

Exemplaire à conserver

Architectural heritage: inventory and documentation methods in Europe

p r o c e e d i n g s

**European colloquy
organised by the Council of Europe
and the French Ministry for Education and Culture –
Direction du patrimoine**

Nantes, 28-31 October 1992

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INTRODUCTION

Following the Round Table held in London in 1989 on "New technologies in documentation on the architectural heritage", the Council of Europe organised with the Direction du Patrimoine (France) the Nantes Colloquy on Inventory and documentation methods. This meeting thus represents a new step in the series of works undertaken by the Organisation with a view to co-ordinating architectural heritage documentation methods and systems.

Its purpose was to determine practical forms of co-operation between heritage documentation centres throughout Europe and to prepare a definition of common standards on the basis of comparing the inventory methods used in different countries.

During the working sessions, successively focused on rural, urban and industrial architecture, the following points were dealt with:

- what are the objectives of the surveys: protection, conservation, pure knowledge?
- what are the survey techniques used; how are the buildings forming part of groups, "families" or series selected and studied?
- how are documentary data recorded (content, structure, vocabulary of entry forms)?
- are data-processing techniques used, and if so, how? Are other word or image processing technologies used?
- what are the results?

At the end of the colloquy, the participants - more than 150 from 24 European countries - agreed on a "core data index", ie a minimum set of data elements for heritage inventories, the draft of which had been drawn up by the Council of Europe's group of specialists (cf. appendix II). This core data index will constitute the basis for a Recommendation to the governments of the member States on co-ordinating documentation methods and systems in Europe.

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This publication reproduces the contributions presented at the colloquy as well as the conclusions of the work.

OPENING OF THE COLLOQUY

The documentation of the architectural heritage in Europe:

A progress report

John Bold

This Colloquy takes its cue from the 1985 Granada Convention for the Protection of the Architectural Heritage of Europe, particularly those Articles (2 and 17) which concern inventories and documentation. Since 1985, new technologies have evolved in the face of increasing economic constraints, and the political situation has altered in a manner that few would have predicted, but the principle of the need to survey, understand, protect and conserve our common architectural heritage has remained constant; the spirit of co-operation, fostered by the Council of Europe, has likewise remained firmly at the heart of European endeavours to find broadly applicable solutions to common problems.

Under the aegis of the Cultural Heritage Committee of the Council of Europe, specialists have been meeting periodically to discuss how we might identify and implement these broad solutions. I should like to thank all those involved in groups both large and small for their continuing efforts - my contribution to this Colloquy draws substantially on the work of others, not only that of my colleagues from the English Royal Commission, Simon Grant and Robin Thornes, and our colleagues from Sweden and the Netherlands, but also the work of our colleagues and host from the Inventaire Général, who with the Council of Europe have done me the signal honour of inviting me to introduce the subject of our meeting. It is a welcome opportunity for an inhabitant of an offshore island to affirm the possibilities and strengths of European co-operation.

For those who have not been quite so closely involved, I should like to review briefly the progress which has been made in our subject and go on to outline the purpose and expectations of this Colloquy.

A Round Table met in London in 1989 in order to examine the tasks of architectural heritage information centres, the ways and means of improving co-operation between them and the new technologies available to them in furthering their work. The participants agreed five recommendations which subsequently were revised by the Council of Europe's group of specialists following the receipt of further comments. Simply, these were as follows:

1. Further co-operation on the principles of information exchange is a priority for further developing the management and understanding of the architectural heritage. This should be encouraged by ensuring the publication of a detailed inventory of documentation centres and by identifying the requirements of users of information.

2. The standards relating to a minimum set of data elements and the technical specifications required for their communication should be identified. This should be done by determining which data elements are necessary for the recording of all buildings of historic or architectural interest in each state or institution for the furtherance of its own work; by determining how this data may be harmonised; and by setting standards for computer systems.
3. Exemplary thematic or geographically based projects should be implemented to test viability of common approaches to cataloguing, classifying and disseminating heritage information. It was suggested that international working groups could assess common needs for image processing, geographical information systems and so on.
4. Appropriate centres of architectural documentation should be designated to participate in co-ordination and implementation of the programme, being made responsible for determining the nationally required set of data elements, carrying out pilot studies and so on.
5. The responsible authorities should take into account the need to co-ordinate the documentation of all buildings and sites of historical importance, by continuing to maintain inventories on both historic buildings and sites, particularly those threatened by redevelopment. They should also consider the development of databases with the capacity to hold structured information on both buildings and sites, identifying methods of classification and interrogation common to both.

These revised recommendations represented a first attempt to outline a programme and they have provided the basis for subsequent work. It is our hope here that we might revise them in the light of greater experience and wider consultation so that they can be proposed to ministers with a reasonable expectation of acceptance.

One of the proposals, number 4, was already perhaps more of a pious hope than a practical suggestion. There are far too many European organisations, with differing purposes and responsibilities, for it to be anything other than invidious to argue that only one centre per state should be identified as having the leading role in implementing a programme of co-operation. We may still wish to recommend however that one body should have a co-ordination role, responsible for soliciting views and disseminating information within each state. Taking recommendation number 1, on co-operation, as axiomatic here, the points where real progress can be reported and proposals developed are numbers 2, 3, and 5, relating to the minimum set of data elements, exemplary projects and the co-ordination of documentation on historic buildings and sites.

Taking these in order, the subject of core data, the fiche minimum, is fundamental to this Colloquy. It is proposed that for each building held in a documentation centre a basic minimum amount of information should be recorded, whatever the extent of the documentation and whatever the purpose of the institution, in order to facilitate interrogation of the documentation held in each of the member states of the Council of Europe. We have proposed a list of headings which have been circulated to you in

advance, concerning the name, location, function, date, associated persons and organisations, the building materials, physical condition and protection status of each building for which a record exists. To this list should be added the date at which the information was compiled. It may seem to some that this information is rather limited. It is intentionally so. Core data is not designed to be all embracing - it is in mathematical terms the lowest common denominator. Each country and each organisation will have additional needs over and above this broad guide but the minimum set of elements should provide the enabling mechanism which is necessary if information gathered is to have a more than purely national or local application. The seeker after wisdom and truth should not expect to receive answers to highly complex questions through these minimum elements but such questions as "how many seventeenth century farmhouses for which you have records exist in such and such a region and how many of them are statutorily protected?"; "which railway buildings for which you have records can be associated with Robert Stephenson and what are their types and dates?"; and "what records exist for houses designed by Robert de Cotte?" can be dealt with very easily. Subsequent, more complicated questions tend to be so specific to a country, an historical period, an architect or a building type that it would be extraordinarily difficult, and I suggest, pointless, to try to produce more detailed lists of elements which would work in all circumstances. We cannot readily equate the information requirements of those concerned with cathedrals and those concerned with textile mills, beyond a basic minimum. It is better to have the field of enquiry narrowed by the broad question; detailed questions can then be asked of the documentation centre, guided by the subject and the availability and accessibility of the records.

We must not expect systems designed for a general application to be able to fulfil all our multifarious research and public information needs. After a point the researcher should rely on traditional methods of enquiry - visiting the building, looking through boxes of photographs and pieces of paper, retiring to a corner with a hot towel and a bottle of cognac, thinking again about the evidence before going back and looking again with more specific question in mind. We should also note in this age of absolutes, with its unreasoning faith in the achievement of a total record, that not all questions are capable of being answered.

We shall be discussing this concept of core data in the context of the recording of the rural, urban and industrial heritages, all areas of concern because of the extent of the daily threats to their physical fabric by redevelopment, attrition and neglect. We have already through a Council of Europe questionnaire, circulated last year, sought to find out which organisations already compile the elements of information proposed as "core". A broadly satisfactory response has been received and both the questionnaire and the results circulated. 78 organisations in 26 states have described 137 inventories covering monuments and sites dating from pre-history to the present day. A wide range of replies was received to the question of the criteria used in choosing which buildings were to be recorded, from 70 % who selected on the basis of architectural and historical significance, to 40 % who selected on the basis of threat and 38 % who selected according to geographical location. These percentages are not mutually exclusive, some organisations might use all three of these criteria, but they do underline the differences of approach and purpose - the variations both overt and implicit which follow individual

national imperatives. However, a more consistent response was shown on the issue of core data - 70 % of organisations already are using most of the elements defined as "core". The fundamental question to be addressed over the next few days is whether this percentage represents an acceptable basis for recommending that all documentation centres should move towards incorporating the elements in order to provide the basis for national and international information interrogation and exchange.

The secondary issue to be addressed is the extent to which we should be recommending the technical specifications for the computer hardware and software which should be used in compiling and disseminating this information, and the extent to which we might, as individual systems become more compatible, merely recommend the approaches and functions which should be carried out and satisfied in order to arrive at the situation in which information exchange is possible. Since fewer than 35 % of organisations currently use information systems, now is surely the time to ask the question before more systems are developed. We should also ask the question of how the implementation of information systems might be funded. If it is a requirement of each individual organisation to finance developments themselves - the functional analysis, the systems analysis, the implementation and development of the utility - some might find themselves financially disadvantaged. Should we propose therefore that central guidance is required and centrally allocated funding a desideratum?

The questionnaires provide detailed information on organisations, contact names, the scope and purpose of inventories and methods of access to them. The Council of Europe will publish the gazetteer next year with a summary of the overall situation in each country if possible. It is important to update gazetteers since responsibilities and purposes change and funding bodies come and go. This one will present the up to date information available to us. It will need to be presented in a revisable form, if not in a state of perpetual revolution.

Moving on from core data, a major component of this Colloquy, other issues may be expected to arise. Recommendation number 3 of the London Round Table, concerning exemplary projects has proceeded slowly. An attempt by the Royal Commission and the Inventaire to set up a project on the imaging of photographs of stained glass foundered as each organisation found itself beset by more pressing national concerns. However the Inventaire and the Italian Istituto per Catalogo e la Documentazione, with Royal Commission participation, have begun preliminary work on a joint imaging proposal as part of the European Community's Impact programme.

Lastly, recommendation number 5, on historic buildings and sites may perhaps be reconsidered and expanded. In England we are working already on the development of a unified database which will combine architectural and archaeological information compiled to a core data standard. The Council of Europe also is concerned to identify matters of interest and concern which may be common to its specialist groups. We must acknowledge that the documentation of the architectural heritage is neither finite nor self contained and nor should it be. It has implications for many other spheres of interest not only archaeology but also other areas of pressing European concern - such as crafts and the techniques and methods of restoration, and the increasingly mobile, movable

heritage. All of these are of profound importance to all concerned with understanding, documenting and protecting the evidence of the past. But I recommend that we should do no more at this Colloquy than acknowledge the significance and complexity of these related areas. It will be challenging enough to arrive at a harmonious conclusion which respects the individual aims of the 78 organisations consulted so far, without significantly broadening the scope of the exercise. If we wish to achieve usable conclusions here then we should concentrate on the specifics outlined in the programme so that we might move towards a consensus on practical recommendations, one of which might well refer to the continuing need to consider the inter-relationship of the various components of the heritage, not only conceptually but also in relation to information technology; and not only in Europe but also in the United States and Canada.

Before closing, I feel that it is incumbent upon us to look up from these details and remind ourselves of why we are engaged in this enjoyable programme of discussion and events. We can do no better than return to the Granada Convention which recognised "that the architectural heritage constitutes an irreplaceable expression of the richness and diversity of Europe's cultural heritage, bears inestimable witness to our past and is a common heritage of all Europeans". The Convention further recalled "the importance of handing down to future generations a system of cultural references, improving the urban and rural environment and thereby fostering the economic, social and cultural development of states and regions". We would do well to remember this larger purpose. "Heritage" has become a much abused and devalued concept. It has an insidious and atrophying effect on our culture; used to justify, for example, performing King Lear in Victorian dress; used, in total contradistinction to any idea of fitness for purpose, to justify traffic lights in London's Regent Street in the shape of classical columns; used in a climate of fear of the present to justify the retention or replication of an architecture of facades, many of which are utterly undistinguished, rather than allowing the building of good new architecture which does not copy but is compatible with the best of the old which we must seek to understand and to preserve. It is not too overweening to suggest that we have a part to play in this process in helping to determine the nature and shape of the environment which we shall pass on. We must work to foster the understanding of the architecture of the past in order to provide a platform of firm foundations for the future. Such understanding must precede documentation. This is our obligation - not to be undertaken lightly. It is why we are meeting here to co-operate and to formulate Recommendations.

It may seem that the path is long and stony, and the steps small, but climbing the mountain of Virtue is not supposed to be easy. We must look forward to the view from the plateau.

Study and documentation problems in rural architecture

Chairperson of the sitting: Maria-Luisa POLICHETTI

**Heritage inventory in Belgium, and more particularly in Flanders.
Rural architecture: density, diversity and complexity.**

Suzanne Van Aerschot

Introduction

The *Architectural Inventory programme*, and the *publication* thereof- both still in progress - were initiated in 1965 by the Directorate of Fine Arts and Literature at the then combined Ministry of National Education and Culture. This inventory summarily lists and records buildings of archaeological, historical or artistic interest, with an additional focus on noteworthy architectural complexes. The inventory of listed buildings does not claim to be exhaustive. The chronological limit is set at around the second third of the 19th century, with a few exceptions of outstanding quality. It is more concerned than usual with rural and town houses and structures, which tend to be less well known than churches and castles. The experimental phase (1965-1972), which included bilingual publications covering the first two pilot *arrondissements* of Louvain and Nivelles, was based mainly on a visual approach, using bibliographies - then, albeit, somewhat limited - as a data-base for functions, chronologies and so on. No archives were consulted at this stage. As such, the inventory acted as an instrument designed to protect and educate, in accordance with Council of Europe policy at the time.

Cultural autonomy (1969) and regionalization gave rise to a split in the initial bilingual team. This in turn resulted in a certain differentiation due to the structural dissimilarities between the Heritage Services. Wallonia, which for a long time had had no such Service of its own, kept to the programme already under way, without any undue interruptions or changes.

Two-part publication of the inventory, presented in a more or less standard form and covering the entire country, is still going ahead. At the present time the institutions charged with this task are:

- The Division of Monuments, Sites and Excavations in the General Directorate of Territorial Development and Housing at the Ministry of the Walloon Region;
- The Office of Monuments and Sites (Bestuur Monumenten en Landschappen (BML)), which is part of the Administration of Territorial Development, the Environment, Housing and Monuments (Administratie voor Ruimtelijke Ordening, Leefmilieu, Huisvesting en Monumenten (AROHM)) at the Ministry of the Flemish Community (Ministerie Vlaamse Gemeenschap), with sub-offices in each province.
- The Brussels-Capital Region.

1. Method of inquiry

The inventories entail the systematic study of the various arrondissements, administrative sub-divisions in our nine provinces. These "topographic" units often differ in terms of both their geography and their history. These differences inevitably find expression in the varied range of town-planning and architecture. Historical towns and cities are often dealt with as entities, and, in Flanders, divided up into historical and urbanistic sectors.

"Global referencing", which includes under the self-same heading urban, rural and industrial architecture, helps to obtain a picture of the overall context. It also helps to pinpoint the major trends of historical, urbanistic and architectural development, and establish the underlying relationships between them. The in situ visit, topographic and/or cadastral map in hand, is a must and invariably entails a thorough inspection of the terrain as well as a swift "archaeological" analysis of each "representative" construction in question. The "reading" and analysis are, needless to say, refined, and backed up by experience and visual recollection. Inventory preparation places ever greater stress on cartographical archives, thereby helping to capture the development of places and buildings in an overall as well as a specific sense.

One or two differences exist with regard to selection procedures - these, henceforth, are broader, more "documentary" and have no chronological limits in Flanders - and with regard to complementary studies and surveys.

The inventorial procedures/consecutive classification proposals implemented in Flanders at the Office of Monuments and Sites, as from 1975-1976, call for a more encompassing documentation base as well as for precise data, to provide "scientific" assessment and justification, as per the Decree concerning the Protection of Monuments and Rural and Urban Building Complexes (Ensembles) of 3 March 1976. Whence the need for "effectual" archival searches, consultation of iconographic sources, and critical analysis of oral sources.

The decree rules out any chronological limits in its definitions of "monuments" and "urban and rural building complexes". It focuses explicitly on values of general interest at the artistic, scientific, historic, folkloric and/or socio-cultural level, as well as at the level of industrial archaeology. The widening of the chronological field and the enlarged typological range have complicated the task of "discovering", within the building stock of the built-up areas, features of value and interest that are part of a cultural heritage thus conceived.

The fairly flexible selection criteria have been drawn up on a theoretical basis, which has perforce been adapted and revised in a pragmatic way. The growing experience of each provincial team, and the results of interaction between in situ work and complementary studies and surveys have given rise to greatly enlivened discussion. Furthermore, an incomplete pre-inventory, prepared in Flanders by a number of local committees during European Heritage Year (1975), managed to draw attention to certain forms of minor architecture and certain features of urban and rural "furbishings".

perceived as part of the heritage by the population itself. This uneven documentation contributed to the abandonment of general criteria. The diversity already glimpsed showed that the task ahead would involve, first and foremost, pinpointing any significant features at local and regional levels...

As a result, both the quality of uniqueness and the fact of belonging to a type recurring either uniformly or in a diversified manner are taken into consideration. Needless to say, the degree of originality of both the construction and the surroundings plays an important role. Some distinctive alterations can nevertheless be regarded as milestones in the development of the construction and, where pertinent, in the development of the history of the immediate surroundings or of the entire region. Similarly, the state of preservation of buildings has an influence on which ones will be chosen, even though examples, albeit in ruins, of certain types of edifice will be included for purely documentary reasons.

2. Structure of data

In both Communities, the structure of the deliberately "schematic" descriptions is based on the inspection record sheet. The data included are more or less the same, with slight differences in their order.

Inspection record sheets

These record sheets are designed to standardize the data taken down on the spot, and structure the resulting analysis. In Flanders these data "units" follow the pattern given below. It goes without saying that the headings of the "core data index" are duly included on them.

1. "Official" current identification (address, cadastral number, classification...);
2. "Historical" identification (name/function/typology + any changes where relevant);
3. Integration in or spatial relation to the built-up surroundings and, where relevant, the typology resulting therefrom;
4. Volumetry or three-dimensional relation indicated by the number of apertures and levels (original/current) + roofing and its specific typology;
5. Proposed chronology/ies, possible style(s) or stylistic influence(s)... possible datings, inscriptions... names of architects, building contractors... this intermediate heading in fact encompasses preceding and subsequent observations;
6. Materials: shell or fabric/ finish/ foundations...
7. Facade(s):

- 7.1 Composition, arrangement... reflecting, on a case-by-case basis, the spatial organization inside.
- 7.2 Apertures: position and specific typology of windows and doors.
8. Alterations (functional and formal: materials, typology.. and possible chronology).
9. State of preservation.
10. Initial assessment of the importance of the construction per se or as a group or complex, or part thereof;
11. Attached (out)buildings (cf. diagram overleaf) and reference to complementary record sheet(s)).
12. Number(s) of negative(s).
Date of entry.

As a rule, the back of the record sheet is left blank, for diagrams and notes, oral source material etc. and, where pertinent, notes on interior features, fixtures (fireplaces, stairs... machinery...).

These single record sheets are used for all types of constructions, apart from churches, which are described on special sheets with headings referring to furnishings and fixtures which are part and parcel of the history of the building.

The degree of refinement and precision of the data included for publication will depend to some extent on the complementary studies and on the way these are collated with the findings of the in situ analysis.

In Flanders, greater attention will be paid to data analysis ranging from the specific construction to the development of the street, hamlet, or commune. Representative groups or complexes, for which there is no special record sheet, will be written up on cards with a set of symbols indicating functions and periods.

The general introductions to each volume will be more exhaustive, examining one by one such aspects as landscape, history, town-planning and architecture - in relation to the particular typologies - in such a way as to highlight any inherent associations and promote a thorough understanding of the region.

The register of architects and restorers, as well as an accompanying, well-researched bibliography, may help to guide more detailed scientific studies, and offer thesis topics. The generously illustrated publication of the basic documentation thus assembled constitutes a sort of "minimal" conservation for all the buildings in question, because at least a picture of them and their specific data will be handed on to future generations -whence the importance of the photographic record at the end of the volume, summarizing all the items entered in the inventory.

3. Documentation

Because of staff shortages, the documentation is not analyzed, systematized, computer-processed etc. The classification made is purely alphabetical and topographical. Each file is made up of the inspection record sheet plus any complementary documentation. The corpus of this documentation, arranged province by province, is available to researchers, architects, proprietors and students.

In Flanders, the introduction of data-processing for the whole inventory is envisaged in due course. Current work entails, firstly, gathering the scientific and administrative data for the 5 000 or so listed monuments, sticking as closely as possible to the system developed by the Royal Institute of the Artistic Heritage for its photographic documentation. The "core data index" could obviously be annexed to this. The Walloon region merely intends to computerize the administrative files of its classifications and listings.

Outlook

Completion of the publication of the two series is the top-priority goal. This, in fact, is the first time that such a programme is being conducted on a systematic and on-going basis throughout Belgium.

To date, "The Monumental Heritage of Belgium, Wallonia" consists of 16 volumes in 26 tomes. The Walloon Region has recruited 15 staff to complete the 7 *arrondissements* in 14 tomes by the end of 1994.

The Flemish Community series, whose title, which has been different from the outset, refers in a more general way to the architectural heritage and the development and evolution of built-up areas, currently runs to 15 tomes in 32 volumes.

It is not easy to predict when the work will actually be completed, because certain teams have been reduced in size, while the task of preparing or updating classification files is swelling. There are still 15 *arrondissements* to tackle, plus the city of Bruges, for which a sectorial approach will inevitably have to be adopted as for Antwerp and Ghent.

The Minister presently in charge of the project has, moreover, shown a definite and resolute determination to bring the programme to its conclusion, and immediately embark on the task of updating it, probably on a computerized and typological basis.

The Brussels-Capital Region is now responsible for the publication of the inventory of the Historical Centre previously drawn up by the two communities. It also intends to coordinate all the activities in its territory, and to develop its legal protection system which involves "inventory entries".

The German-speaking community is providing the translation of the inventory of its district, which is already published in French. It is publishing this version in a series

of instalments dealing with each amalgamated commune, but the "national" presentation will be retained.

