates a wide-ranging network for surveying cultural monuments by which professionals may then return to evaluate the quality of the potential entry. The card must be signed by the person filling it out and by the Inspector for the Protection of Monuments in whose jurisdiction the object is located in order to certify the accuracy of the information conveyed on the card.

Three copies are made of every registration card. Two copies, filled out in the language of the particular constituent republic in which the recorded monument is situated, are filed with the ministry of culture of that republic and with the local preservation agency, respectively. The third copy, filled out in Russian, is deposited with the Ministry of Culture of the USSR.

Registration Certificate. This comprehensive form constitutes the basic document for registering cultural monuments in the Soviet Union. As with the registration card, the same form (a folded list 210 mm. by 297 mm.) is used for recording stationary archaeological, historical, architectural, and monumental sculptural landmarks.

The first page contains general data about the monument, including its name, date, typological characteristics, historical and current use, and location (specified in terms of both republic and the protective jurisdiction of the nearest preservation agency). An index num-

ber, described for the registration card above, is noted at the upper right-hand corner.

The second, third, and fourth pages provide detailed information about the monument, arranged according to several categories. These include a history of the monument; a description of it; basic bibliography and iconographic material pertaining to the monument; an analysis of its physical and structural condition; an inventory of the protective zones established around, or otherwise affecting, the monument; and information about original, present, and anticipated use.

Completion of the registration certificate may be undertaken only by professionals commissioned by preservation agencies at either the republic, district, or local levels. The professional is required to affix his signature, indicate his official position (or profession), and note the date the certificate was completed. In addition, all certificates must carry the signature of the Inspector for the Protection of Monuments in whose jurisdiction the monument is located in order to certify—and thereby assume full responsibility for—the accuracy of the information contained therein.

As is the case with registration cards, three copies are made of every registration certificate. Two copies are filled out in the language of the particular constituent republic in which the monument is situated. One of these is filed with the ministry of culture of that republic; the other, with local preservation agencies. The third copy of the certificate, completed in Russian, is deposited with the Office of the Register in the Institute of Art History within the Ministry of Culture of the USSR. The certificate is designed for computerization; a central computer bank for storing the information contained on these forms is currently being developed.

Once it has been accepted and approved, the certificate becomes the official document certifying registration. This action is taken by the Ministry of Culture of the USSR for monuments of international and national significance; by the ministries of culture of the constituent republics when the monument is of republic or local significance.

Criteria for Registration and Inclusion in the Register

Three basic prerequisites form the basis for the criteria established for registration and inclusion of cultural monuments in the Register. The first focuses upon “stationary” rather than “movable” cultural monuments, excluding the latter category (museum and archival objects such as painting, sculpture, musical scores, play scripts, movies, manuscripts, books, and models) from inclusion in the Register. The second stipulates that stationary cultural monuments can qualify for registration and inclusion in the Register on the basis of either their international, national (all-union), republic, or local levels of significance. The

third prerequisite follows from the classification of stationary cultural monuments as encompassing those monuments of archaeology, history, architecture, or monumental art demonstrating artistic, historical, and scholarly value.

In identifying and designating archaeological, historical, architectural, or monumental sculptural landmarks as cultural monuments of the USSR, numerous factors are considered in determining their artistic, historical, and scholarly value.

Archaeological monuments are judged on the basis of their significance for studying the economic, social, political, and cultural history of the peoples populating the country, in illuminating questions of the origins, migrations, and settlement patterns of primitive tribes, as well as in studying the country's material culture and technological development. Valid archaeological remains located under ground and providing sufficient evidence of past cultures must be sufficiently stabilized and preserved to reveal the construction of a building type, traces of living processes, or architectural and artistic details. Archaeological monuments or remains that shed light on cultures no longer in existence and lacking any other excavated evidence are considered especially valuable for preservation purposes.

Historical Monuments are judged on the basis of their historical and political significance, as reflected in the association with important events and personalities in the history of the country or of their particular region. The scholarly significance of the monument derives from the extent to which it reflects the level of scientific, technical, and socio-cultural development of the period.

Monuments of Architecture and City-Planning are selected on the basis of numerous considerations. These include the value of the monument in revealing the social foundations and living processes operating in the society which created it; its significance and place in the historical development of the country's architecture, as well as in the development of a local school or tradition; and, finally, the extent to which its aesthetic, functional, and technical solutions are both perfected and synthesized within the monument as a whole.

As a rule, all architectural monuments dating through the 18th century, as well as outstanding examples from the 19th and 20th centuries, are eligible for inclusion in the Register, as are all historically-evolved architectural ensembles and city-planning complexes, irrespective of the artistic value of individual component buildings, and noteworthy natural landscapes with unique topographical and planning features.

Monuments of monumental art are sub-divided into two categories. The

first, consisting of stationary monumental sculpture, is judged on the basis of the quality of its artistic expressiveness and technical execution. The second group, consisting of monumental painting applied directly to architectural monuments, is likewise judged on the profundity of its technical execution, originality, and artistic content.

Memorial monuments to outstanding cultural personalities may also be included if the artistic quality of the monument played a significant role in the development either of the national culture or of the culture of a given region. The significance of the personalities or events being commemorated by the memorial are likewise taken into account.

The Register of Historical and Cultural Monuments of the Peoples of the USSR

The protection and preservation of cultural monuments has now become a matter of policy at all levels of the Soviet government. For this reason, the identification and registration of cultural monuments acquires particular significance in the preparation and publication of the Register of Historical and Cultural Monuments of the Peoples of the USSR. For it is intended to be both an official and a scholarly compendium documenting all cultural monuments which either already are or should come under governmental protection throughout the Soviet Union.

Completion of the registration card and certificate constitute the essential preliminary steps for inclusion of cultural monuments into the Register by providing the necessary scholarly documentation to establish the basis for registration. Local cultural organizations, working with representatives of the republic ministries of culture, are chiefly responsible for the conduct of this work. The Ministry of Culture of the USSR funds this operation through its Institute of Art History, Office of the Register, to organizations at the local level. Local chapters of the Society for the Protection of Historic and Cultural Monuments are likewise drawn into this undertaking.

The Editorial-Publication Council, a review body of over fifty distinguished Soviet scholars from those humanistic disciplines encompassed in the Register, is responsible for the setting of policy and guidelines to provide over-all supervision of work on compiling the Register. In 1972, it created four specialized "methodological centers," corresponding to the four monument classification categories, to supervise and coordinate the actual work on preparing the material to be published in the Register. The center designated to guide the work on archaeological monuments is the Institute of Archaeology in the Academy of Sciences of the USSR; for historical monuments, it is the Commission for Compilation of the Register, established in the Insti-

tute of the History of the USSR in the Academy of Sciences of the USSR; for architectural and monumental art monuments, the Office of the Register within the Institute of Art History at the Ministry of Culture of the USSR; for memorial monuments, the Office of the Register and Scholarly Documentation within the Institute of Culture at the Ministry of Culture of the Russian Soviet Federative Socialist Republic (RSFSR).

These methodological centers, aside from developing general methodological guidelines, have begun preparation of the Register for the Russian Republic, editing volumes dealing with various of its regions. Two volumes currently under preparation for the Yaroslavl district (*oblast'*) illustrate the encompassing quality of the undertaking. The preliminary project lists 900 architectural monuments, of which 500 are churches and 400, public buildings and dwellings. In addition, there are 200 archaeological monuments and 400 entries of monuments with noteworthy historical associations. Of the 900 architectural monuments, 300 are already under some degree of governmental protection. The remaining monuments represent the nucleus of those to be designated for future protection.

Protective Aspects of the Register. As soon as a cultural monument is registered with the local cultural offices and eventually with the republic ministry of culture, it receives governmental protection at these respective levels. After further documentary research, the potential nomination to the Register may be submitted to the Ministry of Culture of the USSR for inclusion as a cultural monument of national, or all-union, significance. When this is achieved, the cultural monument receives national protection. Three years ago, there were over 6,500 monuments which enjoyed governmental protection in the RSFSR. As a result of work performed in the intervening period, however, 3,000 more monuments have been added and now are protected by the government.

Three types of protective zones have been developed in the Soviet Union to assure and enforce the protection of registered cultural monuments. The first, known as a "protective zone" (*okhrannaia zona*), seeks to preserve both the monument itself and its immediate surroundings by prohibiting either demolition of the monument or intrusion by new additions to the building itself. The second type of zone, the so-called "zone regulating construction" (*zona regulirovaniia zastroiki*), is designed to preserve the setting that has historically evolved around the monument, including not only the architectural and planning system in which it has evolved, but its visual and natural environment as well. New construction, though permitted within this zone, is strictly regulated in terms of height, density, and compatible land use. The third type, known as the "preservation zone" (*zapovednaia zona*), has only recently been developed to preserve entire historically-

evolved architectural and planning ensembles, in which the historic ensemble as a whole rather than the individual building and its surroundings constitutes the registered cultural landmark. The protective aspects of this zone include emphasis upon the preservation, stabilization, restoration, and adaptive use of surviving historic buildings, as well as upon control of new construction to harmonize with the historic character of the area.

Scope. The Register of Historical and Cultural Monuments of the Peoples of the USSR is intended to be the official government document listing all cultural monuments coming under governmental protection at either the all-union, republic, or local level. It is likewise projected to be the most complete scholarly reference work on registered Soviet cultural landmarks, containing all the basic information and providing access to available source material about them.

Its format is intended to be encyclopedic in the best sense of the word providing a clear picture of the rich cultural heritage of the Soviet Union for domestic and foreign consumption alike. Very complete scholarly articles are projected for monuments of national and international significance, while monuments of republic and local significance will be treated in shorter but equally authoritative entries.

All monuments that represent archaeological, historical, architectural, or monumental-art significance will be included in the Register, indicating that their protection is of recognized public significance. Also included in the coverage will be entire cities and architectural and planning ensembles of historical significance, as well monumental painting and sculpture and any other applied arts with which the above monuments are interrelated. Where a monument or monuments are eligible under different classifications, they will be cross-referenced and, in some cases, treated simultaneously in different categories. Thus, for example, the Smolny Monastery in Leningrad will be included in sections which discuss that city's own history, document the events surrounding the Russian Revolution, as well as treat Russian monuments of outstanding architectural significance. The latter entry will contain information about the monument's attribution, period, and style, as well as an analysis of its place among analogous monuments in the architectural history of the city, region, country and, where applicable, the world. Articles on monuments of architectural and artistic significance will be prepared by architectural and art historians. Those on monuments of historical and revolutionary significance will be developed by specialists in Russian and Soviet history, as well as specialists in the history of the Communist Party. Likewise, archaeologists will handle all material dealing with archaeological monuments.

It is thus anticipated that the Register will become an indispensable research tool for use by historians, architects, artists, and institutions of higher learning, as well as by governmental agencies and

professional and civic organizations involved in the protection of Soviet cultural monuments. Because of the all-encompassing scope of the publication, it is anticipated that the text of the Register must be concise and written in a style easily comprehensible by the widest circle of readers. Moreover, it is proposed to be richly illustrated and reflect the highest standards of the printer's art. It will be published in Russian for the Russian Republic, and in the national language of the various republics, with parallel texts in Russian, for each of the constituent republics.

Structure and organization. Material contained in the Register will be arranged by republic. Material for each republic is to be grouped, in turn, by administrative units: province (*oblast'*), district (*krai*), and autonomous republic, with district capitals and major historic towns and ensembles arranged separately. The material for each province or district will, as a rule, be organized according to town, complex or ensemble, and individual monuments, in descending order, followed by major towns and historic ensembles. In all cases, entries within each of these categories will be listed alphabetically. It is anticipated that each province, historic town, and major ensemble in a republic will be assigned one or more volumes, depending upon the quantity of available material.

In view of the enormous breadth and complexity of the material to be included in the multi-volume compendium, three separate series have been projected for publishing the register. The first series deals with monuments of history, the Russian Revolution, and the "Great Patriotic War" (World War II). The second series focuses upon monuments of architecture and monumental art. The third treats archaeological monuments. Volumes in each of the series are to be numbered in an independent sequence in order both to permit work to be conducted on each series independently of the others and to facilitate future expansion of each series without upsetting the general numbering system.

Each volume or group of volumes will contain an introductory essay on the given province, ensemble, or town, and include articles on the cultural monuments as well as a map indicating the location of each. The introductory essay will describe the salient aspects of the particular element being treated, focusing upon its historical, artistic, and scholarly significance. Articles on the monuments must provide complete data on their name, date, address, as well as supply a scholarly account of their history and salient features, together with photographs, schematic plans, and a basic bibliography. An appendix will contain a general bibliography on the province or city, together with an index to the volume(s) and a listing of all individuals and organizations participating in its preparation.

Monuments of architectural and artistic significance will be amply illustrated by color and black-and-white photographs, as well as

by measured, perspective, and axonometric drawings. Black-and-white photographs are to be used for providing a panorama of the city and its architectural ensembles, squares, streets, embankments, parks, and landscapes. They are also to be used for providing coverage of the individual monuments. Color photographs are to be used primarily for illustrating works of monumental painting, such as ceramics, mosaics, and frescoes.

Measured drawings will include a general plan of the city and its ensembles, detailed plans, sections, and elevations of individual monuments and the most important of its details, and selected axonometric and perspective drawings as needed. Maps are also to be provided to indicate access routes to the monuments, as well as the protective zones established for each monument. All graphic material will be rendered in uniform scales in order to make a comparative study of the monuments possible. The scales recommended by the Editorial-Publication Council are as follows: plans, facades, and sections at 1:200; site plans at 1:1000; fragments and details at 1:10 or 1:20. Format for photographs will be 18 by 24 centimeters.