With regard to *rural architecture*, the investigatory method for the inventory in Flanders contributes towards the real discovery of the rural heritage, and helps to shed light on its various features, and their spatial and architectural characteristics.

The series does not include a great many "rural" tomes, for most of them also deal with historic towns of average importance which occur every 25 kms/15 miles or so, i.e. a day's walk apart in the centre of medieval Europe.

The diversity and complexity of rural architecture can be explained by varied geological and geographical factors, as well as by a complex history going right back to different prehistoric periods, and to the Roman occupation. The archaeological inventory currently being drawn up will add more detailed data in this respect.

Research involving the "overall context" highlights:

- relations between the urban and rural setting, existing at the historical, socio-economic and cultural level, and now apparent in the building heritage;
- individual and group layouts, either in hamlets or in villages of varying shapes and sizes, and the importance of communications networks (roads and waterways);
- major features, such as churches, castles, abbeys, manorial and/or abbey farms, tenant farms... having more to do with academic architecture with the familiar chronological phases;
- minor features such as village houses of all social ranks with the desired variants, representing the architecture of the local district associated, more than any other form of architecture, with local building materials.

In addition, the inventory can supervise, relate and qualify the typologies broadly established in relation to the morphology of villages or farms and houses for example, and take into account transitional zones which are often overlooked, and developments linked, inter alia, with agricultural production or the gradual process of industrialization. The fact still remains that the current "radiography" approach reveals the problems of the rural world, and the way these problems differ from one area to another, ranging from a relative status quo to massive "urbanization" or almost complete disappearance, as in the port extension zone in Antwerp, for example. Protective measures will have to become more an integral part of a general planning and development policy. The first "regional landscapes" characterised by a dynamic and concerted management of their architecture and environment will perhaps prove to be a good solution.

Addendum

The data in the rural architecture inventory can make a contribution towards:

1. Familiarization and popularization associated with high-quality cultural tourism programmes, as will be the case with the Interreg project. In collaboration with the Nord- Pas-de-Calais inventory, this project will focus on the Westhoek cross-border area in Flanders. This study will culminate in a multilingual publication and certain tourist by-products.
2. Scientific study.
The "Rural Architecture in Wallonia" collection, initiated in 1984 and currently consisting of 11 out of the 13 volumes planned (1994), deals with material issuing in some cases from inventories, centred on particular landscapes and farming regions. It endeavours to reconstruct the way of life of farmers, mainly in the 18th and 19th centuries. The study is being conducted by the "History, Architecture and Building Centre" at Louvain-la-Neuve University.

Independently, the series of scientific inventories, published by Western Flanders province, includes in-depth studies of regions and typologies. Tome 4, for example, deals with the Zwin Region (1970), tome 8 with Mills in the provinces (1984), and tome 11, which is in the process of being compiled, will deal with regional half-timbering.

**Monuments file (Record) and monuments topography.
A method to investigate rural architecture in Northern Germany**

Walter Wulf

The Land of Niedersachsen covers the whole north-western territory of the Federal Republic of Germany from the border of the Netherlands in the west and from the coast of the North Sea and the Elbe river in the north southward almost to the centre of Germany.

This territory varies quite a lot in its landscape. Along the coastal region and the rivers we find wide-spread marshlands; these change to moorlands, most of which are cultivated nowadays. The middle of the country is characterised by highly fertile soils and slightly mountainous landscapes. Tilled lands intensively used by agriculture alternate with vast forests. Although there are quite a lot of industrial sites and city agglomerations in Niedersachsen, the landscape is characterized by agriculture and rural settlements and architecture up to the present time.

Corresponding to the landscape and its various conditions there is quite a difference in the topography of settlements and typology of farm-yards and farm-houses. For instance there is a complete change from timber-framed to brick-stoned buildings.

It took a long time till the importance of historic landscape and the qualities of its numerous anonymous architectural objects were discovered as essential witnesses of our past, although or because they were omnipresent in every day live, seemed common and trivial, always used as a means to an end. Only the most important and artistically formed were taken notice of, were objects of scientific interest. Some of them were investigated and documented, but the great majority was unknown, their importance for all kinds of scientific interpretation not recognized.

Since the early sixties the change of technical and economical life destroyed a great part of rural architecture, because farm-houses and stables had to be adapted and merely lost their original character or were totally damaged.

The decisive impulse to start recording rural architecture on a general basis came from the necessity to have lists of protected objects as they were demanded by law since about the early seventies.

To meet the challenge in Niedersachsen, a special method of survey was developed in the mid seventies. The project is now known under the name of "Niedersächsische Denkmalkartei" (Monuments Record or File Niedersachsen). It can be defined both as a method and an administrative instrument of monuments recording.

The methodic considerations formed some basic requirements. First there was the conclusion that there will never be complete knowledge about monuments. So survey

and investigation are an everlasting task that will permanently add new perceptions. Therefore, the documentation of survey was to be organized as a flexible open filing system (as the Monuments Record) for continuous data flow from further research. I might add, that this was at a time, were computerizing was out of thought. Furthermore, monuments inventory was determined by the claim of an area covering, topographic survey, to value and classify rural architecture heritage in its manifold shapes as a whole - in the complex situation, wherein the single monument is only a part in the reciprocal effects of man-shaped landscape and small towns, villages and settlements.

With regard to the practical demands the outcome of the method had to require and store

- fundamental facts and arguments for the list of protected monuments,
- knowledge for the practical activities of monument preservation and
- facts and material to compile further documentation such as the "Denkmaltopographie" (Monuments Topography) or the "Großinventar", the elaborate scientific inventory used in Germany.

Practical transformation of the method and work on site begin with a general information of the public and local authorities directly by members of the "Institut für Denkmalpflege" and indirectly by the local press. After this phase of information work begins with inspection of the locations (villages, hamlets, farms etc.). This inspection is area-covering and based on actual maps of the scale 1/5 000. Every object is observed, objects of interest are documented both by description and photo. Complex relations in settlements and farm yards are observed and documented to.

Parallel to the activities local historians and expert residents are interviewed, literature and archives are searched or interesting documents, historical maps and photos. These are reported, possibly documented by photos.

The outcome of local investigation and research of archive and literature studies is put together, further analyzed and evaluated in descriptions of:

- local topography and local history
- character and forms of settlement
- type of farm yards
- type of buildings, including information of materials, architectural details, construction, inscriptions, surrounding installations and flora (trees, gardens etc.),
- material condition of objects
- social status of residents

all this finding place on files. Beyond this a monuments age map gives information about village development and changing.

This knowledge concentrated on files is the main stock of the monuments record. It may be filled up with new materials and data, as mentioned before. The record is standardized in some aspects. It follows in size the DIN A 4, the photos are 7 x 10 cm. Object data include as a general principle all exact information of location like address, administration number of land register etc. Monuments description is formalized to a brief, telegram-like style in a liable terminology based on a limited thesaurus. The record is so far only partly (ca. 5 800 objects) computerized although it is planned to comprise the whole material. At the moment the automatic data-bank of the "Institut für Denkmalpflege" has not the technical means to begin this extensive work, but we are working on it.

The data bank is used now exclusively for the management of protected monuments list, administering ca. 80 000 objects within and outside the institute, corresponding above all with the local authorities, whose duty is the execution of monument protection.

The record is centrally organized at the head office of the "Institut für Denkmalpflege" in Hannover. It may be used not only by the staff but also by the public, so far as administrative, scientific or maybe also private interests are at hand.

The method of the "Niedersächsische Denkmalkartei" (Monuments Record of Niedersachsen) is based on the analytical research with the main view points of the object itself. The Monuments Topography uses the recorded data of the Monuments Record as the source for a documentation of public use. It tries to comment history, quality and importance of the individual monuments as well as of the monuments sites not only from their own intrinsic value but also in their correlation to geographic situation, historic sources and coherence to each other and their surroundings.

Therefore the topography combines description with cartographical localisation, illustrations of historical plans and pictures with photos of the present. The centre of publication are the monuments in their present existence describing their importance as part of an entirety of landscape, village site or farm yard. Information of movable objects will not be given.

So, not the documentation of analytical investigation and self-reliant research are important, but the summary of known facts about the monument to verify its valuation as evidence of our cultural past.

So far 10 volumes have been published, one more will be at the end of this year. We hope that parallel to the investigation on site we are able to evaluate two topographies every three years in the future. This may be one attempt to give an idea of the importance of the every-days objects of our past to try making people more open-minded for preservation of rural architectural heritage.

General Inventory of the cultural Monuments (GIM) of Slovakia

Luboslav Skoviera

The Slovak Institute for the Protection of Monuments, in Bratislava, is responsible for the GIM in Slovakia. The Institute was founded in 1951. A basic field investigation of the heritage was carried out in the period 1953-1960, with further investigations being undertaken throughout the 1960s.

This monument inventory has been drawn up with the help of about 40 members of the Institute's staff. Additional and specific studies have been carried out with the collaboration of scientific institutes and schools of advanced studies. At the outset, the research was undertaken without the use of any precise terminological vocabulary or approved concepts, but this was remedied in due course. Special record sheets, with fixed headings, have been used for the inventory of the rural heritage.

The List of Monuments in Slovakia was the outcome of the inquiry that was published in three volumes, listed in alphabetical order and by place, in 1967-1969. Volume IV was published in 1978. It contains photographs of the most outstanding monuments, and it summarizes the data presented in the first three volumes. The List of Monuments contains approximately 30 000 entries. The original materials acquired as a result of this investigation are part of, for example, the "Z" Fund documentation.

Development of the GIM

As in France, Law no. 7/1958 of the Slovak National Council concerning cultural monuments was designed to help protect two categories of monuments, and create State inventories. These concerned four regions: Bratislava, eastern Slovakia, central Slovakia, and western Slovakia.

1. The first category concerns monuments entered in the List of Monuments (as in France).
2. The second category concerns monuments entered in the State Inventory (in France these are known as "classified" monuments - monuments classés).

The monuments entered in the State Inventory were more stringently protected than those entered in the List of Monuments.

The monuments entered in the State Inventory were selected in accordance with Law No. 7/1958 and with the criteria that were valid at that time (some 8,000 documents).

In 1987, the Slovak National Council adopted a new law concerning the safeguarding of monuments. This law no. 27/1987 is still in force, and has created the

legal basis for the establishment of the General Inventory of Monuments (GIM) in Slovakia. The GIM was set up in 1988.

Law No. 27 only recognizes one category of protected monuments - those monuments that are entered in the General Inventory (in France, *monuments classés*). This law does not protect monuments entered in the List. The following have been entered in the GIM, in accordance with the law:

1. All monuments previously entered in the State Inventory.
2. All properties/assets recognised as monuments by the Ministry of Culture.

The List of Monuments and the four regional State Inventories served as sources for the creation of the GIM. The monuments in the State Inventory have been entered directly, but the items entered in the List had to go through an approval procedure in order to be declared monuments.

The approval procedure consists of 5 points:

1. The proposal to declare a property a monument may be put forward by the citizen associated with the property in question, by an organization or by the qualified administration.
2. A professional organization must submit an expert opinion: the "professional proposal".
3. The Administrator of the GIM advises the owner about the proposal, as well as the qualified administration in the region.
4. The proposals of the professional organization, the owner and the qualified administration in the region form the basis of the decision of the Ministry of Culture to declare a property a monument, or turn down the proposal.
5. The Administrator of the GIM enters the monuments in the GIM after the official declaration.

The GIM in Slovakia is the sum of the various endeavours that have been made. To date, it contains 11 473 monuments that are fixed properties, and 13 048 monuments that are "moveable" assets. But in 30 villages, measures have also been introduced to protect complexes of rural architecture.

The GIM is made up of three standard components and the Automatic Register (AR).

The three standard components are:

- the register
- the index of record sheets
- the supplement collection - the GIM documentation.

I shall not go into detail about the standard components. Rather, let us deal directly with the Automatic Register (AR). Computerization helps us not only to process a large amount of information and data, but it also makes us apply more precise definitions to certain concepts.

Initial utilization of computers and data-processing in this field dates back to the period 1978-1985, but the first effectual results came with the installation of the PC. The AR was computerized in 1988-1989. It combines the data from two standard components, but it does not contain two important types of data: the identification photograph, and the free description.

I shall now describe the AR in more detail, as well as the overall system in which the AR has the status of a sub-system. The system consists of three sub-systems: the basis of the system is the AR, to which are added the documentary sub-system and the factual sub-system.

The Automatic Register

The AR model has two levels. The first refers to cultural monuments, the second to "items" that have the status of monuments. A monument consists of an "item" or it may consist of several "items". For example:

1. A church is a single item, so the monument is the church, and the item is also the church.
2. The church may also comprise: a chapel or chapels, sculpture(s), a bell-tower, churchyard walls, etc. So the monument is the church together with the churchyard, and a certain number of items are the church, the chapel, etc.

The AR contains 55 data about a monument. The data are organized in groups. Certain data are standardized, and a special vocabulary exists for these.

The data groups are as follows:

- i. Identification of the location; identification of the district
- ii. Categories/classifications from the varying viewpoints
- iii. Art and history
- iv. Protected groups or complexes, and sites
- v. Owners, suitable use, technical state
- vi. Administrative
- vii. Documentation

The AR is used principally by the administrative sector. It is used throughout Slovakia. It is necessary to complete the special description and include drawings to offer the best possible service to the professional sector.

Last of all, I should like to underline the problems resulting from the application of the AR and its development.

1. At the present time, we are creating the data-base for "moveable" monuments, but it will be necessary to create a link between the inventory of "moveable" monuments and the inventory of "fixed" monuments.
2. The updating of the files which are not fully established has not been carried out.
3. The data for the monument must be cumulative, but what is even more important is to complement the data-base with the identification photograph, the drawing of the plane section, the location, and the description.
4. The documentary sub-base has yet to be created.
5. The most important issue is to devise the model for the description of monuments consisting of a set of items. The model, which must be precise without being complicated, will describe what actually exists in the field. It will thus also be necessary to determine the number of levels, and the features of these levels.

I hope that the solutions to the few problems I have raised will be forthcoming from the conclusions reached by this conference.

Inventory of the Norwegian architectural heritage SEFRAK, the non-selective approach

Gro Wester

Background

First I want to thank you for the opportunity to present the SEFRAK-recording-method in this forum. Behind this colloquy in Nantes on inventory and documentation types in Europe lies, as I understand it, a major concern on the part of the Council for the pressure that present economic developments put on the architectural heritage and environment, - particularly in the countryside. Thus I suppose this meeting may be seen as a follow-up by the Council of the European Campaign for the Countryside in the late eighties, in which several countries, Norway included, put a particular emphasis on the protection and conservation aspects attached to the values of physical structures and cultural landscapes in the countryside.

By then our systematic, nationwide recording of buildings, SEFRAK, - had already been going on for thirteen years. According to a strategy-plan first-time registration will be finished by 1996. Thus the duration of the field-work task in the SEFRAK-project will be 20 years. The tasks of ascribing value to the recorded buildings and of running the building-register I will return to later in my contribution.

The acronym of SEFRAK, by the way, has turned slightly absurd recently, since the letter -S - represents a Secretariat that no longer exists. The superior responsibility for the SEFRAK-recordings as well as the registration of prehistoric sites that is being carried out by the university-museums, are now incorporated in the reorganized Central Office for Historic Monuments and Sites. The name still carries some meaning though, since the first syllable "se", is the Norwegian word for "see", German: "sehen", which, I think, we can all agree, constitutes an important part of the recording task.

SEFRAK- a national recording program.

SEFRAK is rather ambitious, - I have sometimes used the word neckbreaking, - national program for recording **all Norwegian buildings from the period 1537-1900**. In war-struck regions up-north and in other areas with few objects left from this period the upper year has been extended to 1945. If you wonder about the year of the Protestant reformation in Norway in this context, I can inform you that this has to do with our law of cultural heritage that gives automatic protection to everything that is older than 1537.

The non-selective approach

Thus, apart from the given period of time, - unlike most building-recordings, - SEFRAK has an absolutely non-selective approach, - the underlying ideal being a

register that is as objective as possible and impartial to changing modes and preferences in conservation. There is no limitation whatsoever concerning size, function, historic or architectural value, degree of decay or any other criteria. The approach has been strengthened by the recent ambition to preserve heritage from everyday life,- the homes and working places of farmers, fishermen and industrial workers, etc.

As far as the endeavours of the Council of Europe to work out a survey of architectural inventories are concerned, this seems to me rather a crucial point. In spite of the declared wish to record rural architectural heritage in the broad sense of the term, there is still the work "conspicuous" attached to the definition presented in the questionnaire. Behind the method of SEFRAK is the ideology that even "inconspicuous" elements in the landscape may be of vital interest in interpreting its history and representativity.

Thus in SEFRAK there is no selecting of objects in the preparation for or in connection with field work, as it appears from the results of the questionnaire that between 70 % and 80 % of the inventories in the survey do. Our field work is carried out by "lay" personnel. Some are students of relevant objects, but the majority are "ordinary", non-professional people who take an interest in local history. All field-workers must attend a two-weeks introductory course. This approach, of course, implies a later professional evaluation by cultural heritage authorities.

Of course, this non-selective approach is not the only possible one: even in my country I suppose it would have been difficult to start such an ambitious project today. My point is that it is very important to question the criteria for selection. When having to limit recordings, which priorities are urgent?

The SEFRAK-method

The basic SEFRAK- method is identical whether applied to rural or urban areas,- or for that matter industrial or mining areas. The house is described on a structured form with a combination of coded information and text, containing information on location, construction, function, age, condition, measures for safeguarding etc. Thus all the core data that are enlisted in the report of July 2nd 1992 are covered by SEFRAK. We are however, continuously working on supplementing the codes. In the European context it may be of some interest to note that the specific codes for recording rural architecture have so far been better developed than the corresponding urban codes. The code series run from 100 to 900 for the different kinds of house-categories.

Furthermore the recording package contains photographs taken from different angles, photos, of details as well as surroundings and plans. All buildings are indicated on the Economic Map Series. In addition to ones own observations there are interviews with owner, user or other persons. Use of archive material is kept to a minimum.

The carrying out of the programme.

For reasons that you will have no problems identifying, registration in most of our 19 counties is essentially done through summer months. The carrying out of the recording programme has been a shared responsibility of the Central Office and regional as well as local levels, where the task of the former is to allocate money, provide material and be responsible for invention and development, including the coordination with other data of cultural historic interest as well as environmental data generally. I suppose you can say that this model of organisation is a typical Norwegian solution to problems connected with a widespread population, long distances and a difficult topography.

Status

The present status of the SEFRAK-program is that we have recorded some 400 000 buildings with still an estimate of 120 000 buildings to go. Fortunately extra employment money has made it possible to speed up the work these last years. It is a kind of work by the way, that is generally thought well of by the unemployed.

By January 1993, 7 counties out of a total of 19 will be finished. About one half of the recorded forms (i.e. 200 000) have been computerized and for about one fourth (100 000) map information has been digitized. Since the price of digital imaging has gone down recently, we are now going to start a pilot project on computerizing image data as well. (Total estimate for the SEFRAK-recordings: 2,5 million photos).

The main objective of the recording

The recording has been designed primarily to secure a better foundation for quality management of cultural heritage in planning and preservation authorities on all levels,- local, regional and national. Thus, all information: text, pictures and map, will eventually be available through a nationwide data network. Planners, as well as researchers, libraries, schools, conservation organisations will have access on-line, and through paper copies and reports.

Evaluation of the recorded objects.

To be able to handle such large amounts of recorded objects in planning and conservation, you have to develop tools for evaluation and classification. Unfortunately this has been a somewhat delayed process, probably partly due to the strong emphasis on objectivity in recording. By now, however, we have developed a method of ascribing value to the recorded objects through the implementation of an evaluation matrix,- and a PC-version of the register to be used for the purpose. The use of the matrix is combined with renewed field observation which gives the evaluator the opportunity to see the objects as part of their physical context and ascribe an environmental value to them as well.

The method has been tested out as part of a data-project on processing a local preservation plan in the municipality of Nome, Telemark. In this particular case the objects, after having been evaluated, were classified in three major categories, A- C, but you can of course have a larger number of categories. here category A and B more or less corresponded with objects which had a value potential to be secured by cultural heritage act or building-and planning act.

Second- generation projects on evaluation are now being carried out in different parts of the country: Theory meets tough local reality ! If this testing turns out a success, which it appears to do, the method will be recommended to be used by planning and conservation authorities on all levels. It will probably prove itself very useful in the work with regional and national conservation schemes that are now in progress in Norway.

So far, so good. Our nightmare has been the rather static aspects of the recording programme. The ambition has been to record, but unfortunately, so far, not to update.

What to do with some ten thousand objects that were recorded 15 years ago? Do they still exist? Have they changed fundamentally? And what to do with more than 500 000 recorded objects in the future? How can we secure an updating on the present situation in addition to the already recorded data? We consider this issue of vital importance for the register to serve the practical purposes it was intended to do. Unless this can be obtained, the register will only be of documentary, historic interest.

One of the problems here is that professionals working in the conservation field are rather reluctant to acquaint themselves with new technical equipment. Mentally it is hard to jump from the quill pen to the computer-age. Although using the register manually, they cannot be counted on for the updating routines. Furthermore the physical changes take place in the municipalities and this is the administrative level below the level of our cultural heritage country offices.

Fortunately we have another building register in Norway of which the central mapping authorities are in charge. This is named GAB,- (short for Norwegian: property, buildings, addresses) and it covers all new buildings from 1983. You may already have guessed that here the technical authorities in the municipalities have the responsibility for updating. Since both the registers can benefit from each other, we have now decided to start coordinating them. Thus the municipalities will solve our updating routine problems and we get one national building register, where gradually also the lacking material for the interval 1900-1983 will be filled in. This will be of great advantage to our internal as well as external users, but it will also have a large potential of other users, like physical planners, police and fire-brigade, health-service, taxation, real-estate. In cooperation with EUROCARE there will be a pilot-project at the Olympic town of Lillehammer demonstrating how the data can be used in connection with data on materials and maintenance.

SEFRAK also participates in two other very comprehensive coordination projects which will demand a fair amount of resources on the part of the central board. One of

these, NOREK, is an internal project at the central office to integrate data of all types of cultural heritage. This will be used as an important tool to secure cultural milieus and landscapes according to a new paragraph in our cultural heritage act.

The other project, MISAM, aims at linking the cultural heritage data with all environmental data. This has to do with the concept of sustainable development, and our view that the physical environment is constituted by natural as well as cultural resources. In Norway cultural heritage management is thus placed under the Ministry of Environment, not Culture.

This fact eventually will make the EEA, European Environment Agency, a platform of cooperation on environmental data.

When asked by the Council to share cultural heritage information on a European level, we support the idea of setting standards to a minimum core, and the Norwegian register, as I pointed out, already satisfies these standards.

As far as agreement on technical specifications for communication between systems is concerned, we must admit a more sceptical attitude. Not only will resources have to be invested to structure elements and control terminology, as pointed out in the report. But how are we to secure the dynamics of such a register? How are we to avoid the pitfalls of stagnation through lack of updating responsibility and resources?

I think at this point in the process we should really ask ourselves: For what purpose do we need an interchange of information? What kind of information is interesting to share among European countries? Perhaps that might not be the whole SEFRAK-register as far as our country is concerned, but rather buildings representative of our country and regions such as medieval timber architecture, and the old wooden houses in our varying coastal landscapes; in short, buildings and milieus that we have a special responsibility to secure in an international context. And we must consider how that information which we consider important to exchange, can be shared in the most practical way.

The Protection of Historic Monuments in Romania Monument inventory of the village of Mișunesti

Ruxandra Nemteanu

The first commission established in Romania for the protection, inventory, classification and restoration of historic monuments was called the Historic Monuments Commission (HMC). It was founded in 1892.

Over the past hundred years, the HMC has undergone various changes, both in its title and in the hierarchic organization of its activities. In this respect, there are four main periods:

The years 1892 to 1948 marked an important period that included the first steps taken to establish the inventory, classification and restoration of monuments. This period also saw the development of precise working methods and the basic guidelines for restoration programmes.

To put an end to the damage being done to the churches forming the basis of the inventory, a Royal Decree of 1915 provided that "all the churches and all the monasteries in the country, prior to the year 1834, are in principle declared historic monuments, until such time as the general inventory of monuments is revised and completed". This decree triggered the first concrete programmes aimed at drawing up the inventory of monuments in Romania, and it was used over a long period of time, right up until the 1960s and 1970s.

A second period covered the years from 1952 to 1977.

The Historic Monuments Commission (HMC) was done away with in 1948, but the restoration programme and working methods previously adopted were continued.

During this period, a large proportion of the most valuable monuments was inventoried using questionnaires distributed to the various specialists throughout the country. With these questionnaires it was possible to draw up an initial List of Historic Monuments, duly approved by a governmental Decision.

It was estimated at that time that wooden rural dwellings of the greatest interest should be moved and rebuilt in ethnographic museums, rather than being conserved in situ.

In 1977, Ceausescu improperly did away with the new HMC, set up ten years earlier, whose activities had been most impressive, for the Commission had indexed, classified, inventoried and restored many of the monuments entered in the listings. From 1977 on, restoration projects were closed down and inventory and restoration activities were reduced to a standstill.

The period between 1978 and 1990 was marked by the absence of any institution specializing in the protection of the building heritage. This was dealt with like the general heritage, the principal aim being to confiscate these properties from individual owners, rather than restore any monuments.

Specialists nevertheless attempted to draw up a new List including a larger number of monuments, but this was never approved, for it would have hampered the demolition of houses and churches of undeniably historical and architectural interest, which had never been included in the previous listings.

We are currently in a fourth period, which started in 1990. In effect, it has been necessary to start again from scratch. Numerous valuable historic monuments have vanished or been forgotten about. Historic centres have been partly demolished. Villages have been moved, or totally razed to the ground. Archives have been discontinued, stolen or destroyed. The record sheets in the inventory are incomplete - certain representative buildings occupied by State institutions are not included in it, etc.

Over a very short period of time, we have had to re-establish the old inventories, supplement the documentation etc. What is more, because the very concept of "monument" has been extended to include whole streets or even whole districts which will have to be declared historic or architectural reserves, the inventory and classification task has become even more difficult. At the present time, the coordination of specific activities and the decision-making process with regard to the inventory, protection and conservation, restoration, and development of historic monuments is in the hands of the National Commission for Historic Monuments, Complexes and Sites N.C.-HMCS, for short - recently set up as an autonomous specialized office, operating under the auspices of the Ministry of Culture.

The National Commission of Historic Monuments, Complexes and Sites includes an operational department which fulfils the functions of a national Inspectorate, responsible for methodology, guidance and inspection, both scientific and technical. This is known as the HMCS Directorate.

A Documentation Service for historic monuments carries out its activities within this Directorate. This Service is currently facing major problems concerning the inventory, classification and registration of monuments. At present, it is using two methods, one based on the German system used for drawing up the inventory of German villages in Transylvania. This system consists in establishing systematic inventories by sending teams into the field to run the inventory programmes. It should be added that we have also received a French programme, but it is rather too complicated for the means now at our disposal. For the time being we are not in a position to adopt the standardized language required.

The second method, which is used throughout the country, was adopted in 1990, immediately after the reinstatement of the HMCS National Commission and the HMCS Directorate. At present, great efforts are being made to place larger areas within localities under immediate protection. Any action undertaken in these areas must have

the agreement of the HMCS Directorate. As soon as a beneficiary makes his request or application to obtain authorization, this makes it possible to go ahead with a selection and inventory of buildings of varying value and interest. With this method, it is possible, little by little, to inventory the entire architectural stock.

Needless to say, this is a difficult method. It involves work in the field which may seem random, and which depends on spontaneous applications. It involves many problems with beneficiaries, but it has nevertheless saved numerous valuable buildings from demolition or deterioration. This destructive bent is the paradoxical outcome of the liberalization of construction permits, which were virtually non-existent until 1990.

By way of example, let me briefly describe the architectural inventory of Mişunesti, a village situated in the vicinity of Bucharest (some 30 miles from the capital), in a pleasant district that boasts a series of lakes, and areas of ancient forest. This is a lowland region, with a temperate continental climate.

The starting-point behind the choice of this objective was the request by a descendant of the boyar who had once owned the village, the farming lands roundabout, and a manor complete with chapel. He notified us that the construction materials of the turreted wall round the manor were being systematically stolen. He was keen to put an end to this theft, and see the restoration of both the manor and the church, which had been left to go to rack and ruin after 1989, and had no precise legal status.

From the outset, the church-chapel, built in 1743, had been placed under the protection of the Decree of 1915, already mentioned, and it appeared on all lists prior to 1990. But the manor, which was built - along with the walls - at the same time as the church, had been overlooked, for political reasons. It only appears on the never validated listing of 1980.

On our many field visits we noted other interesting features here.

The village inventory was drawn up over a three-month period, on the basis of one working-day per week, by a two-person team (a photographer and an architect), accompanied by the mayor of the village, to allay the villagers' suspicions.

An additional day was devoted each week to an examination of the archives and consulting library sources, which yielded the main data on the development of the village (with a view to drawing up the data-sheet for the locality itself) and of the buildings inventoried (for the individual data-sheets).

During this documentation work, the papers of the descendant of the boyar, together with a film made in 1938 by his grand-mother, proved to be extremely useful to us. The papers were specification documents dealing with the various modifications and works carried out over the years, old plans of the estate, cadastral charts etc.

The criteria adopted for selecting the buildings were as follows: age, sequence and consistency of the structure of the building, consistency of the planimetry, typology,

miscellaneous details, absence of major modifications made to the construction, possibilities of future improvements.

Getting back to the working methods used in our organization, we should point out that the data collected have to do with the categories of monuments proposed by the Law on monuments. This law is still awaiting approval, but is already applied in practice. Under the provisions of this law, the concept of "historic monument" also includes:

- archaeological monuments and sites;
- architectural monuments, complexes and reserves;
- monuments which have an architectural, environmental and commemorative/memorial value;
- artistic monuments and complexes, or those with a commemorative/memorial value;
- historic parks and gardens.

As soon as the inventory was completed, we put forward proposals concerning monuments and historic and architectural reserves for which, henceforth, all modifications made to the buildings in the inventory will have to obtain the approval of the HMCS Directorate.

Unfortunately, documentary data are anything but easy to come by, because the archives are not yet available to specialists, and even less so to the public, because certain documents were destroyed during periods of political unrest, and because the people drawing up these reports still lack experience.

This is why, at the present time, we are only drawing up minimal data-sheets, which can be added to at a later date, as the data come to light.

As far as computerization is concerned, the lists of historic monuments drawn up during these last three years (20 000 items) have been stored. The data for each monument included in the lists will be entered in due course.

Access to the documentation is beginning to be granted just to specialists (architects, art historians, archaeologists, etc.), because the archives and library of the HMCS Directorate are not yet ready to accommodate a larger public, for reasons of space, and because the records disrupted in the wake of the unauthorized closure of the HMC still have to be reorganized. At the same time, neither the royalties law, nor the fiscal regulations for supplying the budget of the HMCS Directorate - today totally dependent on the State budget - have been finalized.

The methodology is still obviously insufficiently developed, and organization is still wanting. Overly hasty work does not give the best results, but apart from this, we have had to find solutions in three years to problems which others have taken twenty years to sort out.

In practical terms, we do not have the impression that we have a Historic Monuments Commission celebrating its centenary, but simply a National Commission of Historic Monuments, Complexes and Sites that has been operating for just three years.

Cataloguing a site in the Po Valley: Methodological issues The Siris Project

Fabio Poggi

Territorial cataloguing and informative system

SIRIS (Informative System for the Reconstruction of Historical Settlements) has been a territorial recording project - carried out between 1986 and 1990 - with a wide research span, based on the standards established by the Istituto Centrale per il Catalogo e la Documentazione (Central Institute for Records and Documentation) of the Italian Ministry for Cultural and Environmental Assets.

Cataloguing of architectural assets

About 3 300 architectural monuments located on an area of 300 sq.m and pertaining to eight boroughs along the Po river (complex and individual buildings in historical centres as well as in rural areas) have been catalogued using structured record cards. Each building is also documented by photographs, maps, drawings and photogrammetric data enclosed with the card itself.

Research on documentary sources

In order to reconstruct the history of the architectural monuments and of the surrounding territory, the pertaining documentary sources (archivistic and bibliographic material, cartography, photographs) have been researched and catalogued.

Investigation and direct analysis of such sources (cadastres and historical iconography in the first place) has resulted in various thematic maps through which changes undergone by the territory can be reconstructed in detail (maps of urban and rural building settlements, of roads, of surface water courses, of vegetational and environmental features, of the use of the soil).

Territorial analyses

Specific analyses have been carried out to determine the environmental and vegetational features of the territory under investigation. As a result of this analysis, maps have been produced, in which morphological, geological, agronomical, naturalistic and landscape elements are represented.

The components of the informative system

The most relevant outcome of the project has been the creation of a data-bank which can:

- place exactly the architectural heritage in the space, highlighting - both for the past and for the present - correlations between catalogued buildings (palaces, rural buildings, etc) and environmental context (built, agricultural or natural);
- locate and examine the documentary sources relating to the catalogued buildings;
- give access to specific archives, such as that of urbanistic analyses, town planning regulations, limitations, ownership, etc.

The information gathered are kept both on paper and on a magnetic support: this makes up a traditional library of the recorded territory and of the documentary sources, where access to the originals (recording cards, thematic maps, graphic and photographic documentation, town planning regulations, bibliographies, etc.) is assisted by a computerised data bank.

In the **computerised data bank** the data are organized in three distinct sub-systems:

- Alphanumeric subsystem: cataloguing cards and texts on various subjects;
- Cartographic subsystem: digital mapping in different scales;
- Iconographic subsystem: images on optical disks and Laser Vision.

The **Alphanumeric Subsystem** contains the data pertaining to:

- the cataloguing of the architectural assets;
- the documentary sources;
- town planning;
- territorial analyses.

The **Cartographic subsystem** has been devised and structured by using digital mapping procedures, so as to function as common "base" and support for the representation of the analyzed phenomena. It contains:

- basis maps to be used for "territorial navigation";
- cadastral maps.

The **Iconographic Subsystem** contains images, on optical disks and Laser Vision, pertaining to:

- maps of the historical cadastres;
- historical maps;
- graphic and photographic documentation pertaining to the recorded architectural monuments;
- thematic maps representing the evolutive phases of the territory (ownership, use of the soil, place-names).

Links between recorded assets and archivistic sources

Files containing information on buildings, documentary sources and territorial analyses are connected to each other by a complex integrated system specifically created to guide consultation through linking keys of various type.

For instance: the documentary sources have been inserted into the informative system following the compilation of cards containing data which allow to access the individual types of documents and to establish links between documentary sources and recorded assets.

This operation is made possible by four types of links:

- thematic scope: the cataloguing cards indicate the characteristics of the individual documents and the type to which they belong;
- place-names: the names of the principal and secondary locations appearing in all documents are memorized;
- owners: the names of the owners mentioned in the historical cadastres and in the cartography are also transcribed;
- the system of coordinates: each recorded object is identified by coordinates, like the individual particles of the Nuovo Catasto Terrini (New Land Register), the areas indicated in the historical cadastres, in the topographies, in the main map series and in the photograms of the air shots.

The scientific methodology of cataloguing

The recording method established by ICCD is based on the idea of "territorial cataloguing". The territory examined is divided into units, homogeneous from the administrative point of view, which function as a connecting base for all the information gathered. As this methodology aims at a comprehensive knowledge of all the cultural assets located in a certain area, the various entities making up that territory are studied and recorded, with a special emphasis on the existing relations amongst individual objects and between objects and the surrounding territory.

The technical methodology of cataloguing

One of the main tasks of ICCD is to define cataloguing standards, concerning the data structure, the terminology employed, and the procedures to be followed.

If the recorded object can be considered a physical entity described by means of its attributes, the organization and management of the data must be such as to guarantee its accessibility and to maximize its use. As a consequence, a special formalized syntax has been devised to structure and aggregate information.

The syntax is made up of three standards:

- terminological standard: formation of normalized dictionaries;
- syntactic standard: definition of rules for the recording of particular information,

- structural standard: application of a structural scheme ruling the relations amongst homogeneous information and amongst the different kinds of information concurring to the description of the asset.

The Catalogue is therefore represented in terms of minimal entities and of their mutual relations. We have actually defined a "conceptual schema", that we call "catalogue of Catalogue", that is the ordered and modular set of all the information needed for the recording of the architectural assets, - ruled by precise and homogeneous relations.

The developments of cataloguing in Italy

The definition of a tool such the "catalogue of the Catalogue" qualifies cataloguing in Italy for its coherence and flexibility. With the perspective of a comprehensive database of the cultural heritage, the "catalogue of the Catalogue" allows a link between different objects and information by using the same terminological, syntactic and structural standards to increase the information content of such a complex database. Similarly, it is possible to retrieve and exchange information with analogous databases. Its contribution to the operations of testing and reviewing data must be emphasized.

Study and documentation problems in urban architecture

Chairperson of the sitting: Miklos HORLER

Swiss Inventory of Architecture 1850-1920 (INSA)
Twenty years of experience and the year 2000

Dr. Nott Caviezel

Those of you who are familiar with the structures of Switzerland will know that the federal organization, the four cultures and the four languages of the country offer an undoubted store of wealth, but do not always make things easy when it comes to the matter of cooperation at national level. The management of the inventories of the historical and artistic heritage is a case in point. So it is not surprising that a private organization, backed by the cooperation of the 26 cantons in Switzerland, should happen to be at the origins of the major inventories of the Swiss heritage. Nor is it surprising that this organization, the *Swiss Art History Society (SAHS)*, which includes a scientific institute, should have been in charge of these inventories since 1880.

In order to facilitate comparisons between methods, the organizers of this conference have divided our work into three parts. For my contribution, I have been asked to emphasize the aspect of urban architecture. Instead of now discussing with you the *Swiss Inventory of Architecture 1850-1920 (INSA)*, I might just as well have talked to you about the major inventory of "*Swiss Artistic and Historic Monuments*", which has been in existence since the 19th century, with 85 volumes already published. This latter inventory, which can be compared to the French General Inventory, broaches the three themes of the conference, but does not focus particularly and exclusively on urban architecture. For the inventory of "*Swiss Artistic and Historic Monuments*", the Swiss Art History Society (SAHS), in agreement with all the cantons in the country, has drawn up recommendations and prescriptions which govern not only research but also the preparation of texts and their publication. It is within this context that the *Swiss Inventory of Architecture 1850-1920 (INSA)* was created in 1975, as a complement to the major historical inventory.

In 1982, after lengthy preparatory and research work dating back to 1975, the SAHS was in a position to present to the public the first volume of the Swiss Inventory of Architecture 1850-1920. The complete collection will run to 15 volumes. The aim of the INSA is to inventory and publish, in 10 volumes, the 26 cantonal capitals, plus 14 other towns which numbered 10 000 inhabitants or more as at 1920. Five supplementary volumes will contain articles and descriptions, the general index, and a lexicon of architects.

The INSA provides information about the buildings and urban development of one of the most important periods in Swiss architecture, extending from the creation of the Confederation in 1848 to the emergence of the New Architecture. As a reference book, and before it has even been completed, the INSA is an indispensable tool when it comes to protecting and safeguarding the heritage, developing rural and urban areas, and research. The preparation of one volume covering three to five towns (research, editing, publication) takes about five years and costs some 1.5 million Swiss francs.

Objectives

The central aim of the INSA consists in establishing, within a limited period of time and with limited means, a relatively quick inventory which covers all the entire national territory. The INSA will offer assessment criteria for the conservation of monuments, and act as an initial "pointer" for works dealing with art history. Research programmes make use of written and iconographic archival sources - that is, photos, prints, plans and maps - as well as statistics. The INSA presents its urban monographs in a standardized form, the better to pinpoint the distinctive features of the different places described.

Methodology and presentation

The study of each locality is divided into four chapters. Comparisons are thus possible between chapters 1 (Historical overview), 4 (Appendices) and 3 (Topographic inventory). Chapter 2 traces the development peculiar to each place. In so much as the 40 towns in question may present common or differing features between them, the four chapters complement one another and give a general view of the place concerned. Chapter 1 gives a chronological overview, while chapter 3, which deals with the topographic inventory, presents the items concerned in relation to their geographical situation. Chapter 2 combines both these aspects in a consideration of the urban development of the place.

The items listed in the topographic inventory (chapter 3) are classified by street name and number. Buildings of a public or semi-public nature are described as completely as possible. Together with archival work, field-work is a factor of considerable importance. The descriptions are accompanied by appropriate photographic documentation. The data are entered on inventory cards which are used for the final version of the public inventory. In order to be able to complete the INSA by about the year 2000, the SAHS will make use of data-processing systems, particularly in the case of the inventory proper (data-bank), the general index, the lexicon, and, need it be added, the word-processing and technical production of the volumes.

Summary and outlook

In summing up and following up the question posed by those taking part in the conference, I should here like to underscore the following points:

The INSA is an inventory on a national scale, but one undertaken by a private organization. This in no way diminishes its value. On the contrary, the fact that it is not managed by the State, and that all purely political considerations are bypassed in advance, lends it greater scientific import. This in turn leads to the positive outcome that, in their decisions concerning conservation, the administrations of the towns inventoried in the INSA very often rely on this instrument, even though it has no legally protective value. In so much as the INSA is published in editions of more than 10 000 copies in three languages, and it is widely available throughout the country and abroad,

regard for architecture, which is more and more under threat, is constantly growing among the public and political authorities alike.

1. The work invariably takes the same form. As a general rule, one and the same person is commissioned to undertake the field research, the archival research, and the preparation of the texts describing a particular town. It is often the case that other researchers will be associated with the person thus commissioned, thus forming small teams. On average, the Society employs two to three people on a full-time basis for the INSA project.

The exhaustive nature of the actual inventorial chapter often depends on the abundance or dearth of archival sources. The number of dwellings to be inventoried is determined by a desire to respect a certain balance between private and public buildings. In small towns, every building, or nearly every building, plays an undeniable role in the local architectural fabric, while in large towns or cities, on the other hand, this representative function tends to be taken on by complexes, housing estates and neighbourhoods (quartiers). In spite of these basic principles, differences do exist in the selection and description of items between French-speaking Switzerland (Suisse romande) on the one hand, and German- and Italian-speaking Switzerland, on the other. The circumstances peculiar to each place have also had repercussions at inventory level.

2. The structure of the data is straightforward. The description of the items which appear in the inventory is thus based on the following data:

- name of the street, insurance number
- name of the building
- dates
- type (residential dwelling, post office, railway station etc.)
- original function, current function
- original proprietor, sponsor
- architect, contractor
- description
- historical summary
- reference to plans
- reference to sources and bibliography
- photo (reproduced where possible)

For the time being, computer and data-processing systems have not been introduced across the board. But certain authors do use these systems. The SAHS envisages introducing a system to establish a simple data-bank relevant to the specific requirements of the INSA.

3. The large edition INSA volumes represent the end result of the work undertaken. Once a volume is published, the huge store of documentation assembled (record-sheets, texts, photos and negatives) is then deposited in the Federal Archives of the

Historical Heritage in Bern. Users of these archives are scientists and specialists in the field of monument conservation.

4. The sub-title of my paper refers to twenty years of experience and the year 2000. The critical appraisal of this inventory is closely linked to the "time" factor. Originally, it was estimated that some ten years would be needed to complete the INSA in seven volumes. Today, almost 20 years later, we have just about reached the halfway stage, after restructuring the schedule in the early 1980s, and increasing the number of volumes from seven to ten, and then to 15.

In 1982, when the first volume appeared, the work was hailed as a pioneering venture. The INSA was in fact a precursor in those days. For the first time, a reputed institute had envisaged inventorying to some extent the "poor relations" of architecture, and, more to the point, publishing and presenting this inventory in book form, including historical and typological articles as well as an overall summary of the way towns had developed.

Meanwhile, the Swiss Art History Society has not been the only organization with an interest in this subject. Cantons and towns are embarking on their own protection-oriented inventories. They are, obviously enough, somewhat administrative in nature, and most of them will probably never be published. With regard to these rapid inventories, in the first instance a systematic investigation is not indispensable, because data can be supplemented at any given time, and because, on the whole, these inventories do not include articles and summaries. Despite these essential differences, the INSA runs the risk of seeing the importance it has acquired diminish if it delays its completion dates too long.