Conclusion

It would appear that the Ministry of Culture of the USSR, organizationally, stands in juxtaposition with the U.S. Department of the Interior. The Office of Fine Arts and Protection of Monuments can be likened somewhat to the Office of Archaeology and Historic Preservation, National Park Service, U.S. Department of the Interior, while the Office of the Register within the Institute of Art History is somewhat similar in scope to the Office of the Keeper of the National Register within the OAHP. Using that analogy, it appears that the scale of Soviet activity, in terms of personnel, far exceeds that of the United States in concern for the man-made environment. Certainly the funding levels that are currently being invested by the Soviets for preservation at the national governmental level are far in excess of those which we enjoy in the United States today.

One gets the distinct impression, moreover, that the Register of Historical and Cultural Monuments currently in preparation in the Soviet Union is the type of comprehensive compendium which we have not seen fit to develop as yet in the United States; but which would, were we to do so, use the existing framework of our own National Register of Historic Places as the basis for coordinating and integrating into a single series of volumes the work and materials produced by the Historic American Buildings Survey, the Historic American Engineering Record, the Historic Sites Survey, as well as the National Register itself.

Legal Aspects of Historic Preservation

Kenneth C. Tapman

Introduction

Analysis of the legal aspects of historic preservation in the Soviet Union requires consideration of four basic concepts of the Soviet political system and its philosophy of cultural resource preservation. First, the government is a three-tiered structure consisting of the union or national government, the constituent republics, and the territorial and local authorities. Second, virtually all property and activities are under the jurisdiction or control of the Soviet state. Third, the objective of the government concerning historic preservation is the protection and preservation of all registered cultural monuments (historical, architectural, and archaeological). Fourth, extensive government resources are available for and committed to furthering the preservation of identified properties. The scale of this support is equal in magnitude to other major government programs. As with other major programs, moreover, responsibility for providing and maintaining this support is lodged at each level of government in a specific agency or agencies charged with the protection of cultural monuments.

Identification of Cultural Monuments

The process of identifying, evaluating and designating properties as cultural monuments in the Soviet Union is extremely thorough. Because it is the government's policy that cultural monuments are to be preserved, it is necessary that complete documentation be developed in order properly to evaluate properties for their significance at the local, republic, or national level. This documentation forms the basis for all actions affecting the property, including its preservation, maintenance, restoration, rehabilitation and protection. The documentation must

cover not only the property itself, but its setting and the relationship of the surrounding environment to the property, historically and in the present. This information is used to develop the boundaries for the zones of protection and regulation which are established by legislation, around registered cultural monuments.

Designation

Designation of a cultural monument includes the establishment of boundaries for a protective area around the property. In the Russian Soviet Federative Socialist Republic (RSFSR), whose procedures were cited as examples to the US Historic Preservation Team, the councils of ministers of the union and autonomous republics and the executive committees at the district (*oblast'*) and city levels have been required to establish suitable protective areas around architectural, historical, and archaeological monuments situated on territories under their respective jurisdictions. The legal documents establishing such areas must be included in the inventory record and become a part of the registration for each property.

Designation of cultural monuments is usually initiated at the local level and, as appropriate, may be further undertaken at the republic and national level. For example, a property will be identified, documented and evaluated at the local level. Should this process indicate that the property may be of republic or national significance, the process is repeated at those levels.

Once registered, a cultural monument is afforded extensive protection from impairment through a framework of protective and

regulatory zones, to be discussed below. Responsibility for supervising the implementation of this protective scheme rests with the network of offices of Inspection for Protection of Cultural Monuments that are housed in the ministries of culture at both the union and republic levels, as well as in the respective administrative jurisdictions of the district and city executive committees. These inspection offices work with various governmental planning and construction agencies to coordinate activities affecting cultural monuments. These agencies have recently been made to comply with the restrictive covenants of the protective and regulating zones. A joint resolution enacted in July 1970 by the Council of Ministers of the RSFSR and the Ministry of Culture of the RSFSR, designating over a hundred historic towns in the Russian Republic, required planning and construction agencies to give due regard in their projects to the protective and regulatory zones of all registered sites and ensembles located in or near their project area.

Establishment of Areas to be Protected Around a Registered Monument

In a resolution adopted jointly by the Building Committee of the RSFSR (*Stroikom RSFSR*) and the Ministry of Culture of the RSFSR in December of 1966, two zones were defined as constituting the area to be protected around a registered monument. These are the protective zones (*okhrannye zony*) and the zones regulating construction (*zony regulirovaniia zastroiki*). Work on determining the boundaries of the protective areas as well as on establishing a concrete policy for their maintenance and enforcement is conducted by agencies responsible for the protection of monuments, together with architectural and building agencies and restoration workshops, with the participation of specialists from various scholarly organizations. In the Russian Republic, ratification of the boundaries for the protection areas is made by the Council of Ministers of the union and autonomous republics, the territorial and regional executive committees, and the Moscow and Leningrad executive committees, according to presentations made by architectural and planning departments and cultural agencies. For monuments of national significance, the Ministry of Culture for the USSR must approve the action. For monuments of local significance, such approval is the responsibility of the local agencies for the protection of monuments.

Protective zones. The protective zones are established for each registered cultural monument or group of monuments. Their purpose is to facilitate the preservation and maintenance of monuments and their environs, to reveal and exploit their architectural, artistic, and planning attributes, and to create the necessary conditions enabling the populace

and tourists to become familiar with them.

Protective zones are established in accordance with the following guidelines; set forth in the aforementioned resolution:

In determining the boundaries for protective zones, the objective is to guarantee conditions for the optimal preservation of the monuments, for their study, and for their interpretation to the populace and tourists, as well as utilizing the protective zone to highlight the monument or group of monuments within the surrounding fabric.

In order to facilitate the preservation of the historically formed architectural planning structure of the part of the city containing a series of monuments, a single zone should be established for the given group of monuments (preservation regions).

The boundaries of protective zones should be integrated into the existing boundaries of the city (streets, blocks, squares, etc.).

The precise determination of the boundaries, size, and character of the planning of the protective zone should be based upon the location of monuments, their use, as well upon the historical topography of the locale and the natural limits and configuration of the surrounding territory.

Zones regulating construction. These zones are established, apart from the protective zones, for ensembles, complexes, and individual monuments with the aim of preserving their traditional environs and their relationship to those environs. Zones regulating construction establish boundaries to permit the preservation of the historically formed planning system and the character of the natural and architectural context of the monuments. These zones are normally used to protect revolutionary and military monuments, kremlins, palace ensembles, garden and park ensembles, retail rows, monasteries, courtyards, estates, city squares, and other groups of monuments in their surrounding urban fabric or natural landscape.

Scope and Extent of Protection. In order to realize the objectives of protective zones, the following restrictions have been set forth in Section II of the aforementioned resolution:

New construction and replanning is forbidden within the boundaries of a protective zone.

Recent construction defacing the monument, impeding its viewing, or cluttering the site are subject to removal.

All architectural, building, and planning measures, as well as projects to provide services within a protective zone, are conducted under the direction and control of the appropriate Ministry of Culture according to special programs approved by both the Ministry of Culture and the government agency in charge of construction and architecture.

Easements for power lines and substations are not permitted within protective zones.

Establishment of transportation networks and terminals within protective zones is prohibited.

Similar policies apply to zones regulating construction:

Although new construction within these zones is permitted, restrictions are placed on the height and density of such construction.

Industrial facilities and transportation-warehouse complexes are prohibited, as are other facilities which pollute the land, air, and water supply.

All architectural and planning measures must have the approval of the Ministry of Culture having jurisdiction over the area.

The requirements of protective and regulatory zones are rigidly enforced, which requires that boundaries be specifically described. The general requirements are that the zone be developed on the basis of a base city map (at a scale of 1:5000 or 1:10000) with the notation of all monuments. On the master plan for a city, the protective zones must be delineated: for a city having a population over 50,000, at a scale of 1:20000 or 1:10000, for a city having a population under 50,000, at a scale of 1:1000 or 1:5000, depending upon the scale of the existing topography.

Projects for planning and the provision of public services and amenities in protective zones and zones regulating construction must be developed by specialized design organizations (preferably together with projects for the restoration of the actual monuments) at a scale of 1:500 and larger scales.

The basis for developing a detailed project for the planning and provision of services and amenities in protective zones stems from the programmatic instructions issued by local ministries of culture or those designated by them to develop this work (preservation workshops where they exist, or design organizations). Programmatic instructions normally include the following material, as stipulated in Section IV of the aforementioned resolution:

Historical data about the monument.

A clear description of the outlined measures for protecting, studying, and utilizing the monuments and the site.

Geodesic survey maps indicating the territory.

A plan of underground communications.

Design materials relating to the indicated restoration of the monuments (if available).

Program planning for a protective zone must anticipate the complex solution of architectural, economic, sanitary, and technical problems, both for the long term and for the execution of preliminary work on the preparation of the site and the restoration of monuments. The necessity and sequence for removing later construction not possessing any historical or architectural value is established during evaluation of the monument.

On the basis of the protective and regulatory zones, the cultural agency having jurisdiction over the property has a clearly defined area within which it will protect the historic resources. At the earliest stages of planning, other agencies of the government must take into account the cultural monuments to be affected. When the appropriate cultural agency refuses to approve another agency's project and the dispute cannot be resolved between the agencies, the matter is referred to the Scientific-Methodological Council for the Protection of Cultural Monuments. This is an interdepartmental, interdisciplinary council under the auspices of the Ministry of Culture of the USSR. Most disputes are finally resolved at this level of the all-union administrative framework; only the most serious disputes, whether at the local, republic or national level, are ever brought to the council.

Beyond the planning stage, additional safeguards are established to ensure that project execution is compatible with cultural values. Prior to commencing construction in any historic area, archeological research must be undertaken in accordance with a procedure developed jointly by the Ministry of Culture and the agency responsible for architecture and building. The cost of conducting such archeological research is usually borne by the agency requiring permission to work near a protected monument.

Preservation Zones

Cultural monuments in the Soviet Union are increasingly being viewed as comprising more than individual buildings and sites. The concept of districts or areas exists, especially in Moscow and Leningrad. It is clear that preservation zones (*zapovednye zona*) in such cases have been established to preserve the historically evolved architectural and planning component of a town which includes an ensemble of buildings, landmarks, and planning elements. The entire area is considered a designated monument, and restoration of the architectural and planning fabric of the area is a primary objective. Emphasis is placed on adaptive use of surviving structures as well as strict controls on new construction to assure proper harmonization with the historic and architectural character of the area.

As no specific criteria for compatibility have been established, an *ad hoc* approach is presently being used. The use of restored or rehabilitated structures may include an agreement between the occupant and the cultural agency having jurisdiction over the property. This agreement provides that the property will be used and maintained to certain standards, and that no alterations to significant historic or architectural elements will be made without the prior approval of the Ministry of Culture. For violation of the agreement, provision is made for the imposition of a fine of up to approximately \$2,000 and also for specific

performance to restore the property to the status *quo ante*. This provision is enforceable through procedures equivalent to binding arbitration rather than before the courts.

Conclusion

The Soviet Union's legal system establishes a clear and direct approach to achieve the objectives of historic preservation. Properties are carefully evaluated and, once designated, they are to be preserved. The ministries of culture at the union and republic levels are responsible for designating monuments, including the establishment of surrounding protective and regulatory zones. The investigation, evaluation, maintenance, enhancement, and protection of cultural monuments is the responsibility of the cultural agency at the local, republic or national level of government. These agencies have approval authority within protective and regulatory zones concerning land use, construction, demolition, and other related activities. Disputes between agencies are resolved by the binding decision of an interdepartmental, interdisciplinary council.

The Soviet Union's cultural resource protective system has been developed with the objective that all identified resources will be preserved. Its success results from the fact that the government controls all significant development activities, that the government is fully committed to preservation objectives, that the government adequately finances programs to achieve these objectives, that there exists a top level government agency to represent preservation interests within the government, and that preservation is an undisputed national objective.

Finally, it should be noted that preservation in the Soviet Union is not only concerned with preserving resources and controlling new development, but also with restoring resources and correcting past mistakes which degraded these resources. The scope and nature of this commitment is well beyond that found in the present policies of the United States Government.

Restoration Workshops and Architectural Museums

Lee H. Nelson, AIA

Restoration Workshop at Pushkin

The US Historic Preservation Team visited two important restoration workshops in the Republic of Russia, one at the Leningrad suburb of Pushkin, the other at Moscow. The workshop at Pushkin was solely directed toward restoration of the Catherine II Palace. This palace is nearly 900 feet long, and contains many very large and elaborate rooms, grand staircases, and a particularly enriched chapel at one end of the complex. The palace was damaged in World War II. The roof burned, collapsed into the building, damaging much of the very elaborate wood carving around the ornamented doorways, as well as causing considerable damage to the intricate inlaid floors. In addition, most of the interior wood suffered from the subsequent exposure to the weather. It would appear that this historic resource was pretty much considered a total loss by the Soviet authorities, but the present director of workshop was allowed to put together a small crew of craftsmen on a trial basis to see whether it was possible and feasible to attempt a restoration. They were successful beyond anyone's expectations, and we were particularly impressed with the quality of the craftsmanship. All the workshops are housed within the palace itself, but the scope of this project is so great that it will be some years before they have worked themselves out of their workshop space.