Meanwhile, alas, the costs of this undertaking are rising, and are far outstripping the financial means of the Art History Society. Grants earmarked by the National Fund for Scientific Research only meet one third of the required amount. At the present time the major problem concerns the financing.

After the year 2000, it is foreseeable that the INSA will be scaled down to become a more or less specialist book with no particular wide application, and this will in no way justify the enormous costs just referred to. The reference work represented by the INSA would then run the risk of being outdated, because, from the very beginning, the concept behind it involved proceeding step by step, based on a criterion concerning the choice of items within the inventory, thus making it possible to produce, together with their supplements, actual urban monographs covering the years 1850 to 1920. But while today's skimping on thoroughness may be a plus point, in ten years time it may be a shortcoming.

We are all aware of the difficulties facing our major inventories. The day of their completion lies a long way off, and may even be unforeseeable as such. From this viewpoint it is important that, from time to time, to demarcate a certain state of progress, there are certain tasks and endeavours which can be completed in the short term. In this sense, the INSA has every chance of success, on condition that in the

year 2000 the inventories of the 40 towns selected are finished, and that all that remains to be published are the lexicon of architects and the summaries.

In order to encourage the furtherance of these great inventories and spur on this noble task, the Swiss Art History Society will in the future try, in collaboration with the various cantons and with the Confederation, to formulate a sort of general plan for Swiss inventories, which are very numerous. The question of standardization will be of appreciable significance, especially at a time when computerization is also being introduced into the preparation of our inventories. I hope that the proposals offered at the end of this conference will represent a point of departure in this direction. Before there is coordination at a European level, it will be necessary to coordinate the inventories in Switzerland - for all their individual quality.

The Monuments Inventory Project (1850-1940) in the Netherlands; its implementation in four major cities

Marieke Kuipers

Introduction

Until about ten years ago nearly all documentation and conservation activities by the Netherlands Department for Conservation were concentrated on the heritage dating from before the Industrial Revolution. The hard work of listing about 40 000 monuments and 350 historic townscapes took more than ten years. Although our Monuments Act does not make any difference between "old" and "young monuments", the heritage of the younger period (1850-1940) seemed to be outlawed ¹.

Therefore, we started in 1987 the national Monuments Inventory Project, called MIP for short, with sixteen co-operating partners (the four major cities and twelve provinces) and it is intended to be finished in 1992. At the moment the results are available of all four major cities and of seven provinces. Besides, already six popular books have been published in a special MIP series, and two others will soon come out ².

The MIP-campaign has the aim to investigate the still present architecture and townscapes dating from the 1850-1940 period over the whole country in a systematic way within five years. The first purpose of this project is to overcome the lack of knowledge about our "younger heritage" and to build up a national database. Another aim of this campaign is to advance an integrated policy for the control of our built environment as a whole and to get a broader appraisal of its specific (historic) qualities. This means that we should not formulate our inventory standards too restrictive, but that

¹ The first Monuments Act came into force in 1961. Since 1989 a new Monuments Act (1988) came into effect, keeping more or less the same definitions for listing a historic building or townscape, and, in spite of many administrative changings and discussions, including the limited age of fifty years.

² This series is a co-production of the Netherlands Department for Conservation and Waanders Publishers at Zwolle; already available are the books about Utrecht (1), Drenthe (2), Overijssel (3), Amsterdam (4), Rotterdam (5) and Flevoland (6), while books about Groningen and Zeeland will come out in November 1992.

we also should pay attention at the buildings and areas with more social or cultural historic values rather than mere architectural merits ³.

MIP organisation

After several pilot projects we decided to start our inventory program focused on determined regions instead of specific building types or architectural styles ⁴. So we divided the whole country into almost sixty "inventory areas" or regions (defined by coherent cultural historical characteristics and by already existing administrative limitations like provincial and municipal boundaries). For the proper inventory work we attracted dozens of special assistants, most of them temporary (in some cases thanks to an employments plan or alternative national service). The project has a unique character because of the intensive co-operation between the national, provincial and municipal departments for conservation of historic buildings and areas. The national department contributes the general budget and gives all methodical instructions and supervision, while the daily surveying practice is in the hands of the provincial or municipal MIP-assistants (two or three in each town) ⁵.

General MIP methods

The central idea is to investigate the whole country on a declining scale, starting from the level of the region to the level of the municipalities and ending with the individual buildings. Each of these regions should be described in a general way, beginning with the geographical aspects (nature and use of soil, drainage), then the infrastructure (roads, waters, railroads, military works) and ending with the structure of the settlements with their cores, extensions and the scattered buildings.

³ In our MIP manual we mention two sets of criteria: one group to select the "town planning areas of special value", and another group to distinguish the characteristic and valuable buildings, both in respect of the present local values and both representing the following aspects:

- 1) cultural historic values
- 2) historic-environmental and town planning values, c.q. architectural historic values
- 3) situational or ensemble value
- 4) soundness and/or recognizability
- 5) rarity.

⁴ For instance, in the seventies a large selection of Neo-Gothic churches has been listed, a small selection of railway-stations and a great number of our historic lighthouses. After a small selection of "modern monuments" in Amsterdam, a systematic investigation of the younger heritage within the historic centre has been executed in 1979-83. Other pilot projects dealt with the former mine- and southern districts in Limburg, the Peel-area and Twente.

⁵ At the national department (RDMZ) the supervision-team consists of eight experts and the national MIP manager, Peter Nijhof; all of them are part-time working for the MIP in addition to their regular job. Each province and the four major cities has a permanent project manager, too, who is responsible for the budget and time table of their share in the MIP. Besides, for every project partner a committee of guidance is installed with very differing voluntary members, varying from mayor to professor or a member of the provincial monuments committee. These committees are meant for a boarder social support for the inventory project and they are meeting about three to four times during a year, sometimes even in the field.

In addition to these *regional descriptions* (containing about twenty pages typescript) there should be made a more detailed *description of each municipality* according to the same division of contents and in the case of major cities also dealing explicitly with the *structures and buildings of the local districts* (resulting in reports from about six to forty pages). These description activities can for the major part be typed as "office work", using general and easily available sources (books, journals, reports, maps), and they are intended to be carried out *before* the fieldwork, which in practice was not always possible.

After these descriptions, in interaction with preliminary fieldwork, there should be made a so-called *urban typology*, only in case of large extensions or other interesting developments. Therefore, a specific map should be made, showing these developments according to a uniform standard. For instance, when there is a villadom, a garden-village, an industrial zone or a green belt dating from the MIP-period, they all should be marked with prescribed hatching types (see our MIP manual, Zeist 1987).

Then, there could be made a step further in the estimation of the present values of the investigated town and village extensions by applying a general scoring list in order to assign so-called *areas with special values*. This distinction is important for two reasons, one for the futural (or even actual) town planning and control of housing complexes, another for the proper fieldworking phases of the project: the "special areas" must be inventoried intensively (just like the historic centres), while the other parts of the settlements can be inspected in a more rough way. Anyhow, the fieldwork must be done; street by street, even outside the built-up areas, equipped with special forms, maps, manuals and cameras.

Fieldwork

The survey of all buildings can be considered as the most labour-intensive part of the project. The fieldwork has also an impact on the public relation affairs by contracting the local authorities and the local press. By publishing in the local papers the inventory work becomes also generally known by the public. This matters greatly because most people are standing on their privacy. On the other hand, many inhabitants (or even local authorities) often do not recognize the peculiar architectural values of the houses where they live in (or the office-buildings, shops, factories where they work in). As far as concerning the methodical aspect, the fieldwork was in itself not the most problematic part of the project after our instructions; the storage of the data proved to be more complicated. After several joint instructions in practice there arose a wide spread consensus about what buildings should be inventoried and those which should not, based on our general MIP criteria and the explicit notion that we were looking after buildings of at least a certain *local* value. When working so, the large amounts of typical vernacular domestic architecture and particular street fronts with different types of rowhouses arose the most inventory problems. We tried to solve them by using the relation with the "areas of special value" or to choose the most representative and intact examples. We also agreed about the buildings types which should *always* be inspected at the inside, too: churches, factories, (semi-) public buildings and other buildings where an interesting interior or roof construction could be expected. Mostly for reasons of time

saving we found it not necessary to visit all interiors of the inventoried buildings (being in majority houses for different social classes). The fieldworkers had to take pictures of all those buildings being of interest for the MIP (black and white obliged, colour slides optional); at least one of the front, and if possible, also from the rear and the side(s), and optional of a special detail). In addition they had to fill in a standard form, answering questions about address, architect, date of construction, shapes, materials, building type, style and so on, which should provide the records for the computerized database.

Documentation

Roughly spoken, the formal output of the MIP, based on our central MIP manual, can be divided into two parts. The first package contains the regional and local descriptions with analyses of their specific characteristics and the present town planning values of the extensions made during the 1850-1940 period. These descriptions can be consulted in soberly produced, simply illustrated reports, in a very limited edition, present at the national, provincial and municipal departments for conservation ⁶; The second information bulk consists of the completed MIP standard forms and the dated pictures concerning all inventoried buildings (which photographs are only present at the provincial or the four major municipal departments).

Only the *written* documents will be stored in a computerized database, because it is still too complicated to computerize all maps, pictures and other images illustrating the reports and inventory forms. The regional and municipal descriptions will be stored as Word Perfect files. For the object related database, we adapted the English CAIRS programme, which is not the easiest in use, but provides good methods for text retrieval and specific sorting functions.

At the moment, the computerized data are only available for the MIP assistants at their own departments and not (yet) for the interested public. Now we are working very hard to create a central database with all MIP records which can be consulted by every interested person in a special MIP studio, to be founded at our national department office at Zeist. Therefore we developed already a quite practical method for giving the wished output in several manners based on the BASIS-Plus module *Fundamental Query and Manipulation* (FQM), which sounds more difficult than it is when practising.

Directly following on the MIP campaign we started in 1991 a similar organized project - the Monuments Selection Project (MSP) - in order to select the sites, neighbourhoods and buildings of *national value* which should be protected by our Monuments Act. For the MSP database we develop a new input system, called INCA. This system is easier than CAIRS and it can interact with wordprocessors and computerized List of monuments and historic buildings.

⁶ However, the municipality of the Hague brought the MIP report out as an oblong, hard-covered book with coloured maps and illustrations (edition of 1 750 copies, for sale at the price of £ 87,50).

general inventory results

We are expecting that in the whole country about 165 000 buildings and complexes will be inventoried, while about 650 "areas of special value" will be distinguished. The four major cities will take nearly 5 % respectively 10 % from these amounts for their account, providing the following results:

Amsterdam:	± 3 500 buildings/complexes	21 "areas of special value"
Rotterdam:	± 1 500 buildings/complexes	17 "areas of special value"
The Hague:	± 2 000 buildings/complexes	20 "areas of special value"
Utrecht:	± 2 000 buildings/complexes	8 "areas of special value"

TOTAL	± 9 000 buildings/complexes	66 "areas of special value".
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The "areas with special value" can vary from canalfronts, parkfronts, villadoms, garden villages, company towns or other social housing complexes to carefully planned large town extensions. Although we intend to assign these "special areas" not too narrow limited also the smaller housing complexes can be distinguished as such, if they are scoring enough on our MIP criteria. It is not necessary to restrict these "special areas" only to systematically arranged areas nor to residential quarters exclusively (e.g. the two peat pools along the long highroad of Hillegersberg or the Southern Park, planned by H.P. Berlage at The Hague). Nevertheless, about the half of these "special areas" is related with garden villages and very few areas are of a not preceedingly planned type.

Whatever their character or their scale, we try now to get all assigned "a special areas" integrated and respected in the local town planning policy.

As concerning the central MIP database, this is now filled for one third of all expected records, including those of the four major cities. Each object or complex of buildings received a unique code number (alphanumeric), while for the characterization of the buildings types and the relevant architectural styles we developed a special "MIP thesaurus", in order to get all records as much uniformly stored as possible. Unfortunately, there are several irregularities or even gaps in these data because of different reasons (too less time, too less control and, sometimes, too specific situations), but in general we can really say that we are coming closer to our first MIP aim in overcoming the lack of knowledge about the extensions and buildings dating from the first industrial period in the Netherlands.

**From a survey of the historical monument to the investigation
of built environment
Heritage inventory and documentation of urban and rural
structures in the region of East Pomerania in Poland**

Artur Kostarczyk

1. Introduction

The Regional Centre for Studies and Preservation of Built Environment in Gdańsk - an institution established in 1990 for the regional studies in the territory of East Pomerania - has designed research studies on the cultural identity features of the region. An origin of the regional studies in 12 historical regions of Poland is connected with a certain intellectual process lasted in the 1980s.

From the very early 1980s certain new tendencies have started in the Polish theory of historic preservation. The holistic and ecological option in conservation has become stronger. The historic process of transformations of the built environment has begun to be observed in such aspects as:

- spatial management and land-use culture,
- material culture,
- intellectual and spiritual culture.

A collaboration between the preservationists and the physical planners, developed in 1980s, has created a new approach in historic preservation and in physical planning. Preservationists noticed that built environment is something more than the aesthetic aspect only, and that it includes also: genius loci, spatial and intangible values; and the physical planners (regional-, urban-, and rural-) discovered that physical planning is a bit more than only certain land-use problems.

In 1986 the collaboration between preservationists and physical planners in Poland reached also the level of regional and national physical planning. In the year 1987-88 the State Service for the Protection of Monuments prepared a background study of cultural environmental qualities and the draft conservation policies for the National Physical Plan of Poland (a strategy for the 1990s).

The historic preservation study for regional and national planning was a task which raised new questions and, first of all, evolved the problem of guidelines for the historic preservation of spatial values.

Therefore, the Principal Inspector of Monuments Mr. Tadeusz Zielniewicz has established and sponsored the research project: "The Synthesis of Spatial Values of Built Environment in Poland" scheduled for the years: 1989-93.

The research field in the Project is defined by the cultural point of view on the environment. The subject of research is the identity features of historical regions in Poland. This identity is created by a unique synthesis of values, which characterize the region as a certain whole. Basically, the synthesis of values is a synergetic interaction of:

- special values (spatial management & land-use culture),
- substantial values (material culture),
- intangible values (spiritual & intellectual culture).

Certain structural features of the built environment create a "framework" of the important factors which have an impact on the identity of region. When the process of transformation of built environment takes place "within the framework of the Gestalt", there is a chance for a region to continue its identity positively.

In Poland, and perhaps in the other post-communist countries in central Europe, there are some specific problems connected with 50-years long a formidable gap separating these countries from the organic historical process of transformations of the built environment which was continued in the Occident. One of the aims of the communist government in 1950s-1970s was the idea of unification of the nation and its country and of clearing off the regional peculiarities in Poland. The process of unification affected, first of all, the regional and local communities, and weakened their awareness of cultural autonomy. Due to private farming (still alive) and some peculiar features of Poles, the historical regions have survived notwithstanding.

The main aim of the Project is to delimit the cultural regions of Poland, and to establish the autonomous spatial conservation policies for each historical region and sub-region.

Because of a special history of Poland, it is perhaps one of only a few European countries with a medieval structure of the cultural landscapes. That is why the protection of spatial values which are an unique heritage of the history of spatial management and land-use culture in central Europe are so important in Poland.

There is a chance that a new territorial constitution of Poland will result from the current political changes. The Project supports the historical and cultural option in the discussion about the best shape of a new territorial structure of Polish regions.

2. Survey methods and selection criteria

Establishing a certain system for the monitoring of transformations of historic landscapes is basically one of the main issues in preservation and protection. Especially in Poland, where the process which has started in the year 1990 - after the restitution of a free market economy and the democratic system - causes a formidable scale of the transformations of cultural landscapes.

There is a need for monitoring of trends, and first of all need for documentation of the current state of the cultural landscapes. It is probably quite possible that the scale of transformations of built environment in Poland will be comparable with well known from the history the reconstructions of the landscapes in West Europe in the XVIII and XIX centuries.

That is why the investigation of spatial features of the built environment is so important. So, the heritage inventory in the Regional Centre in Gdańsk is oriented, first of all, on spatial values produced in the historical process of development of spatial management and land-use culture.

The cultural point of view on the environment involves a simultaneous reasoning on various levels of geographical space:

- the level of the territorial organization,
- the level of the settlement network organization,
- the level of an inner structure of towns and villages,
- the level of an inner structure of particular urban lot or rural farm.

3. Data structure and use of data processing

An enormous number of historic data (cartographic, cadastral and iconographic sources) has evolved the need for a certain use of data processing. That is why we have tried to develop some elements of the Built Environment Information System (BEIS) drafted recently in the Regional Centre in Gdańsk. The elements are connected with cultural values of two kinds:

- a) monuments and groups of buildings,
- b) sites and larger settlement structures.

The new philosophy of the historic preservation and a holistic approach to the built environment will produce the need for an open methodological framework. So, the BEIS should have certain functional features:

1. an integrated database with several workstations and a number of networked database users;
2. based on the Geographic Information System;
3. a certain structural openness in terms of the system of data processing;
4. a certain functional openness in terms of the exterior generated data (modems and computer networks).

The autonomous data bases are the main part of the system's structure. In this place the system is filled in by data. The autonomous data bases can exist as certain independent sets of data. The wide abilities of the data processing create opportunities for an autonomous work.

We have started with the following data bases in the Regional Centre in Gdańsk:

1. "The Monument Record" - for monuments and groups of buildings;
2. "The Card of a Place" - for sites and larger settlement structures;
3. "Cartographic Data Base" - for historic cartographic and cadastral sources;
4. "Iconographic Data Base" - for historic iconographic sources.

It seems to be obvious that the BEIS has to be based on a Geographic Information System (GIS) - the cultural space is an integral part of a geographic space. But it is not obvious how to build a linguistic bridge between indexers and researchers. We know that the leading research laboratories in the United States and in Europe have just taken the challenge. This is basically the main issue in our work on the model structure of the BEIS. In the Regional Centre for Studies and Preservation of Built Environment in Gdańsk during the last 2 years we have tried to solve the problem. Some of the results are enclosed.

4. Access to documentation

The supervision of the transformation processes is the main issue in the protection of the cultural landscapes. We try to adopt the method of the Environmental Impact Assessment for the built environment aspects. The computer simulations of probable transformations of the landscapes is the proper tool for the historic preservation issues. It could be useful for example in case of the public debate on a particular project which probably could change the cultural landscape of a place.

That is why, the access to documentation should be as open as possible. So, we plan to use scanner for recording all the iconographic historical sources (also cartographical and cadastral) just to open an access for the general public.

The open access to documentation means also thousands and thousands of volunteers-preservationists. Therefore, we design future products of BEIS taking into consideration that they should be easy to read and to understand; and we try to enrich visual information in "The Monument Record" and "The Card of a Place".

5. Conclusion

We all (the preservationists) are facing the problem of the balance occurring in the built environment between the status quo and the changes. This is the question of guidelines of the historic preservation policies. And it needs the systemic solutions.

The holistic approach to the built environment in this context means:

- to know something about everything rather, than to know everything about something,
- to treat the process of transformations of the environment as the natural one,
- to investigate first of all these elements, which are important factors of identity of the place in the organic process of transformation of the built environment,
- to investigate these features of the built environment which can help us to understand and to control in certain way the process of transformations.

**The approach of the Royal Commission on
the Historical Monuments of England to the description
of some declining industrial quarters**

Nicholas Cooper

In 1989-90 the Royal Commission on the Historical Monuments of England undertook surveys of a number of areas of decaying industry. The areas and the buildings covered by these surveys were not in themselves of great importance, but the manner in which these surveys evolved was instructive. Any recording is a matter of asking questions, and the form and content of the record is largely determined by the questions that are asked. In addition, the conclusions reached by any survey are also affected by the methods adopted. Although this seems obvious, it may be that these matters are too often taken for granted, and the adoption of standardised recording methods can sometimes obscure the need for an approach that has been adapted to particular needs. The end result of these industrial surveys was rather different from what was expected at the beginning, since it was found that the methods and questions adopted initially were inadequate for what was found had to be done. However, with those methods and questions that were adopted in the course of the work the Commission was actually enabled to produce results that were more interesting than those intended at the outset.

In 1989, the British government established Urban Development Corporations in several areas of obsolete housing and industry in a number of old industrial towns. Within these areas, special provisions operate which are intended to stimulate their economic renewal: many of the normal planning controls have been removed and special financial incentives are available to stimulate the creation of new industry and to encourage new building to replace old ones. The older buildings of many of these areas have not been closely studied, and it was therefore possible that they included unknown structures of architectural or technological importance, or buildings that were significant to the history of these localities, and which might be demolished without a record of them having been made. The Commission therefore undertook rapid surveys of seven of these areas in order to discover any sites that deserved to be recorded in greater detail if they were in danger.

The initial methods adopted were similar in all these surveys, and the results and the difficulties encountered were also similar. In order to miss no buildings of importance, the Commission made a record of all buildings and industrial structures from before 1945, with a photograph and a brief description, and a note of its location, date and functional type. This information was all recorded in the standard format that the Commission has adopted for all its building records, and using descriptive standards and terminology set out in its thesaurus of architectural terms. This was then entered onto a computerised database that enables searches to be carried out under any of these core data headings. In this way the Commission inspected some 5 000 sites in these areas, at a rate of between 20 and 40 buildings and structures in a day.

This method of survey was different from any that the Commission had adopted in the past. In the past, whether it has recorded the historic buildings of a particular area, or buildings that related to a particular subject that concerned us, it has been selective, choosing to record some buildings and not others. The Commission has recorded only those buildings that seemed particularly relevant to the themes that it was studying, or which seemed to be architecturally or historically the more important buildings of the area being recorded. What the Commission had done in such cases is to say "We wish to know more about a particular aspect of the past and its buildings: we think that these particular buildings can tell us some of the answers". In the case of these industrial surveys, however, the Commission did something rather different: it said of each old building in these areas "this looks like an old building. What precisely is it?" In these industrial area surveys, the Commission looked at everything, recorded everything, and consequently asked questions about everything.

Within these survey areas, there were some structures that were easily recognised and which could easily be recorded according to a brief, standardised form. But although staff of the Commission brought to all of these surveys a good general knowledge of the industrial history of the 18th and 19th centuries and of the buildings and structures that represent this history, it was found in practice that there was much that could not be understood. To begin with, there was the landscape itself and the disposition of the buildings within it. Buildings can only be explained in relation to other buildings, both in time and in place. Beyond that there were buildings themselves that were not comprehensible when first seen because their functions, their development or their rarity were not appreciated. Before these buildings could be understood it was necessary to learn more about the particular histories of each of the areas that were surveyed.

By acquiring a knowledge of the history of the locality the Commission was able to do what it set out to do - to make a brief record of every building and to identify those worth recording in detail. The information that was brought to the understanding of these buildings was not in itself new: all of it derived from books and other published, secondary sources, even though it was the first time, perhaps, that we had looked at a large number of very ordinary buildings in the light of such knowledge: more often such knowledge is applied to the interpretation of buildings that are architecturally more distinguished. However, when applied to every single building in an area, this historical information enabled one to perceive the wide range of different ways in which they were significant.

Such knowledge, of course, can most helpfully determine the core data that one records about individual buildings. But in these industrial surveys the Commission ventured into other areas where the standardisation of data becomes inappropriate. Through asking questions about the origins of individual buildings, these surveys provided explicit comments on the relationship of the built environment to the historic forces that created it. The character of an area is not always easy to define, and one reason for this difficulty is that all too often there has been a lack of any dialogue between historical knowledge and comprehension of the physical remains. Any old town is the product of history as well as of traditional building materials, and the sense of

uniqueness peculiar to every town and village is hard to make explicit if one only understands half of the input. What has too often been lacking both to planners and the public is an understanding of the historic background that enables people to make explicit their awareness of the character of the place where they live. Architects are supposed to be sensitive to the visual effects of buildings. Planners are skilled at analysing the effects of social structure, transport demand and the location of housing and work places. Urban historians have analyzed the development of many towns and communities in the greatest detail. But how often do architects and planners get together with historians to learn from each other's experience and knowledge? How many experts are prepared to consult with an authority in a discipline that is as apparently unpractical as that of the historian?

In these industrial studies the Commission approached the interface between history and planning. Planning is essentially about relationships, and the physical history of any area is expressed by the relations between buildings, in time and function, space and scale. Without knowing the history one cannot make sense of these relationships on any level beyond the aesthetic and beyond their functional relations in 1992. While one must never decry the value of aesthetic responses to buildings, some objective historical knowledge is an almost essential underpinning to judgements that may otherwise appear dangerously subjective. Equally, if one wants to know what is likely to happen in the future, it is always helpful to know how things have evolved in the past.

However, the Commission does not think it is for a recording body such as itself to say what should or should not take place; it is rather the task of building recorders to provide an analysis that other people can use. It is not for those who are concerned with the history of the built environment to say that recent developments that deny the historic genius loci of a place are good or bad: change is of the essence of history. But one can point out how knowledge of an area's past contributes to a deeper understanding of how it works, and at the very least contributes to sentiment. Nor is sentiment worthless: it is what attaches people to their surroundings and makes them take seriously decisions about their environment. Building recorders have for many years been accustomed to providing detailed information about individual buildings for the use of those who are concerned with their care. What was done in these surveys was to demonstrate the way in which historic surveys of whole areas might inform discussions about the way in which such areas are managed. However, in reaching these conclusions, the Royal Commission found itself compelled to go beyond the collection of core data on individual buildings; the question remains whether any record of a complex historic landscape is capable of reduction to a set of core data in any useful way.

**Vienna, a 19th century metropolis;
searching appropriate methods of investigation**

Andreas Lehne

I work for the federal office for the protection of monuments in Austria. This office is in charge of the protection of monuments and of the inventory. These different tasks are done by different departments and there are no direct links between heritage protection and the inventory. The fact that an object is listed in the inventory does not mean that it is legally protected. Inventory in Austria still means books, heavy, printed books that everybody can buy. There are two types of inventories. The first is the *Österreichische Kunsttopographie*, which was started in 1907; up to now about 50 volumes have been issued covering about 10 % of the country. This "Arttopography" is a detailed survey, based on research on the sources and study of the literature, which is quoted. The texts are richly illustrated with photos and plans. For the more important buildings there are catalogues of compiled old plans and drawings; each volume has long indexes of persons, artists, iconography etc. It is quite clear, that such thorough studies take years of work. If you deal with ordinary baroque monastery and its collections, you easily fill two thick volumes. You understand, that it would be hard to cover the whole of Austria. So this "Arttopography" today is seen as appropriate only for special areas. 20 years ago it was decided to start a second type of inventory which should provide a quick general view on the heritage. This new inventory is based on the "Dehio, Handbuch der Kunstdenkmäler". This Dehio, which exists in all German speaking countries, was started by Georg Dehio in Germany in 1901 as some sort of specialised guidebook for the interested public and as a practical tool for the conservator. This Dehio Handbook was transformed in Austria to become a short, preliminary inventory, which should not only cover the first class monuments like churches, castles, palaces etc. but the heritage as a whole with the enormous numbers of secular architecture: villas, dwellings, farm houses etc. There are big differences in the treatment of buildings. For the more important monuments, information is given about the situation in the landscape, the owners and the building history. This is followed by a description, in the case of churches including also the interior equipment. Buildings of minor importance are only listed with their address. Authors of the Dehio are not supposed to use the archives, instead the available literature only, which is not being quoted. There are no photos, only maps of relevant settlements and groundplans of the most important buildings. Up to now eight volumes, covering most of Austrian provinces have been finished; at the moment we are preparing the Dehio for Vienna, which will have 3 volumes, each about 700 pages. In Vienna 3 out of the 23 districts have already been dealt in a separate volume of the "Kunsttopographie" which was issued 12 years ago. This volume was to be a kind of pilot project, but it proved to be too expensive and no further volume has been started, it was decided to concentrate our work on the Dehio.

Vienna: 1.7 millions inhabitants, 135 000 buildings, 36 000 of them before 1919, about 10 000 before 1880. One can distinguish three main areas: The centre "Inner

city": oldest buildings from medieval times, a few Renaissance houses, a lot of baroque, with very valuable palaces of the nobility. Fine architecture of the 19th and the beginning of the 20th century when the baroque Residence was partly turned into a modern metropolis. Very few modern buildings. Also the surrounding Ringstraße belongs to the first district. It is not only a boulevard but a juxtaposition of high class dwelling houses, with cultural and economical institutions (opera, theatre, museums etc). The zone between the Ringstraße and the second circle-lane, the so-called "belt", the former customs barrier is primarily covered by residential buildings of the second half of the 19th century. These areas had been urbanised in the late Baroque period. Up to 1950, 2 000 buildings of the Baroque and Classicism still had survived. Today nearly two thirds of them are lost, most of them having replaced by modern residential houses. The outer districts, incorporated in 1890, are characterised by a rather nonhomogeneous structure. In between industrial zones, working class districts, garden-city like areas with villas, there are still some parts of the old semi-rural villages preserved.

I shall first show you some pages of the mentioned volume of the *Kunsttopographie* for the 3.4.5. districts, issued in 1980: you see that also the normal dwelling blocks are documented with photos and in some cases with the plans found in the archives. The archives are very good, due to the strict building regulations. That means that even for the suburban area inside the "belt" usually documents from the early 19th century, can be found. So the *Kunsttopographie* will provide information on the builder, date of building and alterations and a brief description for nearly all dwellings from the time before 1918. For the buildings of the later 20th century the selection is stricter, but for example all the communal housing blocks built by the city of Vienna in the interwar-period are listed.

Now to the Dehio. This meeting comes a bit early - next year I could have presented the first volume of the new Dehio for Vienna; up to now there are only proofs available. How is the work on the Dehio done? The authors, most of them art historians, partly civil servants, partly free lancers usually have commissions for the work on one district. They are supposed to walk through every street, have a look at each building, entering the ones which look "interesting". Sometimes it is necessary to have preannouncements, but this usually is done only with regard to first rate monuments like palaces or important houses of famous architects. Selection: The guidelines say that each object of artistic, historic or cultural value should be registered; that means, that in the inner city with its old valuable "stock" of houses, nearly each building has to be registered, in the outer districts less than 10 percent of all houses will be listed. In the large areas between the Ring and the belt-parkway where you mainly find late 19th century architecture - about 50 % will be registered. The Dehio is of course also open for 20th architecture. There are no time limits.

The order: district wise, first a short introduction to the history and development of the district. Then clerical architecture, followed by secular monumental buildings (public buildings, palaces etc) next comes the less important secular architecture in the alphabetical order of the streets. At the end statues, fountains, etc. Selection and treatment of the dwelling houses is of course most difficult. Usually one starts with a very short description of the street as an ensemble, afterwards, the Numbers of the less

interesting building which are part of that ensemble are listed. Then the more important buildings follow, which are characterised by a few short words.

I shall give you two examples of texts for normal dwelling houses. They might sound rather funny. They also sound a bit strange in German, as we don't use any verbs in order to keep the texts short, and of course there are a lot of compound nouns and abbreviations. Insiders call this language "dehiotic".

First a narrow street in the seventh district, a mixture of baroque and 19th century architecture:

"Gardegasse: slightly twisted street, connection between Burg- and Neustift-Gasse, once part of the Spittelberggasse. Between multistorey dwellings from late historicism (Nr. 1, 2, 3, early German with round tower at the edge 9, 11, 13, 15) the remarkable baroque or empire suburban buildings partly preserved. Nr. 4 "The golden star" 18th century nucleus, facade from the 1. half of the 19th century, suburban house with facade structure in the style of early historicism (straight pediments, floral decoration). Nr. 5 "The red star", built during the third quarter of the 18th century, important baroque suburban house, with richly decorated facade, arched entrance (doorway), main stories partly with pilasterstairs, richly decorated window frames with curved pediments in the main storey. Small rectangular court-yard with loggias. Back (Faßziehergasse 4) with facade of early historicism with even pediments, floral decorations with masques. Nr 6 ... etc".

The second example is a rather ordinary street in the 3rd district: "Wassergasse: Set up after 1880, homogenous 4-5 storey dwellings 1880 - 1885, Neo-Renaissance - facades with window-frames and cornices in clear relief. (Nr. 11, 13, 15, Nr 18 commemorative tablet with portrait relief for Zephyrin Zettl, signed Fritz Hähnlein 1938, Nr. 19, 20, 21, 23, 24, 25-27, 28, 29, 31, 32, 34, 36) parentheses. Symmetric buildings of late historicism between Hörnes- and Geusaugasse, 1887 (Nr. 4, 6, 8) Art Nouveau dwellings from 1910/11 (Nr. 10, 12, Nr. 14, floral decoration of the facade, Entrée with putto-reliefs, stain glass windows in the staircase).

Nr. 29 and 31: built 1883-1884 by Gustav Matthies, the entrances alternated in 1904, majolica wall-decoration showing landscapes, decorative stained glass windows. In house Nr. 29 sculpture of Hygieia and sculptured Chandelier on the landing. At the Entrance two empire-relief medallions with mythological scenes (obtained from a former building). In house Nr. 31 there is also a female sculpture (muse) from the time when the house was built, and a bronze bust Carl Haball, signed "Julius Grünfeld fecit".

15 lines were used for this street, the much more detailed description of that street in the Österreichische Kunsttopographie took 2 pages, including 3 photos.

We have been asked to speak about specific problems. I want to mention only 4 of the hundreds of problems which arise:

1. The normal buildings are only listed with their street number, building date or stylistic classification. If the name of the builder is mentioned it means that it is a more important building. So sometimes the name of the builder is known to the author but it is not told to the reader. Information is held back. This policy might be questionable.
2. There is a difference in the treatment of private villas and dwellings blocks. In Vienna it is not very difficult to enter a dwelling, if it is not open, one can ring the concierge. It is more difficult in the case of villas, there is always an inhibition to annoy the proprietor and his dogs if you just bump in.
3. Cemeteries: like in every big city, we have a number of large cemeteries in Vienna with hundreds of tombstones of artistic value. There is also the question of whether tombs of important citizens should be mentioned.
4. Usually modern dwelling blocks of the time after 1945 are not treated in the Dehio. But a lot of them, especially those built by the city of Vienna have works of fine art attached. According to a former rule one percent of the building costs should be spent for art. Masterpieces have not very often been created in this connection, but nevertheless there are works of art. Should all of them be mentioned? Is the average author of the Dehio capable of making qualifications and distinctions in the field of contemporary art?

Results: the Dehio is primarily of academic value. It offers a lot of information to the art historical work. The registers of artist or iconography are very useful for further research. And of course this thoroughly compiled inventory is an excellent starting point for everybody who wants to write a selling guide book. The Dehio does not serve as an adequate preselection for the protection. The Dehio really tries to treat the city as a whole. As I told you, from about 10 up to 90 percent of the building structures are listed, whereas only about, one or 1.5 percent of the Vienna houses are under protection. The Dehio is dealing with the city as a cake, from which the protectors pick out the raisins only. There is eternal antagonism between the people who do the inventory and those in charge of the monument protection. They tell us, that the Dehio is worthless to them, because we are listing too much, and we say "well, you are not protecting enough".

**The inventory of the urban architectural heritage ¹.
General Inventory, Documentation and Protection department.
Heritage Directorate. Ministry of Culture (France)**

Bernard Toulrier

For the past ten years, the analysis of the urban milieu has greatly progressed. The general listing is now prepared using just one method: the topographical inventory, an exhaustive scientific survey which, in the case of the urban sector, consists in locating and identifying buildings, by collecting the data on them that are essential to our knowledge of them ². The topographical inventory starts with a systematic listing of items later than the year 400 - excluding all archaeological inventories - and before 1940. There are no chronological limits imposed on the listing of the major items.

This listing of the urban heritage has the advantage of a clearly defined approach. Specific study areas are delimited on the basis of topographic, historical and urbanistic criteria, making it possible to differentiate city- and town-centres, suburbs and outskirts or outlying districts, so as to apply in each sector research methods that are best adapted to the degree and nature of the urbanization ³.

Within these urban study areas, the listing of projects, the programming for which is subject to the approval of the National Inventory Commission, is undertaken by teams from regional Inventory departments, made up of researchers, photographers and draughtsmen.

The preparation of the inquiry is aimed at gathering together the most immediately accessible bibliographical documentation ⁴ and existing sources ⁵. Iconographic and,

¹ We shall restrict our observations to the domain of the buildings heritage. Within the context of the programming of an urban sector, the Topographical Inventory also includes the listing of moveable items. The definitions of the terms "Inventory" and "Architectural Heritage" are those of the Convention for the Protection of the Architectural Heritage of Europe (article 1). Council of Europe: cf. CC-PAT (91) 12 rev.

² Livret architecture/ Architectural handbook, Paris, Ministry of Culture, 1978, 179 p.
Vocabulaire de l'architecture, by Jean-Marie Pérouse de Montclos. Paris, Imprimerie National, 1978 (reprinted 1989). Principes d'analyse scientifiques Collection.
L'inventaire topographique. Guide. Paris, Ministry of Culture, 1991, 74 p.

³ This division of the entire listed territory into homogeneous cultural areas is also the method used in the inventory of Italian cultural items. L. Cavagnaro Pontuale, Norme per la redazione delle schede di catalogo dei beni culturali. Beni ambientali e architettonici. I. Norme generali. Rome, 1983, pp.24-26.

⁴ The "Répertoire des Inventaires" collection lists, region by region, all the works conceived in the form of repertoires or inventories, as well as studies or monographs, which, within a defined geographical context, examine a large number of monuments or items.

above all, cartographic sources, along with old town plans and cadastral registers (old and new), are preferred ⁶. The new cadastral register acts as a cartographic back-up for the inquiry ⁷.

The end product is formatted as:

- "General dossiers" on the town,
- "Group dossiers" on urbanistic units (spontaneous and structured combination of buildings large and small, or open spaces) ⁸,
- "collective dossiers", by family of buildings, and
- "individual dossiers" of buildings ⁹, considered as individual or representative elements of each one of these families.

Public access to this documentation, as well as to these computerized data-banks and image-banks microfiched from the dossiers ¹⁰ is obtained through the network of the Heritage Documentation Centres, at national and regional level ¹¹. The documentation compiled is the basis for regional publications published in national collections ¹².

⁵ The manual files coming from these examinations of books, periodicals, archives or iconographic records are classified in topographical order. These files are in the process of being computerized. Systems for helping with the keying-in, and the output product of these data-bases are being developed around PSYLOG software. The international exchange format planned is the MARK format.

⁶ Visual or graphic read-outs are often used as an aid to field surveys. See the methods developed by detailed read-out using the regressive method. As a general rule, the buildings on the old cadastral plan are entered on the old cadastral register.

⁷ Numerical back-up will gradually be substituted for graphic back-up where large urban areas are concerned.

⁸ Example of a complex: the great urban prospects in Paris. Cf. Study in progress by the Thalès workshop.

⁹ A building or group of buildings designed for the same purpose, constructed on a self-contained plot of land and forming a self-contained plot of land.

¹⁰ In October 1992, out of the 80 000 references stored in the data-base, more than 15% were urban sites. Some thirty towns with more than 3 000 inhabitants have been dealt with in a topographic inventory...

¹¹ Access to the data-base is by way of 36 14 on the Minitel, currently in preparation.

¹² Etudes topographiques, Cahiers de l'Inventaire, Etudes du Patrimoine, Images du Patrimoine, Itinéraires du Patrimoine... (Topographic studies, Inventory notes, Heritage studies, Heritage images, Heritage circuits...)

During this decade, the methodological basis of this listing has developed in three directions: a tool to help with research, a system of documentary information and data, and a reference and evaluation tool for conservation and protection ¹³.

The identification research file

The method followed must combine the scope of the identification with speed. The aim of the research is to obtain an analytical selection of outstanding or representative members of a "family", based on a systematic identification procedure ¹⁴.

In very highly urbanized areas, it is then possible to proceed with the identification building by building in certain "sample-based" blocks, judged to be the most representative ¹⁵.

The study unit is defined as the original dwelling or habitation unit, the actual basic cell for the registration of data issuing from the archaeological examination of the edifice ¹⁶.

Each unit is analyzed with the help of an "identification grid" which includes its location, the main distinguishing typological features and the date. The typology is based essentially on the functional morphology of the architectural fabric, and on an analysis of distribution, retracing the developments undergone from public space to private place ¹⁷.

¹³ So-called "type 3" Protection. Projet de prise en compte par les documents d'urbanisme. La "base régionale des données patrimoniales". La "liste communale du patrimoine culturel". Paris, Heritage Directorate, 1992, 8 p. typescript.

¹⁴ The identification method may be systematic, but at the same time differentiated on the basis of chronological periods, so as to be able to apply an identification grid or yardstick better adapted to certain periods. (e.g. Angers, Toulouse).

¹⁵ Cf. Examples in the suburbs of Paris. This identification by sample-based area is sufficient to meet the main research objectives. This method is less functional from the viewpoint of daily heritage management.

¹⁶ Definition of the basic unit, from land occupation to buildings. Georges Coste, Bernard Toulhier, La demeure urbaine: expérimentations et méthodes: l'exemple de Tours, in Revue de l'art, no. 65, 1984, p.89.

¹⁷ For the first results of these methodological considerations, based on the examples of Montpellier and Tours, cf. Revue de l'Art, no.65, 1984, pp. 81-97. See also Bernard Toulhier, Règles et construction d'une typologie de la demeure urbaine, in Recherches sur la typologie et les types architecturaux, ... 1991, pp.28-33.

The analysis of the urban dwelling is based more directly on an examination of the recurrent features of the dwelling's external and internal structures, its position in the urban milieu, and its capacity for reshaping in relation to legislation and models, either theoretical or in use.

The data are structured in a very rigorous way, based on a numerical coding which allows for a statistical processing ¹⁸. The use to computer-assisted cartography is then necessary to visualize the result of this processing ¹⁹.

In addition to the factors destined to enrich the "general observations" of the collective dossier, the index resulting from the identification survey is used to "caption" a Communal Heritage map including all the items identified, selected, protected or to be protected.

This research data-base is in principle designed for eventual local management at the Regional Heritage Documentation Centre. The data emerging from this identification can feed some of the spheres of the national documentary data-base ²⁰.

The documentary file for selected items.

The selected items represent about 10% of the whole body of items identified. In addition to major items, this selection respects the typology of the families and their chronological strata.

The Mérimée national data-base is a textual data-base with access via thesaurus or text search. Its original function is to be connected to an image-bank on microfiches reproducing all the different dossiers of the topographic inventory concerning architecture: bibliography, maps, plans, photographs ²¹.

The descriptive system is designed to comply with the possibilities of the Mistral documentary research software ²². The base consists of 62 open or closed lexicon fields. The lexicons are term lists, hierarchized or otherwise, which form the thesaurus. A lexicon is closed when only the terms entered in the lexicon can be used ²³; it is

¹⁸ Breakdowns: flat sorting on one parameter, crossed sorting (e.g. Paris, Faubourg Saint-Antoine); multi-dimensional processing: factorial analysis of connections (e.g. Tours, Angers). Use of SAS software.

¹⁹ Examples of automatic cartography: Cognac. Use of ARC-INFO software.

²⁰ File established in the TEXTO software "Guided addition" format.

²¹ The documentary management of all the various elements used in the establishment of the dossier is also provided by specialized "regional micro-bases" whose installation is currently under way: phototype file or data sheet, drawing file, bibliographical file...

²² Descriptive Architecture System. Paris, Ministry of Culture, Heritage Directorate, 1989, republished 1990, 193 + xxx p.

For consultation of the architecture base cf. Leroy-Beaulieu Sabine, Deldon Larianne, Mistral, version 5 or How to use a documentary software, Paris, 1988.

²³ For hierarchized lexicons like those of the DENO, PART, LOCA and SCL fields, the new terms are introduced after examination of the propositions entered on a lexical proposal form.

open when the terms are sorted by the machine and automatically indexed. These lexicons are used to construct a reverse file, in other words a list of key words. Each key word on the list indexes all the documents which contain it.

The categories are grouped in six chapters: documentary references, designation of the item, location, history, description, legal situation, and interest of the item. We shall take a quick look at some of these fields which call for a brief commentary.