There are a number of workshops or craft specialties which include:

1. Restoration of damaged carvings and woodwork
2. New wood carving (reconstruction)
3. Repair and replacing of wood paneling and moldings
4. Gilding of carving and mouldings
5. Restoration of painted ceilings, panels on canvas, and re-creation of badly damaged or missing paintings of panels

6. Restoration and replacement of the very elaborate inlaid floor units
7. Manufacture of decorated ceramic units for the colossal tiled stoves

We were told that anyone can join this restoration workshop, but such apprentices that do not show sufficient aptitude and talent are simply released from the workshop. Apprentices are allowed to work under the guidance of a master woodcarver, for example, and they work upwards through a series of exercises and tests in the traditional guild approach. Apprentices also learn from and study the original carvings which are in the workshop for repair and restoration. We saw apprentices attempting to duplicate original carving on a side-by-side basis. The best woodcarvers completely absorb the style, the spirit, and the craftsmanship of the original wood carvers. The quality is truly impressive.

The repaired and new carving is mounted on thin hardwood plywood panels for ease of handling and installation, to maintain dimensional stability and to minimize future cracking and separation of components. The carved figures are glued up, and it was our impression that the laminating techniques follow the original, both as to the species of wood and the general thickness of laminations. The carvings are then over painted with gesso and slightly touched up by finish carvers in preparation for gilding.

Considering the intricate Rococo nature of the carving, the gilding is particularly delicate and time-consuming. A small piece of carving (e.g., 1 meter long) takes a month or more to gild, and is done entirely with sheet-gold. We were also impressed by the inlaid woodworkers' shop, where they work with many species of wood, in the most intricate of patterns. These craftsmen make their own tools which are embellished with inlaid woods, some of which may be considered works of art in themselves. In a society that has a severe manpower shortage and where women are called upon to do many things that require considerable strength and physical effort (e.g., road repair and building construction), it is interesting that the crafts represented in the restoration workshop are not generally integrated as to sex. The wood carvers were all men and the gilders all women, but the women seem to play key roles in other aspects of the workshop where a high degree of skill and patience is required. This is true of painting restoration and the ceramics laboratory.

Most of what we have described above relates to "objects"; we did not see very much in-place building conservation, such as masonry repairs, carpentry, or installation of mechanical equipment. It would be hard to judge the quality in this aspect of preservation. Nor did we acquire any real knowledge about their use of mechanical gadgetry, such as fire detection equipment, fire suppression systems or the use of security systems.

We were also impressed by Mr. A. A. Kedrinsky, Chief Architect and Director of the workshop, who (according to his aides) is a "master" of every craft in the workshop. He is a shy and modest man, who obviously has a way of inspiring artists and craftsmen to perform at a very high level. He is inclined to give all the credit to the workers. He particularly called our attention to a woman who had invented a substance to simulate wood which could be cast into small architectural ornaments (for chandelier parts, etc.) and which was strong and durable without being brittle. It was made of gypsum, white glue, and very fine sawdust. He demonstrated its strength by throwing a completed ornament against the floor, without any visible damage or breakage. It is also interesting that several interpretive exhibits have been prepared in connection with the restoration of the Palace, and that these exhibits tend to stress the malicious wartime damage and the personal skills of the individual restoration craftsmen (and craftswomen), who are usually identified in the exhibits *by name*. We found the latter approach a refreshing change from the usual anonymity and lack of recognition of restoration craftsmanship in this country.

It is around this subject that we recommend a further exchange with preservationists in the USSR. We believe that it would be useful and beneficial to exchange exhibits of good-quality photographs showing various aspects of restoration craftsmanship in the two countries. Such exhibits would reveal the diversities as well as the commonalities of our historic resources and the community of dedicated restoration craftsmen. Craftsmanship speaks for itself, requires little in the way of intellectual explanation, generates a respect for the individual, and recognizes a commitment at the state and personal level. For our part, we could draw upon the decentralized craft skills in the United States: in Federal programs, in the private sectors of business and industry, and at the state and local levels. Such an exhibit need not be an expensive production, but it could also be duplicated for travel in this country, to capitalize on the growing interest in architectural preservation that is being engendered by the Bicentennial.

Restoration Workshop in Moscow

On June 12, 1974, Messrs. F. Ross Holland, Lee H. Nelson, and Henry A. Judd, visited the large and comprehensive restoration (or production) workshop in Moscow, which is part of the All-Union Production and Scientific Restoration Complex of the Ministry of Culture of the USSR. This restoration workshop had recently celebrated its 25th year of operation, and employs about 980 people. It is the *production* arm of the restoration *design* workshop (described elsewhere in this report) which is separately staffed and housed in another part of the city. The restoration workshop is physically accommodated in a large (and unrestored) monastery complex. This workshop encompasses

more crafts and specialties than the one at Pushkin, and includes at least the following shops: furniture repair and restoration, wood carving, gilding, weaving (including dyeing of fabrics), brass casting and finishing for hardware and chandeliers, foundry for iron casting, machine shop, welding, forging and blacksmithing, furnace for glass casting, shops for grinding and polishing of glass parts for chandeliers etc., shops for ornamental sheet metal work, cornices and eaves.

Particularly impressive was their weaving department, where they do all manner of complex weaving of fabrics for chairs, bed hangings, draperies, wall coverings, in such materials as silk and brocades. They work from fragments of original fabrics, with specialists determining the original weaving methods, thread counts, and dye colors. With this information, artists create the designs for missing areas if needed. They have a special laboratory for experiments with vegetable dyes and for controlling the uniformity of dye colors. They have even restored several 18th century Jacquard type looms (originally invented in France) which operate on a continuous punch card system to control the weft and heddles. They also have women who work as specialists in "translating" the weaving designs and punching new cards for controlling the looms.

It was interesting to observe that when casting glass parts for chandelier pendants, they rough-cast the glass to its approximate final size and shape, including the faceting. After casting, it is only necessary to break off the excess glass at the mold joints, and then the parts can be ground and polished with a minimum of work. We were given samples of such pendants both in the rough-cast and finished form, polished and drilled to receive wire hangers.

Being housed in a former monastery complex, the workshops tend to be in relatively small rooms which are interconnected. We were surprised at the general lack of lighting, ventilation, and consideration for health and safety. In general, the Russian craftsmen, including artists, are accustomed to working at what we would consider to be very low levels of light, but this doesn't seem to affect the quality of workmanship.

After touring this workshop for four hours, we had to leave not having seen the whole place, but we were told that every craft was represented except ceramics, which is handled by the workshop previously mentioned at Pushkin. The scope and depth of the operation is suggested by the fact that they forge their own nails and "draw" their own wire. For the three team members named above, the visit to this restoration workshop was the high point of the entire trip.

Folk Architecture Museums at Suzdal and Tbilisi

We visited two folk museums in the Soviet Union, one at Suzdal, which is in the early stages of development, and the other at

Tbilisi, which is potentially much more ambitious and comprehensive.

Within the Suzdal Kremlin, not far from the Cathedral of the Nativity, is the small but very interesting wooden log church of St. Nicholas, built about 1776 in the village of Glotovo (in the Yuryev District) and which was moved to Suzdal in 1960. According to Nikolai Voronin's book subtitled "Old Russian Towns" (Moscow:1971):

It [the church of St. Nicholas] was brought here as one of the first steps to set up an open air museum of Russian architecture in Suzdal. There are comparatively few surviving specimens of old wooden architecture in central Russia and this building is an excellent specimen of the early type of wooden church in which the main body is very similar to the basic unit of an ordinary peasant's house.

We did not understand why this church was relocated within the Suzdal Kremlin precinct. Perhaps it was moved into this location before the concept of an open air museum was fully planned, because across the river from the Kremlin there is a relatively recently established museum of wooden architecture, known as the Vladimir-Suzdal History and Arts Museum-Preserve, which includes two other log churches dating from 1756 and 1776, together with several 18th century log houses and related farm buildings. One of the small log buildings was embellished with surprisingly rich carvings on the exterior, and completely furnished as a peasant's home. Another, a large two-story log house, was being repaired and installed, the house having been dismantled and re-erected here. The repairs consisted of "dutchmen" in the rotting logs, new window sash and recaulking of the logs. The Russians used a fibrous rope-like material similar to oakum, for caulking the joints between the logs. We were not at this site long enough to learn whether there is an overall plan for development of this folk museum. It seems clear that until recently there has been very little interest in folk architecture, especially houses, because of the strong emphasis on "monuments." We do not know if it is contemplated to bring other representative 18th and 19th century central Russian buildings into this complex.

At Tbilisi several members of the group visited the National Outdoor Museum of Georgian Architecture—a very ambitious undertaking which is just underway but, when finished, will include buildings from eleven different districts of Georgia, physically grouped by district. This museum-preserve will encompass buildings from ancient masonry churches to the most modest thatch-roof shelters, early log and stone farm buildings (including out-buildings) to more elaborate late 19th century houses, one with a verandah decorated with scroll-saw ornament. At the present time there are several dozen such structures completed, some furnished; work is progressing at a modest rate. The

earliest buildings were brought in about 1966, but most of the work seems to have been accomplished since 1970. There is a modest onsite restoration workshop in connection with this open air museum and appears to consist of about a dozen craftsmen who were engaged with re-erecting a wooden house on a stone foundation. It was interesting to note that the rubble stone foundation had been laid up with portland cement mortar. There were several carpenters patching rotted sections of large wooden sill members and hewing new members where the originals were rotted beyond re-use. Actually they were hewing timbers which had been sawn just slightly over-size, rather than hewing round logs. This is a short-cut commonly used in the United States. We learned that such timbers are not purchased on the open market, as they would be in this country, but rather that the trees were selected and especially cut for the purpose.

There is a well-illustrated and descriptive leaflet which indicates the planning and the building types that will be assembled in this outdoor museum. Unfortunately it is not in English; we recommend that it be translated.

Shchusev Museum of Architecture

In Moscow we visited the A. V. Shchusev Museum of Architecture housed in the main Cathedral of the Donskoi monastery. This is a superb exhibition of Russian architecture ranging from the 10th through 19th centuries, and includes many excellent photographs, some very large color transparencies, measured drawings and historical views together with original architect's drawings and models. This is probably the finest museum of architecture that any of us have ever seen. There is no equivalent to this comprehensive and well designed exhibit of architecture in the United States. It should be noted that this exhibit includes a number of interesting late 19th century buildings including examples of Slavic Revival, Art Nouveau, and early examples of Soviet architecture.

Techniques and Administration of Restoration

Henry A. Judd

Our first impression of Soviet restoration techniques was rather a shock which, thankfully, was relieved as we toured the Soviet Union. Upon arrival, we were taken to the Hotel Rossiya, the largest hotel in Europe, which was built in close proximity to the Moscow Kremlin. The location of this enormous hotel seriously overpowered numerous old churches and dwellings adjacent to it that had been preserved and given adaptive uses. The churches had been heavily sand-blasted; patched with brick that did not match in either color, texture, or size; and crudely repointed with modern portland cement. All of these techniques we deplore in our own work, yet often find them applied by unsympathetic or inexperienced people.

On our first evening and the following day, we visited the Moscow Kremlin and other buildings in the immediate vicinity, and were disappointed to find evidence of similar work, particularly on the Kremlin walls. Our initial evaluation was that the Soviet Union had much to learn from us. Upon further evaluation, however, we find that these projects were undertaken before the serious development of, and effective dissemination of technical information about, acceptable restoration techniques. Our hosts regretted that work, and are making real efforts to avoid its repetition in the future.

At Yerevan, the capital of Soviet Armenia, we viewed the early stone and adobe ruins of the Erebuni Citadel, which dates back some 2,750 years to the founding of the city. This citadel reveals problems very similar to the ones that we faced in our own southwest. Armenians, too, have not yet solved the problems of preserving adobe, and have used the same questionable techniques we have been employing. There was a great deal of reconstruction over the extant ancient walls. In some cases the work was very well done, but probably highly conjectural. In the case of the new work over the ancient stone walls, an obvious distinction was made between the old and the new. The

modern cement mortar joints in the new work was the poorest construction that we observed from both an esthetic and a technical viewpoint. Like the United States, however, the Armenian republic has initiated scientific studies to improve its restoration techniques.

The ancient classical temple at Garni in Armenia, which collapsed centuries ago, was being reconstructed. About a third of the reconstruction was of original materials and two-thirds of new materials. The new stone, of the same variety and color as the old, was obtained from a local quarry. Cutting of this stone was done onsite. The profiles of the original were reproduced without the embellishments of the original and without any attempt at fakery or antiquing. If a reconstruction must be done, this is an admirable approach.

Armenian specialists believe that a reconstruction is preferable to a ruin from both the interpretive and protection standpoints. This view becomes questionable, however, in such instances as the proposal to reconstruct the gigantic, ancient round Church of Zvartnots outside Yerevan as an architectural masterpiece. I have seen published three conjectural drawings based on the surviving remains. The three proposals varied greatly, so that any reconstruction would be very conjectural. The product of such a restoration would become an architectural masterpiece of the modern rather than the original designer. It would no longer be an ancient church, and the fascinating extant ruins would be disturbed and largely destroyed.

At the Catherine Palace in Pushkin, outside Leningrad, we observed very careful studies and development of craftsmen to restore and reconstruct the very large and ornate structure, which was severely damaged by the German army in World War II. As work was still in progress in portions of this structure, we were able to observe both the restoration techniques employed and the process used to train craftsmen. Both, as indicated in the preceding report, were greatly impressive. We also toured the completed work in other portions of the structure which is open to the public by guided tours. Special felt shoes were provided all tourists to protect the finished floors, most of which were very intricate marquetry. In one room of the palace our attention was called to a very intricate and beautiful painted ceiling. The masters were not pleased with the tonal qualities and were going to redo the entire ceiling to correct this error, one that would not be obvious to anyone save an expert working on the building.

All the cultural resources are being carefully and systematically recorded both as found and as restored. With such recording, largely by photogrammetry, an accurate inventory of resources is maintained as a control to evaluate deterioration and preservation in future years, as well as an accurate base on which to plan for further restoration and preservation work. These techniques have been used very sparingly in the United States, but are ones that we should promote and develop in the immediate future.

We were likewise impressed with the quality of draftsmanship apparent in the numerous drawings shown us. We observed very intricate details being rendered in ink. Much of the drafting work was being done by young ladies who show obvious pride in their skills. Drafting of this quality is seldom observed in the United States.

Restoration Workshops

The All-Union Production and Scientific Restoration Center, operated by the Ministry of Culture of the USSR, is responsible for the development of restoration studies and preparation of restoration drawings for architectural monuments, as well as for the over-all supervision over the execution of the project. This center consists of two major departments, a design department, and a production shop. The design department includes six sections: the architectural section, a research section, an engineering section, an estimating section, a photogrammetry section, and a library and archives.

The architectural section numbers about 100 people, of whom 50 are architects, the balance being draftsmen. This section conducts physical research on monuments, probes into their fabric, prepares major drawings and surveys, and carries out the design for the restoration. After approval of the design, the architects of this section supervise the execution of the work.

The research section, comprised of about 30 persons, is subdivided into two parts. About half are scientists; the other half, architectural historians. The scientists on the team, who include biologists, chemists, and physicists, solve practical problems of restoration by chemical analysis. They determine the composition of materials for preservation, cleaning, injections, and the like, as well as specify techniques accurately. Moreover, they seek out new methodology for restoration and study the effects of atmospheric problems. The architectural history segment conducts archival research to document the history of the monument, as well as to prepare adequate supporting documentation for the design studies developed for each restoration project. A catalog of structural devices and elements of old Russian architecture is presently under preparation and will be published in separate volumes as they become available. This sector is now engaged in producing a second edition of its handbook on the methodology of restoration; the first edition sold out very quickly and is now difficult to find.

The remaining sections of the restoration center include the engineering section, which performs the engineering analysis required for restoration purposes; the estimating section, which provides cost estimates for the restoration work and for the future maintenance required to preserve the work they have done; and the photogrammetry

section, which records all structures by photography and the photogrammetry process. The library and archives division includes a collection of all studies produced by units other than the production workshop.

The "Restavrator" Special Scientific/Professional Union of Restoration Works, though similar in scope to the above center, is a municipal enterprise of the Leningrad executive committee (city council). Put into effect on January 1, 1974, by resolution of the Leningrad city council dating from October of the preceding year, this workshop is an amalgamation of the Special Scientific Restoration Workshops under the Chief Architectural and Planning Administration of Leningrad and the group of specialists in Workshop No. 9 of the Leningrad Planning Institute (*Lenproekt*). The amalgamated union employs over 1,000 persons, which include about 780 craftsmen at this time. Though a Leningrad municipal enterprise, the union is the largest preservation workshop in the Soviet Union, providing not only a complete complement of services, but also an entirely in-house operation of manufacturing all the furnishings, implements, and artifacts needed to conduct the most intricate restoration project. Unfortunately, we were not shown its planning and design and production workshops, although we visited one of its branches which is responsible for restoring the Catherine Palace at Pushkin.

Combining restoration, production, and planning, the Union concentrates on restoration of the interiors of registered monuments specified by the Office of Inspection of Cultural Monuments in the Leningrad Chief Architect's Office. The scope of the work extends to cover all the interior fabric and elements of a building—architecture, artifacts, furnishings, art work, and technical equipment. Three million one hundred and fifty thousand rubles was spent on this work alone last year in the palaces at Petrodvorets and Pushkin currently being restored by the Union. The Union has been involved with the exterior restoration of only three or four buildings, including Montferrand's St. Isaac's Cathedral and Rinaldi's Marble Palace. Another organization, the Trust for Facade Rehabilitation (*Trest fasadremstroï*), is responsible for restoration of exteriors, although its work is subordinated to the Union as well as to the Office of Inspection.

The Union provides scheduling for the proper use of manpower; buildings to be restored are programmed two years in advance, according to priorities established by the Office of Inspection.

Until last year, the Union employed the traditional guild-apprenticeship method for training master craftsmen. Article 9 of the resolution that established the Union, however, likewise made provisions for developing a special professional and technical restoration institute to train 300 students. A three-year curriculum has been devised and a permanent building to house the institute is under construc-

tion. In the meantime, the first class is being launched this year, with master craftsmen from the union serving as special consultants to the instructors.

Preservation Programs in Schools of Architecture

Anatole Senkevitch, Jr.

The growth of popular interest and professional involvement in historic preservation in the Soviet Union is manifested in recent efforts by leading Soviet schools of architecture to institute formal training programs in preservation. These efforts reflect, as well as provide further impetus for, the development of new concepts and techniques for preserving and restoring historic monuments and sites in the Soviet Union. The preservation programs of two Soviet architectural schools were examined by Messrs. Anatole Senkevitch, Jr., William J. Murtagh, and Russell V. Keune of the US Historic Preservation team.

The Moscow Architectural Institute

The Moscow Architectural Institute has taken the lead in establishing an innovative but controversial program in which interested architecture students can pursue specialized training in preservation. Although the curriculum of the newly-formed Department of Architectural Restoration has not yet received final approval of the Institute's Administrative Council, the program has been in effect for one year, during which it had an enrollment of about twenty-five out of some 300 students matriculating at the Institute. Prof. Vladimir V. Kostochkin, head of the department, had spent the preceding two years developing the framework for the present curriculum. Other members of the department include Professors Sergei S. Ozhegov, who is also Vice Rector of the Institute, and Guri V. Borisevich.

As in the case of the other five areas of specialization at the Moscow Architectural Institute, students are admitted into the Department of Architectural Restoration at the end of four years of general study in the Architecture Faculty. Students are asked to declare their preference for a major area upon entering the Institute, although they

may change at a later date before enrolling in one of the specialized programs in their fifth year; these major areas include City Planning, Housing and Public Architecture, Industrial Architecture, Rural Architecture, Landscape Architecture, and Restoration Architecture.

It is noteworthy that the degree awarded by the Moscow Architectural Institute and other Soviet schools of architecture at the end of the five-and-one-half-year curriculum likewise represents the equivalent of successful completion of our licensing examination to become a registered architect. Such equivalency is rationalized by the requirement, in addition to the regular academic load, that students spend two months out of each of the five summers in a training and apprenticeship program: the first summer is spent preparing both measured and free-hand drawings of architectural landmarks in the field; the second summer involves water-color renderings of monuments, as well as field surveying; the third summer requires actual on-site construction experience; the fourth summer concentrates on visits to various cities and planning agencies to observe the organization and implementation of design as well as construction techniques and practices. The fifth summer, involving work in a design office, is also envisioned as preliminary to the development of the diploma project in the following fall term. Students are encouraged to direct their summer work, as much as possible, toward undertakings bearing directly on their selected areas of specialization.

The curriculum presently used by the Department of Architectural Restoration consists of three courses taken during both semesters of the fifth year, together with the diploma project which is developed in the first semester of the sixth year.

The first of the two-semester courses, entitled the "History of the Architecture of the Peoples of the USSR," is designed to supplement rather than replace a comparable survey of the subject given at an

earlier year. Despite its title, the course concentrates on the history of Russian architecture, i.e., on architectural developments within the RSFSR. Developed expressly for students in the restoration program, this course deals in far greater depth with the attendant building techniques and related socio-economic aspects, focusing on the development of Russian architecture from the tenth through the nineteenth centuries; twentieth-century Russian architecture is presently excluded from consideration, it was explained, because the immediate needs of the Soviet preservation program place a premium on earlier buildings by virtue of their being both in more abundant supply and more urgently threatened with destruction.

Entitled "Methods of Architectural Restoration," the second two-semester course is designed to provide students with a comprehensive historical, theoretical, and practical survey of Soviet preservation. The course begins by tracing the historical development of Soviet preservation practices, focusing upon the principal philosophies, methods, and case studies in this development. There follows an examination of the legal aspects of Soviet preservation, in terms both of enabling legislation and of statutory requirements and regulations (such as, for example, the protective zones, the zones regulating construction, and the preservation zones). Next to be studied are the methods of documenting a building; these include the generic problem of building types, methods of archival research, techniques of inspecting the fabric of historic structures, and documentation of their architectural and structural aspects. The second semester of the course begins with a review of restoration techniques and case studies. The next topic is adaptation of historic buildings (both in historic ensembles and in new parts of a city) to viable new uses. The course concludes with examination of the problem of moving historic buildings from various isolated regions of the country to a single site for the purpose of creating a museum-village; emphasis is given to the current trend of assembling wooden and vernacular structures on a single site to develop a planned "outdoor architectural museum."

The third course, entitled "Practical Work on Restoration," represents the augmentation of the fifth-year design studio to concentrate upon solving specific preservation and restoration problems. According to Prof. Kostochkin, this course is still at an experimental and tentative stage, inasmuch as additional funds have not yet been made available to support the kind of comprehensive student field expeditions and research deemed necessary for the detailed execution of assigned projects. As a result, it was noted that students have to rely heavily upon library research to develop their documentation. Within the current framework of the course, four projects—two per semester—are assigned. Each one focuses upon a major generic preservation problem.

The first problem requires the design of a specified building

type dating from a particular period in Russian architecture. The student is required to immerse himself in the given historical milieu in order fully to grasp the particular way in which the structural, architectural, and aesthetic forms were created in the given period, as well as to ascertain the specific socio-economic circumstances of the particular occupant(s) of the building to be designed. In other words, the student is forced to conduct the kind of research of these various aspects of the problem that will enable him to design the assigned building as if he were an architect practicing in the given period; he is not permitted to use any architectural, structural, technical, or aesthetic elements or techniques emanating from a later period. The objective of the problem, as explained by Prof. Kostochkin, is not replication. Rather, it is to develop in the student a profound understanding of the complex problems that were involved in producing a building in any given period of the past, and thereby establishing a basis for his comprehending and respecting the essential integrity and scope of a historic structure. The assignment in the preceding year, for example, called for the design of a new town house for an officer in the Imperial Russian Army who, returning home at the conclusion of the War of 1812, discovers his old house in Moscow burned to the ground. This problem, it was added, has proven to be somewhat controversial, and has been accused by some of its detractors of fostering a "pseudoauthenticity."

The second problem relates specifically to the documentation of restoration proposals. The building assigned, usually a registered monument, will have been substantially altered or demolished. The student is required to develop a project for restoring the building to its original appearance. Detailed plans, sections, elevations, and other graphic and descriptive material must be developed on the basis of sufficient verifiable documentation to establish the authenticity of the proposal. In the event that the original appearance cannot be ascertained with any verifiable precision, the proposal should specify the earliest aspect of the building for which supporting evidence has been developed; conjectural reconstruction drawings, though permissible, cannot be supplied as the basis for reconstruction or restoration of the building. The second part of the problem involves developing a viable adaptive use for the restored building. The problem assigned in the preceding year centered around a sixteenth-century Muscovite boyar's mansion, a building type that is increasingly being restored in Moscow; proposals for adaptive use examined by members of the US team did not venture beyond suggesting conversion to museums and comparable cultural centers.

The third problem requires the student to design a new structure and supporting environment attached to or adjoining a historic building, usually a registered landmark. The objective of this assignment is to focus upon the particular problem of integrating a new design to its historic setting in a systematic and viable fashion, through either

harmonic contrast or harmonic stylization of existing architectural elements, without undermining the integrity and requirements of either the contemporary design or its historic surroundings. The problem previously assigned on this theme involved a new addition to an eighteenth-century Baltic house that had been converted into a museum. Although it is admirable that the very difficult problem of integrating new design into an historic urban fabric has been included in the Department's curriculum, the results obtained in this particular exercise were quite weak. The quality of the new design is, at best, mediocre; the expression and scale of the contemporary annex are likewise glaringly incompatible with, and intrude mercilessly upon, the historic structure.

It is noteworthy that this generic problem, even more than the first, has proven to be controversial among both restorationists and the modern architects and design faculty at the Institute. The "purist" faction of restorationists, it was noted, tends usually to sidestep this kind of a problem, while modern architects tends to regard such a framework as an infringement upon their design prerogatives. In view of the fact that this problem is increasingly being encountered throughout the Soviet Union as the number of registered monuments increases, it is becoming, in Prof. Kostochkin's estimation, a matter of fundamental concern not only for his department, but also for other departments in the Institute as well as for the Soviet architectural profession as a whole.

The fourth and final problem concentrates on a town planning scheme involving either preservation and renewal of a registered historic town or ensemble, or the creation of an outdoor architectural museum. Intended to develop methods and techniques applicable to preservation planning projects currently being undertaken in numerous Soviet cities, this assignment requires the student to investigate, through documentation and (if possible) on-site research, the historical patterns of development for both specific and prototypical Russian towns and settlements. In the case of creating an outdoor museum, students are required to research various building prototypes, and to determine the proper mix and site orientation of structures to be included in accordance with planning patterns and traditions endemic to the kind of town or settlement being simulated in the given museum complex. Use of existing buildings is not required, but students are encouraged to examine actual examples of building prototypes to be specified in their proposal. The problem assigned in the preceding year required the creation of a complex outdoor museum-village of wooden Russian architecture. The project shown members of the US team consisted of a comprehensive graphical analysis of different building types, and of their planning orientation within the proposed hypothetical village complex. Its specifications were conceived as guidelines of the kind currently being developed for selecting suitable building proto-

types from among the available fund of endangered buildings situated in isolated regions of the Russian northeast.