In the first chapter on documentary references, the identification no. of the item is given in the REF field. Chapter 2, on designation, is the most important. The Building Denomination field is written up from a hierarchized thesaurus ²⁴ (with 10 hierarchical ranks), indexed and with synonyms ²⁵. The denomination is completed principally by the name or designator (free text) and the actual and successive purposes of the building (key words). The location gives merely the base cartographic co-ordinates. The history of the building, given by the Date (dating in years) and Century (dating in centuries) field is supplemented by a commentary describing the history of each of the component or outstanding parts of the item. The chapter dealing with the description is invariably unsatisfactory in this sort of data-base. It gives a brief, summary-type morphological description and must be amplified by use of the "Rema" field in the following chapter which describes the outstanding parts and features.

The French identity file, in use for some months now, complies with the **core data index recommended by the Council of Europe, with, in addition, certain fields used in the Mérimée data-base:**

- ETUD, specifying the context of the study: topographic inquiry, but also thematic inquiry, list of protected buildings ...
- DENQ, to specify the date of the inquiry
- PDEN, to specify the denomination or transfer the designation adopted in the protection order when this is not in compliance with the authorized lexicon,
- VOCA, to give the name of (patron saint of) religious buildings.

As far as the data sheet currently being proposed by the Council of Europe is concerned, it would undoubtedly be helpful to follow up its definition with a more precise description of the fields and their content (using key words or free text). On the other hand, there is no certainty that the recommendation to open up two single fields on materials is all that relevant..

²⁴ The hierarchic relation helps to create links between a generic term and a specific term. The relation of synonymy establishes an equivalence between two terms with the same meaning. The associative relation called "see also" is a further possibility of the Mistral software and is particularly useful for consultation and queries.

²⁵ New version in preparation, with definition of each of the terms. Publication planned in 1993.

Likewise, it seems most important to continue this line of thought by means of recommendations on the formulation of the denominational thesaurus, so as to achieve compatibilities between the different systems currently in force.

At a second stage, further reflection could be developed to the recommendations concerning the various complexes (towns, villages, urban sectors), so as to examine the converging analyses of the constituent elements employed and the relational rules governing them.

Lastly, European collaboration on heritage data-bases calls for consideration of a further aspect vital for any documentary system of this type: image banks.

We shall conclude by describing an experiment under way on the architectural heritage inventory of the city of Toulouse. This experiment should help to improve knowledge about and conservation of the city, and also help it to achieve a rational management of its development.

The architectural heritage inventory of Toulouse

Annie Noé-Dufour

The Objective

To survey, in less than three years, more than 30 000 buildings in the city (commune) of Toulouse, not included in the protected sector.

Thanks to existence of a *protected sector*, it is possible today to keep an eye on the development of the historic centre of Toulouse (250 ha/620 acres). On the other hand, the tools needed to gain a knowledge of the whole of the commune (11 000 ha/ 27 170 acres) are virtually non-existent. It is to fill this gap that the inventory of the architectural heritage of Toulouse has been embarked upon. An agreement defining up the framework and objectives of this study was signed on 27 September 1991 by the State (Ministry of Culture) and the City of Toulouse.

Nature of the study

The study or survey entails a systematic analysis of each architectural unit.

At the conclusion of the study, the data thus gathered should make it possible to make informed judgements about the interest of each building or complex or group of buildings, or even of a street, block, or neighbourhood. They will be acted upon in two ways:

- in the case of outstanding or particularly representative features of the architecture of these neighbourhoods, by well conceived *protective measures* in accordance with the law of 31 December 1913, for which the Ministry of Culture is responsible;
- in a more general way, by the introduction of appropriate rules and regulations, in particular with regard to the land occupancy plan (POS - Plan d'occupation des sols), for which the City of Toulouse is responsible, or by the creation of a Z.P.P.A.U. (Zone de Protection du Patrimoine architectural et urbain).

The Method

First phase

1. A preliminary documentary approach (examination of the bibliography, collection of different old town plans and illustrated documents and sifting of building permit archives) has provided a better grasp of urban development in the 18th, 19th and 20th centuries within the city's perimeter.

2. In parallel with this, a computerized *identification* table or grid has been developed to analyze the whole of the architectural stock. This makes it possible to gather data parcel by parcel, and establish statistical and cartographic analyses. This was only possible because the City of Toulouse has computerized its cadastral register.

The data-sheet makes it possible to analyze residential buildings which differ a great deal from one another and have very different dates (18th, 19th and 20th centuries, with the oldest dating back to the 14th century). This analysis consists of:

- an identification of the function of each building (is it a block? a house? a castle? a farm? etc),
- summary descriptive data (materials, structure, elevation, decoration),
- historical data (date of construction, name of the architect etc).
- *For buildings built after the Second World War*, we simply note their identification, number of floors, and date.
- *For buildings other than residential dwellings* (but built before the War: schools, religious edifices, factories etc) we also note the construction materials and details of particular interest.

Second phase

Because of the large number of buildings to be listed, we decided at the outset to gather the data in the field, directly, with portable micro-computers.

On the spot, the screen shows the numerical cadastral plan of the neighbourhood to be inventoried. We simply have to indicate the parcel or parcels concerned by the architectural unit, confirm the address which is automatically displayed, and then key in the descriptive and historical data. A scroll menu enables us, for each field, to select with the mouse the pertinent response. The data are transferred on a daily basis to a central processing unit.

To date, we have finished three neighbourhoods, and a fourth has just been embarked upon.

Conclusion

The data-processing system adopted has helped to create a data-base making it possible to effect statistical and cartographic analyses. In the long term, the data in this identification base concerning the whole building stock will be entered into the documentary base described by B. Toulhier, for the buildings selected.

This data-processing system also helps to integrate image and sound. A maquette of this type has been successfully tried out in one neighbourhood. Two hundred photos were digitally recorded and combined with the data-base and the cadastral plan. This experiment seemed to us to be largely conclusive, although the technical options and their financial consequences have not yet been properly assessed.

Study and documentation problems in industrial heritage

Chairperson of the sitting: Marie NISSER

Mining heritage in Europe: Study and documentation as a basis for a European conservation programme

Rainer Slotta

The mining and metallurgical industries have had much influence on Europe - not only through the events of this century and the 19th century, but also in terms of human history. In his quest for useful raw materials, man has altered nature and transformed natural landscapes into cultural landscapes. The deforestation of the Mediterranean region, to supply timber for mines at, for example, Siphnos, Thasos and Laurio, or at Rio Tinto and Almaden, provides ample proof of this. Such alterations to nature were the price paid for wealth gained in gold, silver and other metals, and for the birth of a "culture" which also, and most importantly, embraced artistic and aesthetic factors. Without the mining industry at Laurio, and the financial might emanating from it, Pericles would not have been in a position to build the Acropolis, which is today a State monument and part of the cultural heritage.

It is obvious that the European states have a great responsibility when it comes to the conservation of monuments from the past. Future generations must be given the chance to establish their cultural and intellectual positions vis-à-vis the past, the present and the future. This is why it is so important to conserve major monuments, including the plentiful evidence of mining and metallurgical industries, representing evidence of this aspect of human culture.

But each and every mine has a special form. Coal mines are different from potash and iron-ore mines. Lignite is extracted in different conditions from schist. In other respects, however, we can find common features, especially in the social and cultural domain. Mining towns are always different from "normal" towns, usually because of a certain uniformity which is also the expression of a "para-military" type of organization. The division of life into "shifts" is perceptible. The miners' pride in their work, their sense of solidarity and their particular hardships are all evident in the local architecture and religious manifestations. A study of the features common to, as well as the differences between, the various mining regions is extremely difficult, but it is worthwhile and necessary. It is only on the basis of such details that we can make an assessment of the particular qualities of such industrial monuments.

This problem does not only occur at the level of a region. It can occur on a larger scale. It is undeniable that the coal-mining industry, in the Ruhr for example, often differs markedly from the same industry in Poland. The neighbouring regions of Saarland and Lorraine show particular features not merely peculiar to the respective mineral deposits. The lignite-rich areas of Senftenberg and Leipzig in what used to be East Germany differ from those in West Germany, the Czech Republic, or Slovakia. The Spanish copper ore mine at Rio Tinto in Andalusia is radically different from the mines at Mansfeld (Harz) and Falun (Sweden).

Industrial mining landscapes differ from one another despite their common denominator, which is the encroachment on the environment. Anyone who is familiar with the Borinage and Ruhr regions will have observed substantial differences, despite their numerous shared features. The differences are not only specific, with regard to the site of the mine itself, but also derive from "human" factors.

Each district has phenomena that are ethnic in origin. Proof of this lies in the form of the pit-head gear. The mines in the Ruhr, for example, have differently shaped roofs than Belgian pit-heads. The form of the cable drums is a distinctive feature of English pit-head gear. The builders of French and Belgian pit-heads had experience in reinforced concrete construction which German builders lacked. This is why there are virtually no ferro-concrete pit-heads in Germany. If they do exist, they are situated near a French mining region, e.g. in the Saarland. But even in one and the same country differences emerge. The potash industry shows a "brick style", perhaps because it developed in flat, lowland areas where bricks were commonly used, and because there was no tradition in building with stone. In the Harz region and the Erzgebirge in Saxony, timber was the commonest construction material. This is why we find wood-frame constructions with wooden shuttering and planking. Construction involving metal frames is an international style, but the accompanying details are significant in architectural terms and today still represent the "specific features" of a particular country or region.

But the major problem is the following one: What monuments are to be conserved? As a rule, it is maintained that every mining deposit should be represented in its entire development by typical monuments. In other words, each major period when the mine was in use should be represented in one form or another. For the coal-mining industry in the Ruhr, this means that monuments are required for the proto-historical period, for the period of government-run mining (conserved in the form of the mining monuments at Witten and Muttental), for the transitional periods of pit-bottom exploitation between 1820 and 1830 (the Ver. Nachtigall Tiefbau mine), for the period of extensive capitalist exploitation in the 1850s (the Malakoff towers), the period of large scale mines (e.g. the Zollern 2/4 mine of 1900), the constructivist period around 1920 (pit-head gear conserved in the Mining Museum in Germany). This is a "minimal" programme which can and must be extended - as far existing financial resources will permit - because, in time, any chronological gaps relating to these monuments will have to be filled in. If the coal-mining industry in the Ruhr comes to an end in 2050, all the major stages in the development of this economic sector so meaningful for this district must be identifiable by means of monuments. This is why we have to select the items to be preserved.

Is this feasible? We must also be aware of the fact that it is not possible to conserve a whole host of items, especially when money is short. The problem of what to choose is thus an obvious one. If we wish the criteria for selecting monuments to be applied to all districts, we will end up with a vast number of plants and objects. I nevertheless think that, in some instances, it is important to go along with over-ambitious projects in order, in the end, to arrive at satisfactory and adequate results. But these choices have to be made on a practical level. When several more or less equivalent monuments exist, the one to be preserved is the one which is the least

necessary for the continued mining of the deposits. A great deal of sensitivity is required to make sure that the proprietors of these monuments understand what is at stake, and have a cooperative attitude. In most cases, confrontation aggravates the negotiating atmosphere. But where monuments of an indisputable importance are concerned, it is necessary to show a certain resoluteness, because it is essential that extensive and justified documentation should be available on the value of the monument in question. Furthermore, for monument conservationists, there should be the possibility of assessment and appraisal in the arguments put forward on the value of a given monument, which would have the effect of making monument proprietors regard the decisions and conclusions reached to be full and final.

This model is not only valid for the various countries concerned, but also for the whole European heritage. As the outcome of differences between countries and people, this heritage should be a comparative one. The lack of decision-making processes and criteria at European level in the area of monument conservation is sadly evident, but this shortcoming may be remedied if the national authorities work with an awareness of future requirements. The aim of programmes designed to protect monuments within the European framework must be to establish an adequate documentation base for the European mining industry, not only with regard to national monuments, but also the common European heritage.

Such monuments do exist. We are not thinking so much of installations that have become famous as a result of technical innovations, but rather mines which have a human story as a result of exceptional events.

The Bois-du-Cazier mining accident at Charleroi-Marcinelle is one such monument. In 1956, 262 Italian, Belgian, French - in a word, European - miners were killed by a fire-damp explosion. This mine, which still exists, should be transformed into a European mining monument and into a research institute for the prevention of mining accidents. The same application could be adopted by the Advanced Mining Institute at Freiberg in Saxony, site, for many centuries, of the centre of mining sciences, which still has an influence today all over Europe. It is also quite conceivable that at Kutná-Hora (former Kuttenberg) the famous church of St. Barbara could be turned into a commemorative monument associated with the mining heritage, for it offers impressive evidence of the religious nature of miners and reminds us that St. Barbara is the patron saint of European miners. These monuments - rather than pure mining technology - are important for us and for future generations, because they offer evidence of the critical features of human existence through the life of mining communities.

In Germany, the documentation is recorded by traditional methods, that is by field surveys, a descriptive record and a photograph, the creation of a dossier - often in the form of a data-sheet, verification of the value and interest of the monument in question by comparing it with the known stock, and ultimately the listing of the monument.

There is no central data-bank. On the contrary, the administrations responsible for the conservation of monuments work in a more or less independent way, because the German constitutional law grants authority to the various Länder in cultural matters.

But a fairly close link has been developed between the different administrations, the curators responsible for monument maintenance and upkeep, and international institutions such as ICOMOS.

Furthermore, efforts are being made to establish a data-bank on environmental damage. These data banks - Monudoc and Monufact - contain descriptions of damage done to monuments, preventive measures implemented, the influences of the environment, research findings, and the results of products, procedures, experts and so on. These data-banks are created and managed by the Region and Construction Information Centre of the Fraunhofer Society, answerable to the Ministry of Research and Technology. Today, monument conservation is still managed in a somewhat "traditional" way in Germany.

In conclusion, what measures are to be taken? A European committee set up to establish a classification listing of the mining heritage? This would certainly be premature - much better communications would be required between the national authorities. It is still wishful thinking, because it is already difficult, in one and the same European country - take Germany for example - at a time when money is scarce, to acquire lists of monuments and ideas about monument conservation.

How are we to go about this for Europe as a whole? A degree of utopianism is necessary, because if people shed all their illusions, they become impoverished. Money, it goes without saying, is important, but a shortage of financial wherewithal is not a reason for losing important European monuments. Some monuments will certainly be lost. This is why solid documentation is necessary, and why much honest thinking must be done about the possibility of evaluating the European mining and metallurgical heritage, in the form of a pilot project. It seems to me difficult to formulate compulsory standards and rules, but it is indeed possible to arrive at an assessment of the value of a monument within an international context.

The criteria for the statutory protection of industrial structures in England

Martin Cherry

The adequate protection of industrial structures depends upon three factors being present:

1. A body of sound historic buildings legislation and additionally (in England) a body of satisfactory case law or precedents.
2. High-quality and well-financed research programmes on historic building types and industrial processes, the findings fed into a national (international?) computerised database of the industrial heritage designed to serve both academic and site-policy management needs. Such programmes must be flexible enough to respond to acute threats to individual sites of national importance and the monuments of industries undergoing rapid change or decline.
3. Co-ordinated educational programmes aimed both at the general public, and politicians and policy administrators at a local and national level.

1. The legislative framework

Industrial buildings and sites are protected under two separate sets of legislation:

- i. Scheduled monuments legislation enables the Minister to protect a structure of national importance. Usually those chosen under this legislation have no viable economic use and in effect must be amenable to a management system that keeps them as they are in perpetuity. The controls over monuments are more exacting and take precedence over;
- ii. Listed building legislation which requires the Minister to protect a building of "special architectural or historic interest", and underpinning this legislation is the presumption that the future of an historic building is best served by keeping it in use, but it does not exclude the possibility of conserving it "as found". The majority of protected industrial structures are listed rather than scheduled, and these cause the biggest problems: if or how they should be kept in economic use.
- iii. Scheduling aims to protect the best surviving examples whilst at the same time achieving a representative selection nationwide.
- iv. The criteria for listing as currently laid down allow for considerable flexibility in selection:

- a) Buildings prior to 1840 (e.g. the earliest Manchester cotton mills) should always be listed unless later alterations have robbed them of all interest.
- b) Between c. 1840 and 1914, many structures of definite quality are listed and due weight is given to technological innovation or virtuosity and significance in economic and social history terms.
- c) Very rigorous criteria are applied to post-1914 structures, and those post-dating 1945 must be of exceptional significance.

2. Research programmes and a computerised database

- i. **lack of information as an obstacle to protection.** One of the biggest problems facing listing or scheduling inspectors in the past has been the lack of accessible information about industrial buildings and sites. This can result from (i) a lack of coordinated research and/or (ii) difficult access to a database.

(i) **Example.** When Greater Manchester and the West Riding of Yorkshire were being re-surveyed for listing purposes in the 1980s, comparatively little was known (or few accessible research findings were available) about the cotton and woollen mills that give these areas their international significance. Less than thirty cotton mills out of an estimated 1 000 surviving were listed, and this figure includes the key towns of Manchester itself and Oldham. Working on the basis of major work now completed by the Royal Commission on the Historical Monuments of England (RCHME) it is now possible to start work on a rapid listing (and scheduling) review of these and other areas. Until coherent bodies of research material are available, buildings under threat have necessarily to be assessed on an ad hoc basis. Whilst much can be (and is) achieved this way, the lack of fully-documented contextual material can undermine a case and with it the credibility of the advice given.

- ii. In our case (the compilation of the statutory lists), the reluctance of the government in the early-1980s to computerise the listed-building database has led to serious problems when trying to analyze the mass of information contained in the lists (the number of entries now stands at a little over 440 000) and of developing a conservation strategy.

The current urban list review, now in its fourth year, is fully computerised and allows us to interrogate the database for basic information about the stock of historic buildings: dates, materials, function, architect/engineer etc.

iii. A research-based programme of protection

In England, ministers have recognised that certain difficult periods (or building types) need to be assessed as a whole, the detailed selection criteria established, and guidelines prepared to explain and publicise these more widely. A major exhibition on post-war architecture (opened in London and about to travel widely

throughout England) accompanied by a conference on the first building types to be examined (educational institutions) marked the first stage of this policy in action. It resulted in 46 institutions being listed in March 1993. Industrial and commercial buildings of the period forms the subject of the next research phase, which is now nearing completion.

iv. A methodology

Where possible our approach to each building type will consist of six stages:

- a. identification and description of the industry overall;
- b. detailed data gathering;
- c. collation and reporting;
- d. selection;
- e. consultation;
- f. protection.

The extractive and textile industries are the first areas to be examined, but it should be stressed again that a flexible approach is necessary so that programmes can be suspended or changed in response to changes in conservation priorities.

3. A political will and public awareness

Without a coherent programme in place that helps politicians and public alike to place recommendations for protection into a secure context, the pattern of statutory protection will remain inconsistent and inadequate.

To illustrate this point, of three major post-war industrial and commercial buildings recommended recently for listing by English Heritage, two (the Cummins Engineering factory, Darlington by Kevin Roche, John Dinkerloo and Associates, and Gilbey's Gin Distillery and offices at Harlow by Peter Falconer and the Design Research Unit) were listed, the other (the Heinz Research and Administration Centre by Skidmore Owings and Merrill) was not. As ministers are not required to explain their decisions in detail one can only speculate as to why they came to the decision they did.

Identification of the industrial heritage: Objectives and methods

Claudine Cartier in collaboration with P. Smith and C. Chaplain.

1. Introduction - history

The identification of the industrial heritage issues from a political incentive formulated by the Ministry of Culture, as from 1983, whereby this particular heritage, which marks a new departure, is duly acknowledged, which in turn marks an official recognition of the broadening of the heritage field.

This nation-wide programme was launched in 1986 by the Industrial Heritage Office of the Sub-Directorate for the General Inventory, Documentation and Protection of the Heritage. It was set up in the wake of a colloquy organized in France in 1985 by the Council of Europe, on the theme: "The industrial heritage" ¹. "What policies?"

During this meeting, those attending put forward recommendations concerning this heritage, and in particular a recommendation to envisage a small general inventory, with a specificity and grid suitable for the whole of Europe.

This suggestion happened to back up the aims and goals issuing from the Ministry of Culture, and published in 1983 under the title: "Hommes, techniques et sociétés industrielles: traces et identités" ², which recommended that, in order to get away from the blow-by-blow method of activity, it is important to make available the means for surveying the current state of the industrial heritage. To this end, it was proposed to launch a campaign to identify sites and buildings, as well as machinery, with the aim of establishing a better policy with regard to protection and conservation.

2. Objectives

Since its launch, the identification of the industrial heritage has complied with two complementary aims: scientific study and heritage management.

To meet the first objective, it is necessary to establish an overall photographic record of the French industrial heritage in its present state. What is involved, for each

¹ The industrial heritage: what policies ?

International colloquy held jointly by the Council of Europe and the French section of ICOMOS with the assistance of the French Ministry of Culture and Ministry for Urban Development, Housing and Transport and the *Ecole nationale des ingénieurs des travaux publics* de l'Etat. Lyons, Vaulx-en-Velin, 22-25 October 1985.

² Noëlle Gérôme, Bernard Rignault, Jacques Vallerant, Hommes, techniques et sociétés industrielles : traces et identités, Ministère de la Culture, Dalloz, 1983, 112 p.

industrial production site identified, located and visited, is the gathering of very simple answers to an equally simple list of questions: What is the name of the factory? What was it called in the past? What did it previously produce? Where is it located? What types of energy does it use? Does it still contain interesting machinery? Are there any archives? What are the premises built of, and what architectural forms do they adopt?

These items of information, collected in situ and from archives or existing studies, then grouped and centralized in standardized dossiers identified by a docket, are incorporated within the national documentation already established by the Inventory of "Classical" Architecture and Moveable Items. The result is the establishment of a huge amount of data, organized on the basis of a standardized analytical table or grid, which is the same for each factory and each study area, from Dunkerque to Nice.

But with regard to these existing sites which make up the industrial heritage, in other words, buildings which house or have housed an industrial activity together with the production machinery associated therewith, the identification can supply a very complete, if not exhaustive, state of affairs, in order to have knowledge about the location of, for example, all the textile factories situated on such and such a river, dated prior to 1848, or to study steam-powered machinery, lime kilns, or water-wheels of a specific type.