Although the diploma project is undertaken in the fall semester of the sixth year, its program is finalized and approved in the preceding June. This permits students to apply their last summer of required apprenticeship in an office and area related as much as possible to their program, thereby permitting them to use the summer experience as preparation for the final development of the diploma project in the following term. As a rule, the diploma project is defended in the following February; extensions may be granted at the discretion of the departmental faculty.

In developing his diploma project, the student is expected to conduct a detailed on-site inspection and inventory of his project site (which usually will have been accomplished during the preceding summer's work period). The scope of the diploma project is conceived by the department as a synthesis of methods and elements developed successively in all four prior design problems. Accordingly, it is expected that the student will select a suitable historic town or ensemble (such as a monastery or kremlin), for which a comprehensive preservation plan must be developed on the basis of a systematic analysis of the project site's historical development. The preservation plan must include the restoration of all extant registered monuments contained within the complex, the appropriate adaptive use of all existing buildings, provision for relocating appropriate historic buildings to simulate that portion of the historic fabric of the ensemble which may not have survived, and the design of such new building elements as are deemed essential within the framework of the preservation plan. In addition, the diploma project should include an assessment of the established protective zones both within and around the ensemble and recommend whatever modifications seem appropriate. The graphic presentation of the plan must be supported by comprehensive written documentation of both the historical development of the ensemble and the solutions developed in the diploma project.

The diploma project shown to members of the US team focused on the kremlin ensemble in the ancient Russian town of Kolomna, situated on the Moscow River 72 miles southeast of Moscow. Although Kolomna has been known since 1177 and became a Muscovite outpost in 1300, the present kremlin complex consists of sixteenth century fortification walls and towers and interesting buildings dating primarily from the sixteenth to the eighteenth centuries. The scope of the project encompassed several major categories of development. The first involved investigation of the historical patterns of evolution in the planning of the kremlin, for each century of its existence, as basis for developing a new plan for its re-use. Next there followed a detailed analysis and assessment of the protective zones both within and around the ensemble, with recommendations for modifications reflecting devel-

opments outlined in the preservation proposal. Also provided was the development of a building use and service zoning map, together with a detailed tourist/services circulation scheme. A major aspect of the project revolved around detailed proposals and solutions for the adaptive reuse of all extant registered monuments. The Nunnery and Church of the Assumption in the former Brusensky Monastery (16th-19th centuries), for example, were to be converted into hotel rooms and an exhibition hall, the major addition/modification being that of installing private bathrooms into each of the nuns' cells being converted into hotel rooms. The long corpus of the monks' cells in the New Goluvinsky Monastery (18th century), was to be converted into an exhibition hall, offices, and shops for the restoration workshop located in Kolomna that would supervise the project. The spacious Consistory and Seminary Building (18th century), was to be converted into a picture gallery. The proposal also called for the design of a contemporary new theater and convention center. Here, again, this part of the project was the weakest and least developed, suggesting that minimal attention is devoted to this aspect of the problem.

The presentation, exhibiting a high level of draftsmanship, consisted of twelve boards (each approximately 40 by 50 inches) and a written supporting document over two hundred pages in length. A cursory examination of the project indicated to this observer that it had been well conceived and thought-out, revealing a sound grasp of the preservation problem. It was likewise apparent that the objective described by Prof. Kostochkin of having the solution of the diploma project draw from the methods and insights developed over the preceding four design projects was realized in this particular project with measurable success.

All of the class projects shown to members of the US team exhibited an impressive quality of draftsmanship. It was, however, more difficult to judge the extent to which the projects for the first, second, and fourth problems succeeded in fulfilling the assigned objectives, inasmuch as the documentary basis for the graphically-depicted results was neither depicted nor apparent.

The program of the Department of Architectural Restoration at the Moscow Architectural Institute appears to be controversial in at least two respects. Within the Institute itself, two points of view concerning its content and orientation were described by Prof. Yuri N. Sokolov, Rector of the Institute, as having crystallized among his faculty. The first, advocated by the faculty of town planning, maintains that the scope of the program ought to be expanded to include an equally detailed consideration of open spaces as well as of individual buildings. The preservation problem is so complex, they argue, that it requires the participation of planners as well as architects. The other point of view, according to Prof. Sokolov, is substantially supportive of the framework devised by Prof. Kostochkin, with its apparent emphasis

upon "object" rather than "context" orientation. There is perhaps, in addition, yet a third attitude which is all too familiar to American preservationists, namely, a demonstrated lack of concern for or interest in the preservation problem. Significantly, these various points of view reflect similar attitudes that prevail among the various segments of the Soviet architectural community. It is apparent, however, that there is now general support for having the general preservation program approved for departmental status, even if final approval by the Institute's Administrative Council might provoke an earnest debate of the direction and thrust of its curriculum.

The Leningrad Engineering and Building Institute

Although not provided for in the itinerary developed in advance for the US team, a meeting was arranged at my request on June 4 with Prof. Vladimir I. Piliavsky for the purpose of discussing the preservation program at the Architectural Faculty of the Leningrad Engineering and Building Institute. In our meeting on May 31 with Mr. Vasili A. Petrov, Deputy Chief Architect of Leningrad, it was noted that both schools of architecture in the city had initiated some form of preservation programs. The Repin Institute at the Academy of Fine Arts, according to Mr. Petrov, permitted interested advanced students of architecture to include work on either historic parks or historic buildings in their advanced design projects; these students were likewise encouraged to work with various agencies in the Leningrad area involved in preservation activity. Mr. Petrov indicated that a more systematic program was being developed by Prof. Piliavsky at the Leningrad Engineering and Building Institute. The meeting with Prof. Piliavsky, though very informative, was held at the Leningrad House of Architects rather than at the Institute. As a result, it was not possible to examine the work done by his students.

According to Prof. Piliavsky, no formal preservation program has yet been established within his faculty at the Institute, although numerous provisions have been made in recent years to promote the study of preservation problems and methods by interested students. The first of these is an elective two-semester course on preservation. Open to third- and fourth-year architecture students, the course combines lectures and field trips in examining the major theoretical and practical aspects of Soviet preservation. Preservation specialists, usually architects, are periodically brought into the course (Aleksandr A. Kedrinsky, Chief Architect for the restoration of the Catherine Palace at Pushkin, is a frequent participant). The course has been offered for the past five years, drawing an annual enrollment of about fifteen to twenty students. In addition, Prof. Piliavsky utilizes his two-semester course on the history of Russian architecture to touch upon the restora-

tion problems and methods endemic to Russian building from the tenth through the nineteenth centuries. He likewise endeavors to organize periodic symposia on preservation problems; a three-day seminar on the preservation of historic Russian town centers, sponsored jointly by the Institute and the Leningrad Chief Architect's Office, was held earlier in May.

In the past year, the Architectural Faculty of the Institute began for the first time accepting diploma projects on preservation topics. As a result, Prof. Piliavsky is now supervising two students who are developing preservation problems for their diploma projects. The first of these projects, being developed by a student employed by the Leningrad Chief Architect's Office, involves the reconstruction of Giacomo Quarenghi's demolished English Palace (1783) at Pushkin. Admitting that it is a controversial preservation option, Prof. Piliavsky explained that reconstruction is justified in this instance by the project's meeting what he regards as three essential conditions. The first is that of availability of sufficient documentation of the building, which here includes Quarenghi's original drawings, supplemented by extensive photographic coverage and measured drawings of the actual building which were executed prior to its destruction. The second condition concerns the significance of the building; its value, according to Prof. Piliavsky, can derive either from the building's being crucial to a historic ensemble, as in the case of the recently restored eighteenth-century dwelling across from the Our Lady of Kazan Cathedral and the reconstruction of Rusca's Portico adjoining the Retail Arcades, or from its being an outstanding monument of Russian architecture, as in the case of the English Palace and other palaces currently being restored in the vicinity. The third condition calls for the newly-reconstructed building to fulfill a viable new function. In the case of the English Palace, the reconstructed building has been designated by the Leningrad Executive Committee (city council) as the official residence and reception center ("Palace of Receptions") for official guests of the city. Prof. Piliavsky maintains that viable adaptive uses, corresponding to genuine needs, must be developed before a decision can be made to restore a building in order to prevent its subsequent languishing merely as another museum.

The second diploma project involves the adaptive use of Stasov's monumental Imperial Stables, near the Russian Museum, as a municipal sports center for Leningrad youth. Following the Revolution the facility had been converted into a garage complex, a use that proved highly incompatible with either the significance or the central location of the building. A carefully developed conversion of the expansive complex into such a sports facility, however, could return this monument to a position of justifiable aesthetic and functional prominence. Roofing over the three large interior courts of the former stables with large skylights in order to transform these large areas into year-round

playfields would neither affect the external appearance of the building nor undermine its considerable architectural integrity. At the same time, such utilization of the complex would provide an important cultural center in the heart of the city, thereby representing a very successful example of adaptive use. Prof. Piliavsky plans to continue the thrust of the second project in guiding further diploma projects. For he believes that the problem of developing viable adaptive uses for monumental historic buildings is especially crucial in Leningrad.

A formal preservation program comparable in scope to the one developed by Prof. Kostochkin at the Moscow Architectural Institute is being planned for the Architecture Faculty at the Leningrad Engineering and Building Institute. Prof. Piliavsky explained, however, that its conceptual framework will be somewhat different from that of its Moscow predecessor. Unlike the latter program, which Prof. Piliavsky characterized as concentrating excessively upon the profound replication of historic structures, the program at LISI will most likely emphasize the problems and methods of adaptive use. Prof. Piliavsky outlined his rationale for such emphasis by reiterating that this problem is especially critical in Leningrad. Of the more than 900 monuments that have already been registered and placed under governmental protection, the vast majority requires far more compatible and congenial uses than are presently available. Rastrelli's splendid mid-eighteenth century Stroganov Palace on Nevsky Avenue, for example, presently is shared by four institutional occupants; such a situation creates major jurisdictional problems in matters affecting the proper preservation and maintenance of such a major architectural landmark (a current proposal recommends giving the building to the Hermitage for use as a museum of Russian culture).

As for restoration techniques, Prof. Piliavsky believes that reasonable limits should be observed. He cited the early eighteenth-century Menshikov Palace on Vassily Island (which is to become the Hermitage Museum's center for Leningrad culture in the Petrine era) as a current example of restoration procedures being followed in Leningrad. The original ground floor level of the building is now some one and a half feet below street level. The crucial problem here was how to lower the ground level around the building in order to restore the ground floor and to reinforce the foundation wall. The solution provided for developing a permanent moat of suitable proportions around the foundation wall, which would provide access for its reinforcement and reveal the original ground floor level without involving major modification of the surrounding contemporary topography; it also called for utilizing modern reinforcing methods to secure the foundation walls. Restoration of the original roof will also proceed accordingly. Proponents of a "pure" restoration, according to Prof. Piliavsky, had advocated the complete authentic reconstruction of the original wood roof superstructure. Because none of the original beams or rafters had sur-

vived, however, it was decided to reproduce the original roof form with a concrete slab on a steel structure, with the simulation of appropriate roofing material on all exposed surfaces. In this manner, Prof. Piliavsky explained, an accurate visual image of the building's original appearance would be regained with the use of modern building techniques without resorting to what he termed "pseudo-replication."

Conclusion

It is, of course, difficult to compare the two programs described above. The one devised by Prof. Kostochkin for the Department of Architectural Restoration at the Moscow Architectural Institute provides the only fully-developed curriculum in the Soviet Union to date for training preservation architects. Its framework—which is far more comprehensive than any of the preservation programs currently offered by universities in the United States—has been carefully structured to deal systematically with the major problems and issues of contemporary Soviet preservation. It is to Prof. Kostochkin's credit that he has introduced into his preservation design course the very difficult problem of integrating new design with historic urban fabric. The strength of his program, as well as the greatest object of its controversial reception among the Soviet preservation and architectural communities, derives from its apparent emphasis upon the problem of producing a complete and authoritative facsimile of the original historic buildings. The approach inferred from Prof. Piliavsky's comments appears, in contrast, to place greater emphasis upon the equally complex problem of adaptive use, as well as upon imposing certain limits upon the degree of restoration and reconstruction to be undertaken. Despite certain conceptual differences that should be quite familiar to American preservationists, however, these two approaches should not be regarded, at least for educational purposes, as being mutually exclusive. These differences in viewpoint, moreover, should be recognized as being products, at least in part, of the respective historical circumstances operating in Moscow, a city whose surviving medieval buildings have been severely modified through time, and Leningrad, a splendid Baroque and Neoclassical city whose architectural legacy, which forms the core of the historic city, has been preserved virtually intact. Where Moscow has, from its inception to modern times, represented the show-piece of latest trends in Russian architecture—a development that accounted for substantial modification of its historic urban fabric—Leningrad architecture evolved from the outset a tradition of preserving and capitalizing upon its magnificent classical *tout ensemble*. It should be recognized, moreover, that these differences in conceptual orientation likewise reflect, as they might well be expected to do, comparable disagreements within the Soviet preservation and architectural com-

munities about what should be the proper direction for preserving the national patrimony. That this patrimony must be preserved, however, is a question on which remarkably widespread agreement has emerged over the past decade in the Soviet Union.

The Private Sector in Historic Preservation

Russell V. Keune, AIA

Contrary to general preconceptions, members of the US Historic Preservation Team found that the private sector plays a significant role in preservation in the Soviet Union. This role, which assumes various forms, includes: 1) the contribution of the Soviet citizen as a tourist consumer of preserved cultural property, 2) the inclusion of private residential property within the scope of public preservation programs, and 3) the organization of citizen interest and involvement—which can influence profoundly the government's role in preservation—into societies for the protection of cultural monuments at the republic level.

The Soviet Citizen, Tourism, and Preservation

The significance of the Soviet citizenry as tourist consumers of preserved cultural property was made abundantly apparent from the moment that the US team first set foot inside the walls of the Moscow Kremlin. A constant stream of organized tourist groups flowed in and about Cathedral Square, indicating one of the most important reasons for which these magnificent structures were preserved. It was a scene that was to be repeated on numerous occasions at each of our stops throughout the Soviet Union. Perhaps one of the most dramatic examples of our own experiences as tourists was our visit to Petrodvorets, outside Leningrad, one beautiful spring Sunday—in the midst of thousands of local residents.

Interest of private citizens has been matched by governmental efforts to encourage tourism and promote the general safeguarding of monuments from misuse. Numerous signs could be seen prominently displayed both at Petrodvorets and especially at the ancient Erebuni Citadel in Yerevan, Armenia, admonishing Soviet citizens to respect and take pride in the nation's cultural monuments.

Public preservation programs have also been recognized for their enormous potential for bringing foreign private tourist dollars into the Soviet economy. Soviet economists have calculated that foreign tourists will constitute between 15 and 20% of the total number of visitors expected throughout the country each year. Cultural tourism appears to be well on its way to becoming a significant element in generating new sources of foreign currency for the national Soviet economy.

The growth of both domestic and foreign tourism served as a primary justification for having the Central Research Institute for Experimental Design of Trade/Service Buildings under the State Committee for Civil Construction and Architecture assume the additional responsibility of planning the country's tourist facilities. Significantly, the preservation of historic towns and ensembles forms an integral part of the projects for tourist complexes developed by this Institute.

Our visit to Vladimir and Suzdal introduced us to the first in a series of major tourist centers in the Soviet Union that will be integrated into a town preservation and restoration project. Suzdal, a town of 10,000 population which received over 700,000 visitors in the past year, is the site of the major tourist center for the so-called "Golden Ring" of historic Russian towns.

The presence of an incongruously large ferris wheel just off Suzdal's main thoroughfare, built by local interests to capitalize on the growing tourist trade, indicated that a degree of local business initiative was still very much alive in the Soviet Union. The national government officials were working towards its early removal.

It was also in Suzdal that we were introduced to two tourist-related activities managed in large part by the private sector in Soviet preservation. These were the manufacture and sale of regional crafts and lapel pins. Everywhere we went in the Soviet Union we were presented with handsomely designed lapel pins which often featured local

architectural monuments. Large trays of such lapel pins were displayed in Suzdal kiosks. We were to amass diverse personal collections during the course of our stay. A reconstructed wooden house served as a sales outlet for native handicraft, featuring decorated woodware, the famed Russian *palekh*, or lacquered *papier mache* chests, and assorted jewelry. The sale of lapel pins and handicrafts, we were to learn later, represents a source of revenue for the societies for the preservation of cultural monuments.

Private Property and Public Preservation Programs

In our visit to Suzdal, it was noted that issues involved with both preserving the town's handsome wooden houses and accommodating the needs of their owner-occupants would be coming to the fore as the preservation work on the publicly-owned properties was concluded. Owners of outstanding houses, as well as of those situated along prominent thoroughfares, would be granted assistance in the restoration and rehabilitation of their buildings.

Private ownership of residential property was especially in evidence in Armenia and Georgia. Our travels around the urban centers of Yerevan and Tbilisi revealed that much of the population lives in single-family detached housing. The recently established preservation zone—roughly the equivalent of our historic district—in Tbilisi is conceived to retain the pattern of private ownership. The residents of buildings in this section of “Old Town” that are slated to be restored will be moved out temporarily at state expense while work is being done; they will be returned to their houses after the work is completed. Property in this district is to be inspected every three years. The owner must agree to maintain the property to the best of his ability. However, if he can prove that he cannot maintain it, the city will step in and do the necessary work without forcing the owner to give up his property.

During our visit to Yerevan, we learned that the Cathedral at Etchmiadzin, the Holy See of the Armenian Church, was being preserved in part by private funds being raised by the Armenian church, including \$400,000 in United States funds provided by the Gulbunkian Foundation. These private donations, though used to preserve the private property of the organized church in Armenia, have been transferred to the government of the Armenian SSR, which in turn is executing the necessary restoration work.

The All-Russian Society for the Protection of Historical and Cultural Monuments

The Soviet citizen appears to relate to preservation much like

his counterpart in the United States: he is not at all hesitant to express his opinion. It was evident from our conversations with Soviet public officials that they were often subjected to influential pressure from private citizens in their preservation-related decisions. Literary writing, newspaper articles, letters to the editor, and direct citizen expressions of dissatisfaction were all noted as ways in which Soviet citizens voice their sentiments in matters affecting the preservation of cultural monuments.

It was, in fact, the mounting expression of such protest that paved the way for the creation in 1965 of the All-Russian Society for the Protection of Historical and Cultural Monuments. It was in that year that a group of the cultural and scientific intelligentsia, horrified at what seemed to be the senseless destruction of Moscow's surviving architectural heritage for the purpose of erecting the 4,000-room Hotel Rossiya adjoining Red Square and the Moscow Kremlin and the monumental arterial office-commercial-apartment-entertainment complex along Kalinin Avenue, banded together to establish the Society with official backing of the Soviet government. That this backing proved more than nominal is indicated by the fact that the President of the All-Russian Society, V. I. Kochemasov, is at the same time Vice-President of the Council of Ministers of the RSFSR. Though the fledgling society was unable to prevent the substantial demolition of Moscow's historic fabric to make way for the Hotel Rossiya and the Kalinin Avenue complex, it nonetheless proved instrumental in saving numerous important landmarks around both project sites. On the Hotel Rossiya site, for example, eleventh-hour intervention helped save no fewer than six historic Muscovite churches as well as the ancestral palace of the Romanov family and the so-called "English Court," a combination market and inn built by Ivan the Terrible in the sixteenth century to house foreign merchants. Numerous existing buildings and an important church were likewise retained and integrated into the Kalinin Avenue mall complex despite objections by the Moscow Chief Architect.

Not long after that, the Society proved more successful in directing its substantial clout against another government project that threatened to destroy an important historic architectural site. The government had announced plans to build a new highway from downtown Moscow to Vnukovo Airport through Kolomenskoe, a medieval village on the banks of the Moscow River that was once the summer residence of the tsars. The Moscow branch of the Society insisted that the highway would spoil the historic vista, and that traffic vibrations would damage the foundations of Kolomenskoe's outstanding architectural monuments, including the unique Churches of the Ascension and St. John the Baptist. They succeeded in forcing the transportation ministry to by-pass the historic village at an additional cost of several hundred thousand rubles. Thus, the Society evolved as the Russian Republic's

remarkable counterpart of an American preservation pressure group, bent on keeping senseless demolition of historic monuments at bay. At the same time, however, the Society evolved a positive program for working with government agencies to plan for and anticipate threats to the country's patrimony.

The Russian Society for the Protection of Historical and Cultural Monuments has sister organizations in the other 14 Soviet republics, although each aims to look after its own affairs; there is no all-union, or national society. It is these societies that constitute the principal focus of the private sector's involvement with historic preservation in the Soviet Union. The first of these societies were founded in the Caucasian republics of Georgia and Armenia in 1959. The majority of them was formed by 1966, with the last society organized in the Kasakhstan Republic in 1970. Membership in these societies has grown very rapidly in this period: there are now over 26 million members throughout the Soviet Union. The following figures provide examples of approximate memberships in some of the constituent republics:

Russia	9,000,000
Ukraine	6,000,000
Belorussia	3,000,000
Georgia	800,000
Armenia	800,000

Underlying the massive citizen interest in these societies is the enormous resurgence of popular interest in the country's past. Tired of the pervasive monotony of the latter-day Soviet man-made environment, Soviet citizens of various persuasions are rediscovering the riches of their own unique heritage. Moreover, this renewed interest in the country's past, which was apparent everywhere we travelled in the Soviet Union, is a movement that has struck a responsive chord in the patriotic Russian personality. Thus, when these societies were founded, they proved effective focal points for encouraging, focusing, and stimulating public interest in the preservation of the nation's cultural resources, which were viewed as the embodiment of certain unique past cultural achievements. Mass interest in preservation has also succeeded in bridging gaps between different generations as well as among disparate segments of Soviet society, combining as it does party and governmental officials, students, scientists, dissident intellectuals, and ordinary citizens. At the same time, more free time is becoming available for travel and recreation. This year alone more than 50 million Soviet tourists are expected to visit places of historical interest in their country. The resulting growth in tourism both by Soviet citizens and by an ever-expanding number of foreign visitors has stimulated enormous interest in the nation's past and in the relationship of this past to the future. In short, the phenomenal rise of the Soviet preservation movement might best be characterized by citing the rather poignant observa-

tion made by the leadership of the Russian Society that "there is nothing more powerful than an idea whose time has come."

The organization, aims, and ideals of the All-Russian Society for the Protection of Historical and Cultural Monuments is descriptive of the scope of the private sector's involvement in Soviet preservation activity. The primary objectives of the Society, as outlined in its charter, are 1) to develop and disseminate information about cultural monuments, principally through publications, lectures, conferences, excursions, exhibits, and sale of souvenirs; 2) to attract the widest circle of the Soviet populace into active and direct participation in the study, protection, and preservation of cultural monuments, thereby encouraging respect for the national patrimony and stimulating a greater sense of patriotism; and 3) to collaborate actively with government agencies in developing policy guidelines, projects, and proposals for the preservation of cultural monuments, by means of providing financial, professional, and practical assistance for various preservation undertakings.

The Society is sub-divided into local groups, for which a minimum of five members is needed, and Chapters, usually consisting of fifty or more members. Membership is open to all Soviet citizens 14 years of age or older through payment of dues: 15 kopeks (about 20 cents) at initiation and 30 kopeks (about 40 cents) annually thereafter. In addition to individual members, the Society also accepts organizational members who pay a voluntary membership fee by agreement. Thus, a large automobile factory might pay 5,000 rubles a year, while a small group might pay only 20 rubles a year; the Institute of Art History in Moscow, for example, pays 100 rubles a year. In addition to individual and organizational memberships, voluntary contributions constitute a third source of funds. Moreover, the entire profits from the souvenir and handicrafts enterprises operated by the Society also go towards funding its programs. The Society receives no government funds. But, as Mr. Vladimir Ivanov, Vice-President of the Society, pointed out, with 9 million members each paying 30 kopeks a year, the Society does quite well financially just out of membership dues. This year's annual budget, for example, is 19,000,000 rubles, with the following distribution:

9,000,000 rubles is given to organizations for the restoration of monuments;

2,000,000 rubles is allocated for the administration of the Society;

4,000,000 rubles is allocated for information and education programs; and

4,000,000 rubles is allocated for the operation of the souvenir workshops.

The souvenir workshops produce most of the lapel pins (*znachki*) one sees for sale all over the Soviet Union depicting a town,

district, or republic, as well as individual monuments. They also operate wood carving workshops which produce many of the craft items for sale at all tourist kiosks; among the most recent additions to this array of crafts are souvenir ceramic plaques which feature historic events, monuments, or cities.

The benefits and responsibilities of membership in the Society include participation in and voting at business meetings, election to the various offices of the Society, participation in the various activities sponsored by the Society, and enforcement of control over preservation practices through inspection commissions organized by the Society and government preservation agencies.

The Congress of the Society, the highest governing body of the organization, convenes every five years. At that time, the Central Council of 125 members is elected. Membership of the Council represents the diverse professional backgrounds of the Soviet intelligentsia, including academicians, scientists, architects, artists, planners, and civil servants. From the Central Council a Presidium of 25 members is elected to deal with the everyday administrative affairs of the Society.

A central body of 44 persons administers the Society's program in the Russian Republic. An average of three people administer the regional level programs, and an average of one person handles the coordination of programs and the district and town levels where there is an active membership. In all, the Society coordinates the activities of over 1,500 salaried workers throughout the large Russian Republic, including the fund-raising and other work of its volunteer cells.

In ratifying its charter, the Council of Ministers of the RSFSR granted the All-Russian Society for the Protection of Historical and Cultural Monuments unprecedented authority to review and approve (but not veto) projects for the reconstruction of ancient Russian towns; state agencies are likewise required by law to consult with the Society before going ahead with any redevelopment. Such responsibility prompted the Society to organize the specialists within its membership into sectors of mutual professional interest and expertise. These standing committees include the Sector on Planning, the Sector on Architecture, the Sector on History, the Sector on Archaeology, the Sector on Monumental Art, and the Sector on Folklore and Music. These six sectors, attracting the most active members, organize and conduct their own projects and expeditions and carry on a publications program.

It is through the work of these committees that the Society both collaborates with and reviews projects developed by various government agencies. The Planning Sector has responsibility for reviewing planning projects produced by government institutes, as well as for developing its own professionally-competent, comprehensive design, planning, and redevelopment proposals for historic towns and ensembles. It also is involved in research and development of guidelines for

formulating and implementing protective zones and zones regulating construction. The Architectural Sector is chiefly concerned with formulation of guidelines for conducting restoration work, as well as with exploration and recommendation of new restoration techniques. The Historical Sector is involved primarily with development of objective criteria and methods for the identification and evaluation of cultural monuments.

Another highly active segment of the Society is its Sector on Youth, which has established close working ties with the Young Pioneer and Komsomol organizations. This sector organizes summer restoration projects involving volunteer student cadres, which consist primarily of university students. Special training sessions are conducted for these student cadres in advance to prepare them for their three months of summer field work. Exhibitions featuring their work are organized by the Society at the conclusion of the project. A May, 1974, student film competition sponsored by the Society brought forth 120 entries depicting preservation activities throughout the Soviet Union. The winning entry was from a student group which had worked in a preservation project in Siberia.