The identification of the industrial heritage can also serve as a more specific and refined tool, in the advancement of knowledge, in the identification of new areas of investigation, both for the Heritage services and for other researchers. Such and such a specific factory would seem to merit a more detailed and thorough documentation and analysis, and thus a more extensive examination; such and such an industrial sector or across-the-board set of problems could usefully be the topic for a thematic study programme of the type akin to those that the department has already managed to coordinate on hydraulic installations, metallurgical sites, glass-works, brick-works, the mining heritage, and so on.

Here, then, are all the scientific objectives. The knowledge thus acquired, or anticipated, by the identification programme must, in the second instance, meet certain requirements of an administrative and political nature: the definition and implementation of safeguard and protection strategies, guaranteeing the survival of certain buildings or certain machines, which can be handed down for posterity. The identification programme thus helps to provide extensive and varied knowledge, vital for the selection of the most outstanding features or items, either because they are exceptional, or, conversely, because they are representative of a type of industry in a specific region, or because they are of technological or even symbolic interest.

3. Description of the identification programme

What does this identification process actually entail?

It consists in a systematic and exhaustive cataloguing which, within a given geographical area, will pinpoint and identify all the industrial establishments, whether

still operating or derelict, as well as the infrastructures and production machinery associated therewith, in order to gather for these factories an essential architectural, historical and technical documentation.

One of the main aims of this kind of inventory lies in the relative speed with which it is to be drawn up, and this all the more so because this heritage is today particularly threatened by industrial restructuring and technological changes.

It must nevertheless be borne in mind that this is more a medium-term programme, because two to three years will be required to cover one *département*.

- The study area of this identification programme is in effect the *département* and not the canton (this latter being a small territorial unit regarded as not sufficiently significant for the industrial heritage).
The choice of investigation area is made in the region in question in agreement with the head of the service concerned.
- At the chronological level this inventory is exhaustive for industrial buildings prior to 1950. A selection will have to be envisaged for establishments built after this date (such as, for example, nuclear power stations). This is to avoid including stereotypical industrial zones which came into being immediately after the Second World War. This is one of the rare cases of selection authorized for this identification procedure based on the creation of standard collective dossiers. But because we are dealing with a particularly vulnerable heritage, we know that, come what may, there does exist what we might describe as a "natural" selection process, which has been brought about, first and foremost, by the massive destruction caused by the two World Wars, and subsequently by the economic reorganization and property speculation of recent years.

Destroyed buildings are not inventoried, unless extremely detailed illustrated or written documents make it possible to recreate the architectural configuration.

- The inventory unit is the industrial site constructed on a self-contained piece of land corresponding to one and the same production unit. But it is often the case that we have to deal with extensive industrial sites, either multiple or dispersed over two pieces of land or more, as is the case in the Nord-Pas-de-Calais for textiles and mines, or in Lorraine for metallurgy; these sites then form industrial complexes which are accordingly analyzed as such.

Tested first of all in four "pilot" regions (Lower Normandy, Champagne-Ardenne, Picardy and Poitou-Charentes), the identification of the industrial heritage is currently under way in 14 out of 22 regions, which means that slightly more than one region out of two is engaged in this programme.

Organization of the investigation

Before the investigation begins, the researcher must carry out a minimal amount of preliminary documentary research in libraries and archives, in order to establish a file which includes the industrial establishments to be listed in his *département*. Next, the investigation is carried out commune by commune. Each one of the industrial sites identified must be the subject of a complete visit made to the premises by the researcher, accompanied, where possible, by the Inventory photographer. This whole task should culminate in the opening of an industrial heritage dossier corresponding to each one of the factories thus listed. This end product, which includes texts and photographs, may have a varying amount of information, depending on the case in hand (i.e. on the site and the historical source material available).

We shall now describe three examples of dossiers whose contents are all somewhat different. Let us begin by what we can call a "minimal" dossier. It concerns a flour mill in the *département* of Orne, about which the researcher was able to glean only very scant information. The dossier on this water-operated mill thus only includes seven documents:

- a) the pink descriptive sheet automatically produced by the computer, which uses, and processes, the data in the docket:
 - identification of the industrial building,
 - precise location,
 - brief history of the site,
 - and its architectural description.
- b) the list of archival documents and books consulted during the historical survey of the site;
- c) the table of illustrations contained in this dossier;
- d) the location plan based on the IGN 1/25 000 map, which is used to locate the industrial building within the commune;
- e) the extract of the current cadastral plan with the parcel where the building in question appears;
- f) a figurative document which is the oldest plan found by the researcher in the Archives;
- g) lastly, a photograph of the building taken during the field survey.

The first example shows what an identification dossier consists of in its simplest version. The next example illustrates how the documentary method can describe a more outstanding site by its age, the construction materials still existing, and the importance of studies - including archaeological excavations - already carried out at this site. The site concerned is Aube forge, in Orne, where an iron-refining forge is known to have

existed on the same site in the mid-16th century, and has been only slightly modified in its spatial configurations and technical installations by its active use throughout the 19th century and up until 1944 as a copper foundry. This site is thus a celebrated one, already protected by the laws on historic monuments, visited by members of the public and included in an International Encyclopaedia of the Industrial Heritage, due for publication in early 1992 ³.

The historical and descriptive information summarized on the pink data-sheets is much more detailed, and is amplified by the inclusion of brochures and appendices - photocopied or typed - in the dossier, which also contains numerous old cartographic or graphic documents, and a much more detailed photographic coverage: overall views of the workshops, detailed views of each production shop, and views inside the work areas, in particular of the heavy hammer whose wooden structure calls to mind the drawings in the Encyclopaedia edited by Diderot and d'Alembert.

The third example we shall give, again more for its form, method and sources than for its content, is a 19th century factory, the Abadie works built in 1866 - a paper-factory specializing in cigarette-paper.

This Abadie factory, an establishment employing around 180 people throughout its long existence, was the principal employer in the small urban area in Normandy where it is situated. Research on this factory, particularly among former employees of the factory, but in the factory itself as well, yielded a lot of documentary material, which is reproduced in the dossier: architectural documents concerning not only the production shops, but also the day-nursery (*crèche*) and the workers' accommodation built between the two world wars. There are also documents dealing with the commercial arrangements and organization of the business, glimpses of social life at the factory, and of the work stations - for example, the manual task of shredding, and cutting up rags and other details about the paper-making machinery, the handling of materials and so on.

The photographic survey carried out in 1988 shows us an abandoned factory, whose doors were finally closed in 1975, ten years or so before the beginning of this identification project. An oblique aerial photograph gives a better idea of how the factory fits into the surrounding countryside, in its site on the river, while details of the workshops - which are still used today as a storage depot for a local supermarket - offer good evidence of a type of factory architecture peculiar to the 1880s.

Our three examples all come from the *département* of Orne in Lower Normandy, one of the first "test" regions, where the identification programme was launched in 1986. The researcher responsible for this project, Yannick Lecherbonnier, who is thus the author of these three dossiers and of 318 others scattered throughout Orne, took more or less three years to "deal with" this *département*.

³ The Blackwell Encyclopaedia of industrial Archaeology, Basil Blackwell, Oxford

4. Overall state of affairs of the identification programme

At the present time, five *départements* have been completely inventoried: these are Orne (321 dossiers), Charente (327 dossiers), Somme (283 dossiers), Aube (150 dossiers) and Haute-Marne (242 dossiers), to which can be added a very large canton in the Nord *département*, Armentières, which alone has yielded 107 industrial buildings for identification.

The bodies of documentation thus formed comprise on average around 300 dossiers per *département*. At the present time, almost 1 500 industrial heritage dossiers can thus be easily consulted by the public with access to the Inventory, both in the provinces and in Paris, at the National Centre for Documentation on the Heritage, via the computerized network.

Furthermore, it should be noted that some 5 000 other identification dockets and dossiers have already been completed in the different regions concerned, although these have not yet been incorporated in the national Architecture data-base.

5. Methodological tools

We should now like to describe the methodological tools used by researchers in the field in the various regions, tools which provide the structure and coordination of the information and documentation at hand. First, then, the identification docket, a double sheet which includes the information details which we consider helpful to collect on each site. This is a sort of check-list of descriptive and historical details to be confirmed in the archives and on factory visits. The various fields correspond to the main that we have referred to, segmented and sub-divided for processing by computer. The answers, dealt with by the data-processing system which puts them into a more readable form, are those which appear on the data-sheet at the head of each dossier. The 52 fields in this docket are divided into various major chapters: documentary references, designation, location, period, author, industrial aspects, techniques, and so on.

6. Lexicons - Data-processing

Some fields require the use of pre-defined lexicons. In some instances, some of these lexicons are very limited, and are printed directly on the docket, as is the case, for example, with the field "DESSERTÉ" (Service Access), where all that is required is to circle one of the three terms proposed. For the Architectural Description fields on the last page of the docket, researchers use standardized vocabularies already formulated to describe "classical" architecture.

For the requirements of industrial heritage identification, it has been necessary to create four other lexicons. These are the Denominations lexicon, the Component Parts lexicon, and the Energy lexicons (Natu and Mote), the last three referring to the different buildings and to certain technical equipment - energy equipment as it so happens here - at the industrial site in question. These lexicons have been created on the basis of the model provided by the Inventory's Architecture Thesaurus, in which

they have been incorporated. The most important of them is the Denominations lexicon, because it is used to identify and designate the industrial building in question.

It has been developed from carefully formulated bases supported by quite varied historical documentation, ranging from encyclopaedic dictionaries to industrial classifications and thematic indexes, via industrial surveys and trade directories. It is also the outcome of a collaborative endeavour involving specialists in certain very complex industrial sectors, such as the chemicals industry, or metallurgy.

Its structure is based on the 14 branches of activities described by the French industrial classification of the national statistical service, and includes more than 200 specific terms.

The lexicon is open-ended and on-going. Like the Component Parts lexicon, it has already been modified and added to, as a result of requests and suggestions made by researchers.

This standardized vocabulary exists as a complete print-out and occupies the place allocated to it in the descriptive Architecture System in the Inventory. Last of all, in relation to the history of technology, we should add that another lexicon dealing with the denominations of production machinery is currently being compiled in the Industrial Heritage Unit.

In conclusion, we should stress the importance of this project for our knowledge about the industrial heritage. In particular, the establishment of large corpuses of data makes for a better hierarchic organization of protection programmes, in accordance with the law on historic monuments, for this type of heritage, which, in most cases, consists of representative rather than outstanding buildings and complexes. What is more, the identification of the industrial heritage makes it easier to see this heritage in its totality, in other words, easier to make the link-up between the different production structures, but also with the technical and social environment (for example with the factory-owners' dwellings and workers' accommodation). Lastly, it forms the basis for the publications necessary for a greater awareness of this sector on the part of the public.

Inventory methods of industrial heritage in Finland and examples of their practical applications

Erkki Härö

This history of industrialisation in Finland is reminiscent, to a great extent, of the same process in other Scandinavian countries, especially Sweden. Before the year 1809, when Finland was separated from Sweden and became part of Russia, small iron works and sawmills utilizing water power and wood resources formed the backbone of our industrial development.

The first significant engineering works and textile factories were formed at the beginning of the 19th century. The "break through" of the sawmill industry took place in 1870's and it was followed by strong development in the cellulose and paper industry in last decades of the 19th century. During the decades right after Finland became independent (1917) the focus of industry was still more clearly in wood processing and engineering works when, for example, almost all iron works stopped operations. A continuing strong structural change started in Finnish industry in the last part of 1980. As a result of this change factories in the centres of most old towns have stopped operations and moved to other locations. Because of this, the inventory of industrial monuments is, at the moment, one of the central focuses in the historical study of civilisation in Finland.

The inventory and research of industrial monuments and industrial tradition in Finland has been divided into four different study levels that clearly complement each other:

1. Inventory of industrial environments that are important on a national level.
2. General inventories of culturally historical monuments and sites on municipal and provincial level. Industrial locations are part of this inventory.
3. Special inventories that map sectors of industrial tradition.
4. Comprehensive documentation of individual industrial environments or small group of buildings.

The national level study of industrial environments that are valuable part of cultural history (study level 1) was implemented by the Ministry of Environment in 1988. The study has concentrated on giving an overall picture of a versatile construction tradition in industrial architecture in our country by studying the environments and buildings in different areas of industry, within Finland.

The focus of the inventory study has been on finding out the conditions and current usage of industrial environments which are valuable from culturally historical point of

view. One of the main goals of the inventory was to find out how the preservation of industrial environments with a culturally historical value has been secured in different land use plans. The renewed building protection law of 1985 made this task especially important.

Based on the experiences gained so far it can be started that the general inventories done by using same selection criteria and covering the whole country have had great importance in focusing the protection activities to secure preservation of those monuments that are most important to our industrial tradition. For many industrial environments this meant reconsidering the oversized construction rights in old land use plans.

Study of industrial environments with significant historical value includes about 200 locations, many of which are quite vast and complex industrial entities. The study has also made it possible to recommend some Finnish locations (Suomenlinna dock, Verla paper board factory, Sunila paper mill) to (so called) list of World Heritage as a part of the most important and valuable components of Finnish building tradition.

Study level II consists of the inventory of industrial monuments in provinces and municipalities as a part of general building tradition and cultural picture. It is possible to evaluate the importance of industrial environments in certain geographical areas, for example, side by side with rural or military architecture. On the other hand, this level of study produces information of those industrial buildings whose importance is mainly local or where industrial operations have stopped long time ago.

Based on the experiences of Department of Historical Architecture of National Board of Antiquities and Historical Monuments the inventory of industrial buildings as well as in a large scale the whole industrial tradition is most effective when it is implemented by sectors, covering the construction in one sector of industry (study level III). The importance and effectiveness of this inventory is emphasized when the resulting data is compared to the limited resources which, at least in a small country, can be given to these kinds of activities.

The main benefit of sectoral inventories is that they give an overall picture of different kind of facilities, within the sector in different geographical and economical conditions during different time periods. Only with this kind of information is it possible to make an objective enough target program of protection for the sector in question. Clear focusing on a certain sector also enables expansion of the study to deeper degrees; and allow the cooperation with different branches of science.

Sectoral inventories have been made for example of glass factories, iron and copper works, canal construction and rail road construction in Finland. New, planned areas of emphasis include, among others, buildings related to brick and wood processing industries as well as old power stations. These kinds of study methods offer good opportunities for international cooperation. When it comes to the above mentioned study projects, cooperation has been planned between four Scandinavian countries. Hopefully, cooperation can go beyond the shared planning stage into full implementation.

Finnish iron and copper works are a good example of implemented sectoral inventory. National Board of Antiquities and Historical Monuments made an inventory of all valid historical industry operations that are related to industrial production of metals in 1980's. No attention was paid to the preservation of locations during the study. The primary goal was to accurately map actual buildings and structures as well as locations with archaeological interest with many iron works the basic study has been complemented by additional studies concerning history, technical equipment, labour tradition, products and transportation routes.

With the multifaceted picture gained in this way, the Department of Historical Architecture within National Board of Antiquities and Historical Monuments has relatively well managed to allocate the economical resources. This had led to the protection of preserved metal industry monuments that are essential parts in understanding the history of a whole sector. Good examples of this are vast restoration work of Leineperi iron works (located in Kullaa) which was established to process the ore transported from Sweden in 18th century. Another example is Möhkö works established at the first part of 19th century which used Finnish lake ore (located in Ilomantsi).

Study level IV means in practice a detailed study and documentation of clearly restricted area of industrial building or groups of buildings, in some cases also industrial archaeological study. In practice these kinds of studies are performed in Finland when a location is threatened to be destroyed or when a complete reutilization is being planned.

It can be started, as a summary, that industrial tradition, old factory buildings as the most visible part, has during recent years, become more important part of Finland's general cultural historical study that before. The main reason for this has been the fact that industrial areas with cultural historical value have undergone big changes during the last few years.

The structural changes in industry have in Finland, as well as in other parts of Europe, led to underutilization and evacuation of even big industrial estates, often in city centres. The impacts of this sudden development reflect in several locations on the environment to a large extent. The continuing recession has succeeded in slowing down this development only to a small degree.

The old industrial environments form a major economical resource, but in addition to that they are connected with different kinds of, not easily measurable cultural historical values. The identification of these values and industrial tradition is, therefore, a necessary and urgent task.

Based on the Finnish experience, partly because of the special characteristics of industrial tradition and limited resources, the inventory is most effective if it can be performed almost simultaneously in several study levels that complement one another. This is supported by the fact that at least in Finland there is no training for personnel clearly specialised in the research of industrial tradition. The best inventory results have

been gained in Finland when there has been a possibility to cross cooperation between different branches of science.

As the industrial history of all Europe and North America is similar to each other, in main characteristics as well as in starting points and development stages, the inventory of industrial tradition offers an exceptionally good starting point for international cooperation, not only on the theoretical level but also on the level of practical implementation.

The industrial heritage of Russia and the work in the inventory of historical monuments

Katya Sherban

The study and selection of industrial monuments were started in the Russian Inventory 15 years ago. The turn to industrial architecture in the field of preservation is part of a general new direction of the work. This direction is characterised by the broadening of scope of the architectural heritage which had been studied, included in the inventory and preserved.

The main points of this process are:

1. the reducing of the "age" of the buildings which can be included in the inventory (this means that the buildings of 1850-1950 are to be included);
2. the inclusion of new types of buildings;
3. the widening of the stylistic borders of the studied heritage (this is a specific problem, which was connected with the ideological policy in our country when, for instance even 10-15 years ago it was forbidden to study the "eclectical" styles of the second half of the 19th century, and also Art nouveau, which was considered to be "reactional");
4. the turn not only to single isolated buildings, but also to the groups and complexes of monuments which form together the artistic integrity of the architectural environment, the so-called contextual or environmental approach towards historical heritage. As we can conclude, this approach is very actual in the European countries.

Because of these points, the attention to and interest in industrial buildings appeared.

We started our work connected with industrial heritage in the General Inventory of Architectural Monuments of Russia in the area of the Ivanovo-Voznesensk district, 200 km to the North of Moscow. The district is famous for the textile industry complexes. In the 18th century the governmental peasants of this area started to produce cotton in the small textile mills.

One of the rarest monuments of this period is the unique wooden dam of the early 18th century across the river Teza. The majority of the mills were situated along the banks of this river. We have no remnants of the first small mills, so we started to study later large-scale works which date back to the second half of the 19th century. At the beginning we started to study only the industrial buildings, but very soon we came to the conclusion that it was necessary to preserve the whole complexes of structures

connected with the textile industry which are of great historical, architectural and town planning interest. In the area around Ivanovo-Voznesensk in the late 19th century and in early 20th century the big settlements appeared. They were built by rich and well educated factory owners. The settlements around the industrial complexes were planned according to the ideas of garden-cities. The most interesting example is the town of Vichuza, which appeared in 1870-1910 around the "factories of Konovalov and Son. Here we see the features of ideal town-planning images of the time and some of the details even seem to be naive. (It is interesting that the owner of the factory used to have tea sitting on the small island situated in the centre of the lake in front of the main facade of the factory).

Near the factory is situated the complex of civil buildings, built in 1880-1910 in "eclectic", "russian Byzantine" and "classic-revival" style (the big club for the workers, named "People's house, the nursery, the Pub, the church, etc.) as well as the manor house of Konovalov. To the west of the club, there is the big park with special areas for tennis and cricket and at the end of the town-planning composition, the hospital complex in classic revival style. To the north of the central part of the industrial town, a small dwelling district for the workers appeared in the 1910s, which consisted of 40-50 individual wooden cottages for the families of the professional workers.

In conclusion, it is necessary to underline that when dealing with the so-called "young" heritage of 1850-1950s, the task of working out the system of selection criteria becomes very actual. Of course in special cases, as, for instance, in the case of the textile area around Ivanovo-Voznesensk in Russia, it is important to try to preserve and at least to study all the monuments (as we have already done). One can understand however that it will not be possible to preserve everything, so we have to choose what we want to preserve in all cases. Concerning the industrial heritage, I think that it is necessary to use mainly the two groups of criteria. In the first one, which represents the main traditional group of criteria, we can find at the two extremes, the criterion of unique features (style, type, period, etc) and the criterion of characteristic features. Rarity is one of the subdivisions of the criteria in the middle of the group.

The second group of criteria is connected with the task of the preservation of complexes, ensembles, etc - the so-called environmental criteria. Here one should study and evaluate the qualities of the monument and of the environment and their relations, artistic and historical correlation.

Industrial heritage in the Netherlands; the watertowers

Peter Nijhof

Introduction

The Netherlands have a long tradition in the protection of monuments, dating from before ca. 1850. Industrial monuments from the period 1850-1940, however, are only by chance listed as national monuments.

If we take a look at the official statistics, only a few hundreds of the about 44 000 national monuments can be labelled as industrial monuments¹. This fact is partly due to the general lack of appreciation of this broad category of buildings in the sixties and seventies, when the ancient monuments were listed. The main reason is the fact, the "The First Industrial Revolution" started in our country rather late, from the second half of the 19th century. So the greater part of our industrial heritage is dating from after ca. 1850 and was through that until now only listed by exception. For this reason, of the ca. 200 remaining Dutch watertowers not even a dozen is listed at this very moment.

However, the national inventory-program of monuments dating from the period 1850-1940 (MIP) is almost finished, as explained before by my colleague Dr. Marieke Kuipers. Thanks to that, for the first time in our "monumental history" industrial monuments will be systematically be selected and listed during the just started national Monuments Selection Project (MSP).

Crucial for this MSP is -again, like the Monuments Inventory Project (MIP)- the geographical approach by means of about 60 inventory-regions. However, especially in relation to industrial monuments a categorial approach is thereby strongly missed. To supply in this want was one of the main reasons for the creation of The Netherlands Institute of Industrial Heritage at the end of 1991. The birth of this private foundation is based on the recommendations of the official Advisory Commission Industrial Heritage, who advised the Minister of Culture in 1989. This advice was followed by the minister in December 1991². This Institute called PIE is payed by the minister during 4 years to make up arrears on the field of the industrial heritage and to enlarge the public interest in it as an inextricable part of our culture. In close collaboration with the private sector and the authorities PIE develops initiatives in the field of inventory, selection, conservation, redestining, rehabilitation, education, information, tourism and

All the documents are only published in Dutch.

¹ Anniversar Report 1991 Rijksdienst voor de Monumentenzorg, Zeist, 1992.