Its close contact with research and planning institutes and especially with individual university departments accounts in large measure for the Society's success in conducting considerable scholarly work on preservation. Scholars and instructors at institutions of higher learning use their spare time to participate in expeditions organized by the Society, and subsequently take the material compiled back to their institutions for final development and presentation. Agreements are likewise concluded with specialists at various institutes and universities for conducting archaeological excavations, as well as for documenting historic architectural monuments and towns in conjunction with the preparation of the Register of Historical and Cultural Monuments of the Peoples of the USSR.

The All-Russian Society for the Protection of Historical and Cultural Monuments has devised a program of voluntary professional and amateur participation that is probably unequalled by any comparable preservation society in the world. But perhaps its greatest service to Soviet preservation is the enormous enthusiasm which it inspires among both its members and the public at large.

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1. Church of St. Basil the Blessed (Cathedral of the Intercession), built in 1555-60 by Barma and Postnik Yakovlev for Ivan the Terrible in commemoration of his conquest of Kazan and Astrakhan. At left, in the background, is the Spassky (Saviour) Tower, built in 1491 by the Milanese architect Pietro Solario as the main entrance into the Moscow Kremlin. The ornate octagonal superstructure was added in 1624-25 by the Englishman Christopher Halloway. The tower is seen here scaffolded for restoration.

2. Moscow, a 16th century brick church (badly sandblasted during restoration), near the Kremlin and within one of Moscow's protected districts, seen here impacted by a raised auto ramp leading to the enormous Hotel Rossiya.



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2.

1. Rendering of the central part of Usolye, a town on the Kama River which emerged in the 18th century as the largest of the Stroganov family's salt-mining enterprises in the Urals. Part of a student project executed by V. Myznikov at the Department of Architectural Restoration in the Moscow Architectural Institute (MAI), the rendering features the restored Stroganov ensemble—consisting of the Church of the Transfiguration, octagonal belfry, and Stroganov House (1724-31), and the Church of the Holy Trinity (1813-20).

2. Drawing from a preservation planning project executed at MAI's Department of Architectural Restoration, amplifying the current Soviet practice of moving historic wooden structures from various isolated regions of the country to a single site to create a museum-village. Such a project is required to develop specific guidelines for selecting building prototypes to be assembled; their proper mix and site orientation are determined in accordance with documented planning patterns endemic to the type of village being simulated in the proposal.



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4.

3. Moscow, Restoration Workshop housed in as yet unrestored monastery complex, which comprises nearly every necessary restoration craft, including furniture restoration, wood-carving, weaving, brass casting, forging, glass casting, etc.

4. Moscow, Restoration Workshop. Woman operating a specially devised keyboard for transferring weaving design patterns to punchcards which control the heddles and weft threads in a restored 18th century Jacquard-type loom for brocades.

1. Suzdal, Cathedral of the Nativity (within the Suzdal kremlin), built 1222-1225, with extensive rebuilding of upper sections of walls in 1530; domes were given onion shapes in 1750. The complex ensemble includes the Archbishop's Palace which was restored by Alexei Varganov and Igor Stoletov in 1964.

2. Suzdal, reconstructed house with ornamented frieze. It has been adapted for use as a sales-gift shop by the All-Russian Society for the Preservation of Historical and Cultural Monuments, where souvenirs and reproductions of decorative wooden ware are sold.

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3. Suzdal, Outdoor Museum of Wooden Architecture. At left is the Church of the Transfiguration (1756) and at the right, the Church of the Resurrection (1776), both of which were dismantled and re-erected here in recent years. This museum preserve also includes several log houses and wooden windmills.

4. Suzdal, Outdoor Museum of Wooden Architecture. A two story log house dismantled and recently re-erected here, is now undergoing final touches of restoration which include repairs and replacement of rotting logs, window sash, shutters, surrounding trim, and board roof. The verge boards, richly carved, are typical of 19th century vernacular ornamentation.

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1. Leningrad, interior of Smolny Cathedral, showing a small portion of the crossing which is used for museum displays, consisting of photographs, large transparencies, and industrial design exhibits.

2. Leningrad, Cathedral of the former Smolny Convent, designed by Bartolomeo Rastrelli, 1748-55; completed in 1835 by Vasili P. Stasov. It has been recently restored and is adaptively used as the "Museum of Leningrad Today and Tomorrow."

3. Leningrad, Church of the Resurrection "on the Blood," on the bank of the Griboyedov Canal. Built by A. A. Parland in 1882-1907, on the spot where Alexander II was assassinated in 1881, it was intended to resemble St. Basil's in Moscow.

4. Leningrad vicinity, World War II Russian tank and concrete bunker beyond (at right). The latter is preserved near the line of furthest penetration by the German army during the siege of Leningrad, which also is memorialized in other ways.



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1. Petrodvorets (formerly Peterhof), situated west of Leningrad on the Gulf of Finland. The Great Palace, designed by the French architect Jean B. A. LeBlond as a Russian Versailles for Peter the Great, was considerably enlarged in 1749-56 by Rastrelli for Empress Elizabeth. Heavily damaged in World War II, the palace, gardens and fountains are now a major restoration project, nearly finished, with visitor facilities including guided tours, modern restaurant, and access by hydrofoil boat. This is a very popular historical site.

2. Petrodvorets, in-progress restoration of ornamental woodwork. Carving is mounted on thin hardwood (plywood) sheets to facilitate installation and to provide furred-out space for electrical wiring.

3. Pushkin (formerly Tsarskoe Selo), south of Leningrad. The Great Palace (later called the Catherine Palace), was begun by Kvasov and greatly enlarged by Rastrelli in 1749-56. Photograph illustrates testing of the aging properties of various types of gilding on the colossal figures along the facade.

4. Pushkin, Catherine Palace, Restoration Workshop with woodcarvers at work, duplicating a surviving original carving (at right). The workshop employs about 105 craftsmen, including carvers, gilders, painting restorationists, ceramists, etc.



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1. Yerevan (population 692,000), capital city of Armenian SSR, which recently celebrated its 2750th birthday. Visible here is the modern Yerebuni Museum of local history and culture. Beyond the museum on hilltop (right) is the ancient site of Erebuni, founded in the 8th century B.C.



1.

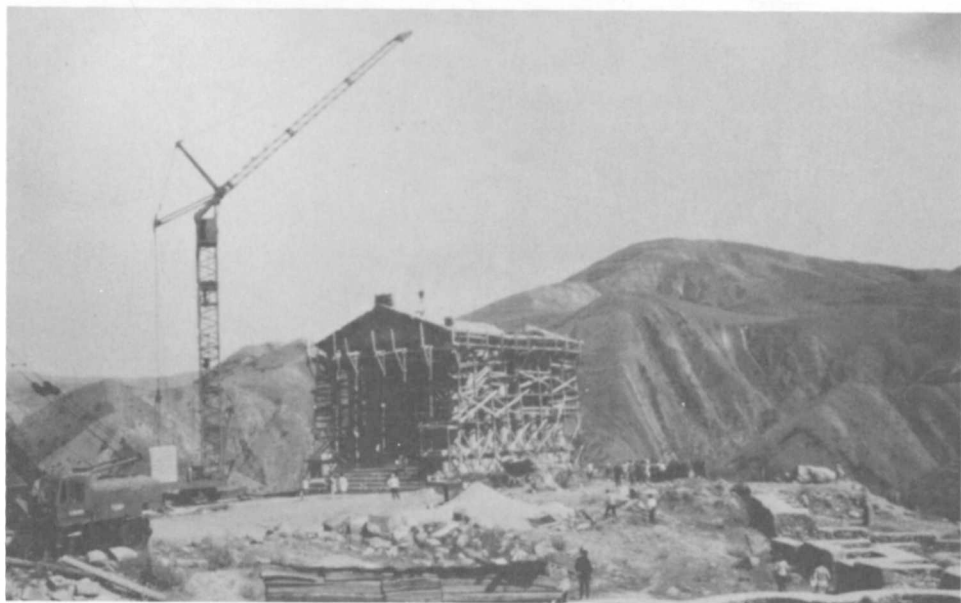
2. Erebuni, portion of the hilltop stronghold complex which has been excavated in recent years. It is largely an archeological exhibit with extensive remains of stone and mud-brick walls, and the partial reconstruction of a large many-columned hall.

3. Armenian SSR, re-erection and partial reconstruction of a classical temple (destroyed in the 4th century) at Garni, a remote mountain site. The structure was built by the Armenian king Tiridates in the first century A.D. and is claimed to be the USSR's best preserved memorial of antiquity.

4. Garni, a stonecutter channeling stone roof battens. Such stonecutting, by a combination of power saw and hand-work, is done at the site; the details are derived from surviving fragments. Missing carved mouldings are replaced with unornamented mouldings to provide visual differentiation between the old and the new.



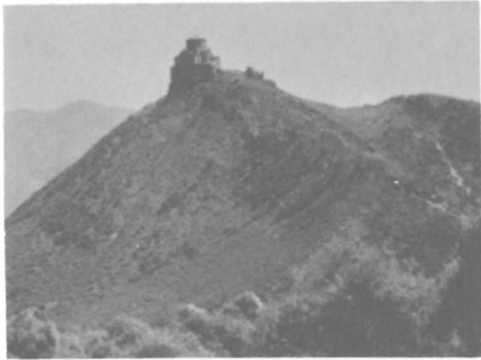
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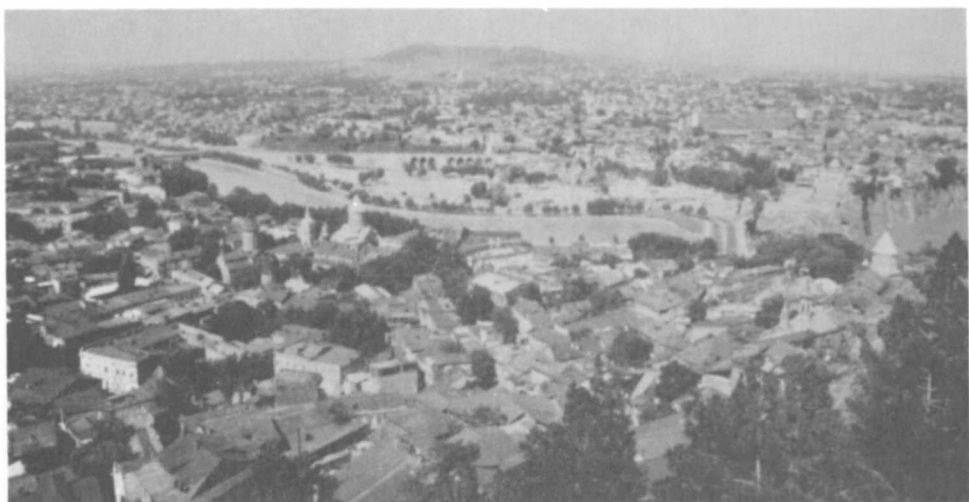
1.

1. Georgia SSR, Mtskheta, Jvari Church, built 586-87, 604, a centralized plan with 4 apses, square crossing bay, dome and octagonal drum on squinches. The church is on a dramatic site above the confluence of rivers Kura and Aragui.

2. Georgia SSR, detail of church facade at Ananuri (up the Aragui River from Mtskheta), a small and remote fortified complex dating from the 16th-17th century. The carved stone embellishments and figured reliefs are typical of the fine artistic craftsmanship of many later Georgian churches.



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1. Tbilisi, general view of city (population 861,000), capital of Georgian SSR, with the "old town" historic district in foreground.

2. Tbilisi, typical balconied house in historic district, which is privately owned and slated for restoration by the city. Owner-occupants will be relocated during restoration.

3. Tbilisi, Georgian National Open Air Folk Architecture Museum, established in 1960 although most buildings were moved in after 1967; it is a collection of representative building types from various regions of the Georgian SSR.

4. Tbilisi, Georgian Folk Museum. Reconstructed foundation and floor framing for a building to be re-assembled in the open air museum. Rotted members were replaced or spliced, depending on the condition of the wood.



3.



4.

Appendix A

Program and Tour, with Soviet Participants

- May 24-25, 1974 En Route from Washington to Moscow
- May 26, 1974 Tour of Red Square and Moscow Kremlin
- Visit to the TV Tower, Church of the Holy Trinity,
and Sheremetev Palace at Ostankino
- Vladimir I. Travush, Engineer, State Committee for
Civil Construction and Architecture*
- May 27, 1974 Meeting with the State Committee for Civil Con-
struction and Architecture
- Nikolai V. Baranov, Vice-President of the State
Committee*
- Yuri S. Yaralov, Director, Central Research Insti-
tute on the Theory and History of Architecture
(under the State Committee)*
- Mark A. Orlov, Director, Central Research Institute
for Experimental Design of Trade/Service Buildings
and Tourist Facilities (under the State Committee)*
- Vladimir N. Belousov, Director, Central Research
and Design Institute for City Planning (under the
State Committee)*
- Boris A. Kuvshinnikov, Advisor, USSR-US Com-
mittee on Environmental Protection, Main Admin-
istration of Hydrometeorological Services of the
USSR*

*Anatoli P. Romas, Senior Engineer and Translator,
Foreign Relations Section of the State Committee*

Meeting with the Central Research Institute on the
Theory and History of Architecture (under the
State Committee)

Yuri S. Yaralov, Director

*Nikolai F. Gulianitsky, Deputy Director for Schol-
arly Work*

*Andrei V. Ikonnikov, Head, Section on the History
of Historic Towns and the Preservation of Archi-
tectural Monuments*

Meeting with the Central Research Institute for
Experimental Design of Trade/Service Buildings
and Tourist Facilities (under the State Committee)

Mark A. Orlov, Director

*Yuli V. Raninsky, Head, Design Atelier for Tourist
Buildings*

*Volya I. Kosarzhevsky, Head, Design Atelier for
Tourist Complexes*

May 28, 1974

Meeting with the Central Research and Design
Institute for City Planning (under the State Com-
mittee)

*Vitali A. Lavrov, Acting Deputy Director and
Chief, Town Reconstruction Department*

Evgeni M. Markov, Learned Secretary

*Iza Y. Kontorovich, Chief, Residential Area Con-
struction Department*

*Konstantin F. Kniazev [President, City Planning
Sector of the All-Russian Society for the Protec-
tion of Cultural and Historical Monuments]*

Rais M. Gariaev, Scientific Worker

Svetlana K. Regamé, Scientific Worker

Yuri A. Fedutinov, Scientific Worker

**Meeting with the Office of Fine Arts and Protec-
tion of Monuments, Ministry of Culture of the
USSR**

Dmitri N. Kul'chinsky, Deputy Chief

*Vladimir B. Kuindzhi, State Inspector for the Pro-
tection of Monuments*

Aleksei A. Maksimov, Chief Architectural Engineer

May 29, 1974

Travel to Vladimir

**Visit to the Vladimir Regional Executive Commit-
tee (County Council)**

Tikhon S. Sushkov, President of the Committee

*Aleksander A. Zenkovich, Vice-President of the
Committee*

*Victor I. Lapshin, Secretary, Party Regional Com-
mittee*

*Gregori N. Strizhak, Chief of the General Dept. of
the Committee*

*Aleksei P. Akimov, Chief, Vladimir Regional Dept.
of Construction and Architecture*

*Vladimir G. Avrutsky, Chief Architect, City of
Vladimir*

*Ivan I. Grishin, Chief Engineer, Vladimir Regional
Committee for Civil Design*

Visit to the Vladimir Glass Works Museum (housed
in a Russian Revival church dating from 1914)

Tour of Architectural Monuments in Vladimir

Travel to Suzdal

Visit and Dinner at the Refectory of the Former
Archbishop's Palace in the Suzdal Kremlin

May 30, 1974

Tour of the Suzdal Kremlin and the Monastery of
the Saviour and St. Euphemius

*Igor A. Stoletov, Chief Architect, Vladimir Special
Experimental Scientific-Restoration Professional
Workshop*

Tour of Suzdal Outdoor Museum of Wooden Archi-
tecture and Rural Life

Return to Moscow

Visit the A. V. Shchusev Museum of Russian Archi-
tecture (housed in the Main Cathedral of the
Donskoi Monastery)

Arkadi N. Lupoll, Director

Tamara I. Geidor, Head of Exhibitions

Travel to Leningrad

May 31, 1974

Meeting with the Central Architectural and Plan-
ning Department under the Leningrad Executive
Committee (city council)

Vasili A. Petrov, Deputy Chief Architect

Valentina G. Aleksandrovskaia, Head, State Inspection for the Protection of Architectural Monuments

Nina A. Smolianova, Learned Secretary, State Inspection for the Protection of Architectural Monuments

Tour of Historic Sites in Leningrad

June 1, 1974 **Visit to the Hermitage Museum**

June 2, 1974 **Visit to Petrodvorets**

Nina V. Vernova, Senior Scholar

**Reception for the U.S. Historic Preservation Team
at the Residence of Culver Gleysteen, U.S. Consul
General in Leningrad**

June 3, 1974 **Meeting with the "Restavrator" Special Scientific/
Professional Union of Restoration Works**

Suren I. Gaziyants, Director

Mark G. Kolotov, Chief Architect

Irina G. Blek, Senior Scholar

Evgeniya A. Komarova, Landscape Engineer

**Tour Through the Catherine Palace at Pushkin,
Inspect the Work of Workshop No. 5 of the
"Restavrator" Union**

Nikolai I. Medyntsev, Superintendent

Aleksander A. Kedrinsky, Chief Architect

June 4, 1974 **Meeting with the Leningrad Zonal Research and
Design Institute (under the State Committee)**

Aleksei V. Karagin, Director

Anatoli F. Antonov, Deputy Chief Engineer

Aleksander V. Yakovlev, Head, Planning and Construction Dept.

Petr M. Demidov, Engineer, Foreign Relations Dept.

Visit to St. Isaac's Cathedral

Visit to the Peter and Paul Fortress

Meeting Between Dr. Anatole Senkevitch, Jr., and Prof. Vladimir I. Piliavsky, Architectural Faculty of the Leningrad Engineering and Building Institute (LISI)

Travel to Yerevan, Armenian SSR

June 5, 1974

Reception at the Yerevan Executive Committee (City Council)

Grigori O. Asratian, President of the Executive Committee (Mayor)

Grigor G. Agababian, President, State Building Committee (Gosstroï) of the Armenian SSR

Levon A. Erzinkian, First Vice-President, Armenian Gosstroï

Gurgen N. Kanetsian, Vice-President, Armenian Gosstroï

Ruben A. Badalian, Director, Gosstroï Research Institute

Eduard S. Arevshatian, Deputy Chief Architect, City of Yerevan

Visit to the "Erebuni" Museum and Fortress

Suren Narimanian, Director

Maria A. Voskanian, Senior Scholar

**Visit to the Holy See of the Armenian Church at
Etchmiadzin**

*His Holiness Vasken I, Catholicos of the Armenian
Church*

Tour of Historic Sites in Yerevan

June 6, 1974

Visit to the Mashtots Institute

Babken L. Chukaszian, Deputy Director

**Visit to the Site of the Ancient Temple at Garni,
Being Reconstructed**

**Tour of Historical Monuments in the Environs of
Lake Sevan**

June 7, 1974

Travel to Tbilisi, Georgian SSR

**Reception at the Tbilisi Executive Committee
(City Council)**

*Sergei T. Riggava, First Vice-President of the
Executive Committee*

*Shota A. Titberidze, First Vice-President of the
Executive Committee*

*Karl S. Megrelishvili, Vice-President of the Execu-
tive Committee*

*Tamaz A. Tevzadze, Chief Architect, City of
Yerevan*

*Irakli N. Tsitsishvili, President, Gosstroï of the
Georgian SSR*

*Otar G. Tukhareli, Director, Tbilisi Zonal Research
and Design Institute*

Ucha S. Bakradze, Chief, Office of Fine Arts and Protection of Monuments, Ministry of Culture of the Georgian SSR

Aleksandr S. Pikus, Deputy Director, Tbilisi Zonal Research and Design Institute

Aslan K. Gogoberidze, Senior Associate of the Tbilisi Zonal Research and Design Institute

Aleksander M. Dzhaparidze, Senior Associate of the Tbilisi Zonal Research and Design Institute

Tour of Historic Sites in Tbilisi

June 8, 1974 **Trip to Alaverdi to see the Svetitskhoveli Cathedral (12th C.)**

Guram A. Zhgenti, Senior Scholar, Institute of the History of Georgian Art

Luncheon at the Chavchavadze Mansion and Estate in Tsinandali

June 9, 1974 **Visit to the State Museum of Georgian Art**

Tour of "Old Town" Tbilisi

June 10, 1974 **Travel to Mskheta to see Historic Churches**

June 11, 1974 **Visit to the Museum of Georgian Folk Architecture and Life under the Open Skies (by Messrs. Lee H. Nelson, Anatole Senkevitch, Jr., and F. Ross Holland)**

Travel to Moscow

June 12, 1974 **Meeting with the Institute of Art History, Ministry of Culture of the USSR**

Oleg A. Shvidkovsky, Deputy Director

*Aleksei V. Seregin, Deputy Chief, State Inspection
for the Protection of Monuments, Ministry of
Culture of the RSFSR*

*Nikolai A. Tarasov, Chief, State Inspection for the
Protection of Monuments, Ministry of Culture of
the RSFSR*

*Vladimir N. Ivanov, First Vice-President, All-
Russian Society for the Protection of Historical
and Cultural Monuments*

**Tour of the All-Union Production and Research
Restoration Combine of the Ministry of Culture of
the USSR (by Messrs. Henry A. Judd, Lee H.
Nelson, and F. Ross Holland)**

Lev N. Nenagliadkin, Director

Lev A. David, Chief Architect

*Sergei S. Podiapsky, Chief of the Research Sec-
tion*

**Meeting at the Moscow Architectural Institute (by
Messrs. Anatole Senkevitch, Jr., William J.
Murtagh, and Russell V. Keune)**

Yuri N. Sokolov, Rector of the Institute

*Sergei S. Ozhegov, Vice-Rector and member of the
faculty of the Department of Architectural
Restoration*

*Vladimir V. Kostochkin, Head, Department of
Architectural Restoration*

*Guri V. Borisevich, member of the Faculty of the
Department of Architectural Restoration*

June 13, 1974

**Final Meeting at the Union of Architects of the
USSR**

Georgii M. Orlov, First Secretary of the Board of Directors

Iraida V. Shishkina, Secretary of the Board of Directors

Victor S. Egerev, Secretary of the Board of Directors

Oleg A. Shvidkovsky, Vice-President

Vladimir N. Ivanov, Member, Board of Directors

Oleg I. Pruttsen, Member, Board of Directors

Mark A. Orlov, Volia I. Kosarzhevsky, and Yuli V. Raninsky (see meeting on May 27 with the Central Research Institute for Experimental Design of Trade/Service Buildings and Tourist Facilities)

Trip to Inspect the "Trepariev" Housing Project

- | | |
|---------------|---|
| June 14, 1974 | Departure from Moscow by Messrs. A. Russell Mortensen, Henry A. Judd, F. Ross Holland, and Lee H. Nelson |
| June 15, 1974 | Departure from Moscow by Messrs. William J. Murtagh and Russell V. Keune |
| June 16, 1974 | Meeting of Anatole Senkevitch, Jr., and Oleg A. Shvidkovsky at the Institute of Art History, Ministry of Culture of the USSR |
| June 17, 1974 | Meeting of Anatole Senkevitch, Jr., and Yuri S. Yaralov at the Central Research Institute on the Theory and History of Architecture |
| June 19, 1974 | Meeting of Anatole Senkevitch, Jr., and Mark A. Orlov at the Central Research Institute for Experimental Design of Trade/Service Buildings and Tourist Facilities |

Departure from Moscow by Anatole Senkevitch,
Jr.

**Soviet Personnel Attached to the U.S. Historic
Preservation Team**

*Vladislav I. Mokhov, Translator and Engineer,
Foreign Relations Section, State Committee for
Civil Construction and Architecture*

*Aleksei V. Doktorovich, Head, Information De-
partment, Central Research Institute for Experi-
mental Design of Trade/Service Buildings and
Tourist Facilities*

**Note: Evening cultural events and unofficial entertainment and tours
are not noted.**

Appendix B

List of Documents and Publications Taken to USSR by the U.S. Historic Preservation Team

- 12 packets of "Legislative Documents and Procedures" which included (translated into Russian) one copy of:
- Antiquities Act of 1906
 - Historic Sites Act of 1935
 - Excerpt—Surplus Property Act of 1944
 - National Trust for Historic Preservation Act of 1949, including amendment
 - Excerpts—Federal Property and Administrative Services Act of 1949
 - Reservoir Salvage Act of 1960
 - National Historic Preservation Act of 1966, including amendments of 1970 and 1973
 - Excerpt—Transportation Act of 1966
 - National Environmental Policy Act of 1969
 - Executive Order 11593—May 13, 1971
 - Procedures for the Protection of Historic and Cultural Properties
- 6 copies of "Administrative Policies for Historical Areas of the National Park System" with an extract in Russian (Part 1, "National Historic Preservation Program" pages 17-20)
- 2 copies of "Part One of the National Park System Plan: History" with a summary in Russian
- 12 copies of the following with a summary in Russian
- The National Historic Landmarks Program
 - The National Register of Historic Places
 - National Park Service Archeological Program
 - Historic American Buildings Survey
 - Historic American Engineering Record Program

- 2 copies of "The National Register of Historic Places—1972" with a summary in Russian
- 4 copies of the following with a summary in Russian
 - Federal Register List of Historic Properties on the National Register
 - How to Complete National Register Forms
 - Historic Preservation Grants-in-Aid Policies and Procedures
 - The Historic Preservation Grants-in-Aid Catalog
- 6 copies of "With Heritage So Rich" with summary in Russian
- 10 copies of "National Park Service Guide to the Historic Places of the American Revolution" with summary in Russian
- 4 copies of "Recording Historic Buildings" with summary in Russian
- 2 copies of "Bent's Old Fort: An Archeological Study" with summary in Russian
- 10 copies of "Introduction to Early American Masonry, Stone, Mortar and Plaster" with summary in Russian
- 2 copies of "A Report of the Mohawk-Hudson Area Survey" with summary in Russian
- 1 copy of the following with summary in Russian
 - An Historic Structures Report of Fort Stanwix
 - Historic Structures Report of Fort Point
 - The Ranger's Club, Yosemite National Park
- 12 copies of the following with summary in Russian
 - National Trust Services
 - Before Restoration Begins: Keeping Your Historic House Intact
 - Nail Chronology: As An Aid to Dating Old Buildings
- 8 copies of "Documenting a Legacy" with summary in Russian
- 6 copies of "Preserving the Environment: Participating in the Review Process" with summary in Russian
- 4 copies of "The Bulletin of the Association for Preservation Technology (APT)" with summary in Russian

8 copies of “Historic Preservation” magazine

12 photographs of “HABS Salon Prints”

12 copies of “Independence National Historical Park” which is already translated into Russian

Many copies of “White House” which is already translated into Russian

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.