² Industrial Heritage and The Art of Destruction. Advice of the Commission Industrial Heritage. Zeist, 1989 and: Standpoint of the Minister of Culture. Rijswijk, 1992.

recreation, relating with industrial heritage. A special task is to assist the Monuments Selection Project by creating documentation methods and selection criteria for the ca. 40 main industrial branches, categories of industrial monuments and regions as a whole.

This work will be done in close cooperation with the many existing private societies, focused on special themes of categories of industrial heritage and universities³. Together they have done already a lot of work. For example, the Technical University Delft has already carried out research projects on modern building materials and constructions⁴ and sluices. Similar private or governmental inventory-studies have been published before on categories like railwaymonuments⁵, lighthouses⁶ or mining monuments⁷. A fine, but still rare example of a regional inventory of industrial heritage was carried out by the province Limburg⁸.

The four-years research-program of PIE foresees further categorial studies on bridges, drainage pumping stations, watertowers, etc. Taking into account the short period of existence of PIE and the limited budget, the aim of PIE is not -and cannot be- to cover the entire field of industrial heritage. It must be possible, however, to develop by all these carefully selected pilot-studies a methodological framework for the systematical inventory and selection of industrial monuments in general, that other experts and organisations can apply to specific fields, not covered before. Many of them have already set up inventory- and documentation projects, but most of them are not complete and do lack well balanced criteria for the selection and protection. One of them is the National Watertower Society (NWS), whose documentation on watertowers is the core of my contribution to this colloquy⁹.

Survey method

The NWS is a private organisation, founded in 1990. One of the initiators, ir. H. Rienks (Technical University Delft) had already set up an own watertower-

³ Under steam. Activity-program 1992-1995 of The Netherlands Institute of Industrial Heritage. Zeist, 1992.

⁴ Oosterhoff, J. (ed.), e.o., Buildings 1800-1940. Review and typology. Delft, 1989. The study on sluices is foreseen to be published ultimate 1992.

⁵ Meene, J.G.C. van de, and P. Nijhof, Railwaymonuments in The Netherlands. Amsterdam, 1985.

⁶ Crommelin, L., and H. van Suchtelen, Dutch lighthouses. Building history and organisation. Nieuwkoop, 1978.

⁷ Inventory of mining monuments in the province of Limburg. Heerlen, 1978.

⁸ Daru-Schoemann, M., and J.C.J.M. Starmans, Industrial heritage in the province of Limburg. Leeuwarden/Maastricht, 1990.

⁹ Nederlandse Watertoren Stichting (NWS). Activities and projects 1992 and coming years. Nieuwerkerk a/d. IJssel, 1992.

documentation in the eighties, assisted by other volunteers interested in this subject. It consists of a documentation of more than 400 watertowers that ever existed in our country, of which about 200 still remain.

Every existing watertower was visited and photographed in situ. This fieldwork was combined with archive- and deskresearch on every existing and demolished watertower. Depending upon what is available, further illustrations can vary from historical photographs to original construction-drawings.

Since the start of this documentation, many alterations occurred, that could not be checked in the field systematically because of a lack of time and money for travelling - remembering that it is all the work of volunteers ! That is why one of the tasks of the NWS for the coming years is to update this documentation by fieldwork and research.

Data structure

By means of one example -the watertower of Hoogwoud in the province of Noord-Holland you can get an impression of the data structure of this documentation.

The province of Noord-Holland has used this documentation for the selection and listing of watertowers from a regional point of view ¹⁰. In the official listing-report all the selected watertowers are described in a way, very similar to the data structure of the NWS-documentation:

General

- . Town, village
- . Address
- . Date(s) of building
- . Architects/constructors/...
- . Owners (s)
- . Present situation (in use or not, physical condition, proposals for demolition, alteration or reuse, etc.)

Tower

- . Shape
- . Building material(s)
- . Height
- . Construction
- . Further information (comparison with other similar towers, specific technical details, etc.)

¹⁰ Boer, H. de, e.o., Watertowers in Noord-Holland. Provincial Monuments Noord-Holland. Haarlem, 1991.

Reservoir

- . Shape
- . Buildings material(s)
- . Amount of reservoirs
- . Capacity
- . Highest waterlevel
- . Dimensions
- . Further information (see under Tower)

Literature

If we compare the NWS-documentation with the "Minimum set of data elements for architectural heritage inventories" of the Council of Europe, two conclusions can be drawn:

- a. The CE-data elements, missing in the NWS-documentation, can be adjusted without problems, at the moment of its computerisation. These fields are:
 - .1.1.: Name of Building (n.b.: not relevant for Dutch watertowers, which don't have a name)
 - .1.2.: Unique Record Number
 - .1.3.: Country, region; Map reference
 - .2.1.: Building Functional Type
 - .4.1.: Protection Status.
- b. The technical information in the NWS-documentation goes far beyond the minimum information demands of the CE.

Use and users

The NWS-documentation has at this very moment no official status, while it is "just" a private initiative and also because it could not be published for the reason of its huge volume and a lack of money. For the same reasons it could not be computerised until now. Nevertheless, everyone in The Netherlands involved in watertowers can use and does use this information. For official purposes, like the listing report of the province Noord-Holland (1991) and recently also for a publication on all the watertowers in the province Utrecht ¹¹. Also the first and only general review of the Dutch watertowers (1989) was strongly based on this documentation ¹².

¹¹ Blijdenstijn, R., and H. Rienks, Watertowers (in the province Utrecht). Utrecht, 1992.

¹² Veen, H. van der, Watertowers in The Netherlands. Rotterdam, (1989).

During the coming years, the NWS expects to computerise and publish the complete documentation in a series of regional books thanks to the financial support from the regional and provincial watersupply-companies.

Besides, the NWS is developing criteria for the protection of a representative selection of watertowers, based on a typology in relation to construction, building materials, type of waterreservoir, architectural style, constructors and architects.

Finally, the NWS is now in charge by The Netherlands Institute for Industrial Heritage (PIE) to work out a set of models for adaptive reuse of watertowers, related to the dominant types of construction. When a watertower gets out of use, the application of these models must lead to an easy, first indication of the possibilities for adaptive reuse.

The further aim of PIE is that all the existing and future categorial and geographical documentation-system on industrial heritage will be computerised according to one basic computer program. So all these information from different "producers" can be linked together and used in the same way, without conversion- and retrieval problems for the average user.

Another step further is, that PIE will cooperate closely with the Rijksdienst voor de Monumentenzorg. My colleague Job van Laar is in charge with the coordination and integration of private and public documentation systems on any subject, relevant for the work of the Rijksdienst. Next year, a special branch will be created within the Rijksdienst, specialising in information, documentation, research and communication. One of the tasks of this branch is to link all relevant documentation systems to the official, already computerised National Monuments Registration System, that contains all listed, national monuments. It is beyond any question, that the "Minimum set of data elements" of the Council of Europe will be one of the starting-points of this ambitions operation during the remaining years of the nineties of this century.

Summing-up and discussions on methodological problems

Chairperson of the sitting: John HUME

Summary report: Survey and selection methods

Monique Chatenet

The three themes dealt with - rural heritage, urban heritage and industrial heritage within the huge sweep of the European horizon covered during these days at Nantes, have given rise to a great deal of valuable communication, and to many papers, talks and meetings which there is no hope of being able to summarize here, in all their diversity. But it does appear vital, on the other hand, to underscore the overall impression of coherence and convergence that has emerged, despite the very varied contexts and subjects covered.

I. The Concept of the Inventory:

Even before broaching the methods of investigation and selection, it is most important to point out that over the past ten years the actual concept of the inventory has been narrowed down throughout Europe, and now focuses on the following four points:

1. Practical aims

The inventory based on pure knowledge, which used to be the dominant type, has given way to inventories devised more directly in relation to heritage protection, whether it is a question of a "Historic Monument"-type protection, or merely the taking into account of the heritage in town-planning projects. The development of the French inventory is, in this respect, particularly symptomatic.

2. A wider concept of what "heritage" means

Throughout Europe, inventories have from now on adopted the broadly accepted sense of the term "heritage", and take into account, in a more and more global way, vernacular architecture, the industrial heritage, and the urban habitat and environment of the latter half of the 19th century, and the 20th century. This development brings problems in its wake which are not easy to solve - practical problems involving a swift grasp of a new corpus of considerable scale, scientific and methodological problems calling for an analysis of the interaction between these different heritages and their incorporation in the urban or rural space, or again requiring the establishment of new points of reference in terms of chronologies, categories, qualitative criteria etc.

3. The sense of urgency

No matter the nature of the theme being dealt with, no matter the European country under study, all those attending the conference unanimously underlined the urgency of inventorying the heritage because of the far-reaching and very fast upheavals which it is currently undergoing. As our Polish, Romanian, Hungarian and Russian colleagues forcefully pointed out, over the next decade the heritage of central and eastern Europe

will suffer destruction as sweeping as during the second World War. In the west, industrial and agricultural changes are also having harsh consequences. So it is more important than ever to comply with that now celebrated dictum used by our Polish colleague: "It is better to know something about everything than to know everything about something."

4. The use of data-processing

To differing degrees, the new technologies are now part and parcel of inventorial programmes, whether the shift to computers and data-processing has already been made, is under way, or merely at the drawing-board stage. The consequences of this are important for working methods, because the huge possibilities of data dissemination offered by data-processing imply considerable rigour in terms of conception and execution.

In this respect, we are witnessing a very clear merging of points-of-view between institutions which used to recommend the dissemination of inventories via computerized data-bases, and those which preferred classic forms of publication - the two methods having shown that they could be very usefully complementary to each other: data-processing, with its immense potential for rapid data recording is an essential factor for any partnership involving heritage managers and administrators. It is also an unparalleled reservoir of knowledge. On the other hand, the book is still the main tool of communications, whether for the public at large or, on the contrary, for the most demanding of scientific communities.

II. Survey and selection methods

Given the diversity of situations, aims, means, and works inventoried, there is obviously a great disparity when it comes to practice. But three common points do nevertheless come to the fore.

1. The individual record-sheet or fiche

The common desire for rapid action, combined with a more general use of data-processing have made it necessary to devise a sort of "identity card" for each building recorded - a summary identification and location sheet reduced to essential data but drawn up rigorously in such a way that the data are coded. This "core data", accompanied by cartographic and photographic documents, is used in most countries. But if it constitutes a vital exchange format, numerous conference participants pointed out that it can in no way mean dispensing with the more in-depth analyses such as those required by restoration work.

2. Selection

Some inventories record all the items identified. But most proceed by selection. Whether the selection processes are empirical or more reasoned, they combine essentially three techniques: typology, topography and chronology.

Typological selection has the effect of choosing within a category or "family" of buildings (dwelling houses, mills..) the examples most representative of each of the types belonging to that family.

Topographic selection focuses on groups or complexes, that is on the complementarity existing between the various components of the urban or rural landscape: link between factory and habitat; link between the farm and all the features; architectural or otherwise, of the agricultural landscape (sheepfolds, terracing, hedges ...).

Chronological selection, for its part, relates to periods of construction.

All inventories which use a selection method in fact combine all three criteria, but in differing proportions. France lays greater stress on typology, Italy and the Netherlands on topography, with chronology invariably by far the most fundamental factor.

Nevertheless, and undoubtedly because of an ever-growing pragmatism, there is an increasing interest being shown in the topographic criterion: the concepts of the rural locality (*terroir*) and urban fabric are becoming essential, and Nicholas Cooper gave a striking demonstration of the interaction in one and the same industrial site between the different structural components.

3. The group or complex concept

Analysis of a group of buildings or complex is thus regarded more and more as a vital counterweight to the specific approach involving each individual feature of the architectural heritage. Three trends emerge from the way these groups are treated, which is often on an empirical basis:

the first, which is more morphological, starts basically with an on-the-spot analysis of the structure, to derive information about the visual composition of the urban or rural "landscape";

the second, which is more chronological, consists of analyses of historical cartography;

lastly, a most interesting trend combining the two former approaches starts from historical documentation, proceeds to an in-depth morphological analysis of the site, and culminates in an overview which is neither purely morphological nor purely historical. It is without doubt in this direction that our efforts must be aimed in the years to come, the better to ensure the conservation of the European heritage.

The changing shape of the inventory: New priorities and new approaches

Robin Thornes

The inventories that have been described by participants over the past two days have been made for a number of purposes, foremost among which are:

- the statutory protection of artifacts, historic buildings and cultural landscapes;
- to assist in the physical preservation of individual artifacts or buildings, either in the present or the future;
- to increase our knowledge of, and generate popular interest in, our common European cultural heritage.

The purpose for which an inventory is made will determine the types of information to be recorded, and the ways in which that information is presented. After all, the information requirements of the architectural historian will be different in some important respects from those of the conservation architect, the town planner, and the general public. There are certain types of information that are required by many categories of user. For example, there is a shared need to know where an individual building is located, what its function is (and has been in the past), and how old it is. These types of information are of fundamental importance, and it is for this reason that they are included in what has been described as the "core", i.e. the index that will lead users to the necessary more detailed levels of information.

It is clear both from the findings of the questionnaire and from the presentations made over the past two days that great emphasis is now being placed on the inventory as a part of the process of preserving historic buildings and cultural landscapes. The inventory has a central role in this process, because identification and documentation are the first steps towards preservation. However, inventories will only be of value if:

- i. they record the information required by the users they are intended to serve;
- ii. the information is recorded to a common standard;
- iii. they are produced in time to be of use, and in a form that is usable.

It is important that the inventories produced enable users to understand the significance of particular buildings, either in relation to others of the same type, in the context of the cultural landscape of which they are a part, or in a broader historical context. For example when a particular textile mill is being considered for preservation it is important to know whether it is a typical example, or is of special significance. The information recorded about an individual building should, therefore, enable the user to

be able to make comparisons between it and other examples in the same geographic area, and of the same type and date.

The value of an inventory to its users can be enhanced significantly by the presence of a clearly-defined and adhered to "core" of index information. After all, the integrity of an inventory as a whole is, in the final analysis, dependent more on the consistency of information recorded at this basic level, than on the depth of detail of its best records. It is of greatest importance as well as easiest to achieve, compatibility at the level of the minimum record. In order to attain consistency, it is necessary that the same types of information are recorded about each individual building in the inventory. It has been interesting to see that a large proportion of participating organisations make use of proformas as a means of helping to ensure that the information required by the inventory is present in every record. However, if these types of information are to serve the purposes for which they are intended, then not only must they be present in each record but they must have been recorded to a common standard. This can be achieved only by the adoption of, and adherence to, predetermined format and terminology controls. For consistency to be achieved at a european level, there will need to be co-operation on both format controls and multi-lingual thesauri. In this respect the identification and definition of the "core" is not an end but a beginning.

There has been broad agreement that while the types of structured information outlined above are of great significance, there is a continuing need for traditional text based approaches. Important among the latter is the published synthetic overview, either of a particular building type (as in the case of a thematic inventory), or in a particular geographic area (as in the case of the traditional topographic inventory). The two approaches of compiling structured data and producing published works of synthesis are not mutually exclusive exercises. Rather, the former process can and should inform and support the latter. Structured data alone has limited potential as a means of conveying information, being restricted to providing what one participant has called "a telephone book of buildings". The importance of the synthesis cannot be stressed enough, for it is through such works that we are best able to communicate the significance of individual buildings, families of buildings, and cultural landscapes. Looking to the future, it is clear from what a number of participants have said there is growing interest in using Geographic Information Systems and Digital Imaging to create computer based inventories that have the potential to transcend the traditional published inventory.

It has been pointed out that the world is changing with unprecedented speed and that there is a need for the makers of inventories to respond with equal rapidity. Several participants have mentioned the slow progress made by methodical and detailed inventories, most of which were carried out on a topographical basis. The solution adopted by some organisations has been to make a new type of inventory, based on rapid survey. These surveys have, in the first instance, sacrificed depth of knowledge on individual buildings in order to achieve breadth of coverage. One result is that buildings are recorded that might otherwise disappear without having been documented; another is that the inventory produced forms a body of knowledge which can be used as the basis for recommendations for statutory protection of particular buildings.

The need for rapid surveys has been given greater impetus by the broadening of our areas of interest. The growing recognition of the importance of nineteenth and twentieth century buildings, not to mention the move towards taking holistic views of cultural landscapes, has increased dramatically the number of individual structures that need to be identified, assessed and documented. It is clear that we need to adopt strategies such as the rapid survey in order to be able to provide coverage of the large number of buildings involved. These surveys provide us with the information that is needed to be able to establish both the quantity and the quality of the built heritage. However, the inventories that result from these surveys should not be seen as ends in themselves. Instead, they should be regarded as points of departure, providing as they do the basis for selecting individual buildings, or groups of buildings, for more detailed recording.

Ultimately, we must recognise that "our knowledge is never complete" and that "our perceptions will change". It is important, therefore, that our inventories should be dynamic entities, capable of admitting new types of information and capable of accommodating the requirements of new methodologies. The inventory is a tool designed to improve our knowledge of our cultural inheritance, and the "core" index information that is put forward at this colloquy is, in its turn, an important component of inventory.

Summary report on data-processing and new technologies

Simon Grant and Olivier Toche

I. Results of the survey of architectural inventories: computer usage

General

Within the scope of this summary, it is worthwhile reviewing the results of the 1991 Survey of Architectural Inventories, with specific reference to the patterns of Information Technology (IT) usage within the responding organisations. Although the survey is now one year old, it can still be seen as statistically representative of the European situation today.

Of the 78 organisations which responded to the Survey questionnaire, less than one a third (32,85 %), used computerised information systems to support their inventory work; although many bodies which did not then use IT stated that they planned to develop systems in the near future.

This leads us to conclude that as most current no-users of IT will wish to implement their own systems, is there an urgent need for the definition of technical recommendations that will assist in this process . If so, how far should recommendations go?

The Survey showed that amongst the organisations who do employ IT to support Inventory- related work, there is little conformity on a national or international basis in either the equipment or the types of software employed for the management of databases. From the information supplied, it is clear that many bodies have, of necessity, had to develop their own systems to support tasks of database management that in functional terms, perform the same task in processing and managing types of inventory information as those systems used by other bodies.

This situation, where organisations act in isolation, is akin to the re-invention of the wheel: inevitably wasting of resource and resulting in the development of many different ways of doing the same thing. Should we accept this as inevitable, given the differing functional and organisational constraints that apply within states and across their boundaries? Is there a case to be made for the definition, design and possible development of software that could support the core recording needs of bodies who have not yet started the sometimes slow and expensive path of computerisation on their own?

Future technologies

Considering the use of IT for functions other than the management of databases for inventory information on monuments, there is an exceedingly low level (typically less

than 5 %) of use of other IT facilities to support activities which have so far received a good deal of attention in this conference; namely utilities for handling information in a spatial context (broadly classed as GIS); systems for the storage and manipulation of visual documentation, either in digital or analogue form (both of which were identified as priority areas for consideration at the London Round Table of 1989); and also Desk Top Publishing (DTP) systems, employed for assisting and to some extent, replacing existing publication methods.

In the coming years, it is inevitable that the use of GIS, Image storage and retrieval systems and DTP will become widespread and be indispensable for efficient information management in organisations whose responsibility encompasses the recording and management of the historic environment. There is clearly scope for communally directed research within the relevant disciplines to advise organisations on:

- a) The desired functionality of such systems in supporting the management of information relating to the historic environment
- b) Appropriate standards for the collection, storage and transfer of spatial and visual data, in a national or international context.

Is this something that can be addressed through cooperation in exemplary projects, and if so, how might this be effected?

Differential Distribution of IT Usage

A further concern arising from the Survey of Inventories was the differential distribution of IT usage throughout the Council of Europe member states. Geographical areas where the Survey's results indicated no wide scale use of IT to support inventory making functions were:

- a) The Eastern Mediterranean - With neither Greece, Turkey or Cyprus recording any use of IT
- b) The Iberian Peninsula, where there is a great deal of record-making activity in the various regions of Spain and to a lesser extent, Portugal, but so far no development of IT systems.

In addition, it was clear from the results of the Survey that IT usage in states with a federal structure of government was extremely patchy, with no discernible standards of technology or operation being applied in geographically contiguous regions.

The question that arises is whether we should see the employment of IT in development of architectural inventories as an essential prerequisite for the effective management of a growing and ever more threatened historic environment. Do we wish and is it within the competence of the Council of Europe to encourage development in areas where either resource or expertise is not immediately available, or where patterns of government foster diversity rather than conformity of purpose and method?

II. Summary of contributions

A certain number of contributors made reference to the use of technical tools in the inventory process, and more particularly to the use of data-processing instruments, as they were invited so to do by the conference programme. If we take just these latter instruments into consideration, the aircraft used for the aerial photography required to identify the heritage in the Birmingham region, or the bicycle used for the survey listings in the suburbs of Amsterdam can be left out of account, even if these technical means can be useful for the gathering of data to be computerized.

The different papers delivered at the conference also reflect fairly well the answers to the questionnaire formulated and circulated by the Council of Europe, and brilliantly analyzed by John Bold and Simon Grant.

Out of the 18 papers, only ten or so rapporteurs described or referred to the use of computerized systems in Germany, England, France, Italy, Norway, Netherlands, Poland and Slovakia.

Among those already using computerized systems, no inventory has data or series of records covering all the items inventoried:

- there is part-computerization in Germany (Lower Saxony): "The technical means required for completing the computerization programme are not available", explains W. Wulf;
- only administrative data are recorded in Slovakia, L. Skoviera points out;
- even Norway, which nevertheless has the greatest number of computerized architectural records (200 000 out of an estimated total of 400 000), has only stored 50% of the general building stock.

On the other hand, several rapporteurs indicated that they are not yet using computerized systems, not even a minimum fiche or data-sheet, as A. Lehne, the Austrian representative, observed not without a dash of humour.

Some pointed out that only the list of protected monuments is currently computerized. This is in particular the case with Belgium, in Flanders, where it is planned to "finish the inventory before computerizing it", in the words of S. Van Aershot.

It is nonetheless encouraging to add that most of the inventories, even those not yet computerized, are either due to be computerised in the near future (Switzerland, Romania) or already consist of very well organized fiches which should be easy to key in.

Among those who indicated the use of computerized systems, we find the same type of information more or less across the board: structured textual data. Little specific

information on this was forthcoming. But mention was made at least once about: the presence of fields without lexicons, fields associated with a table of values, fields with lexical control, and the existence of unique or multiple-entry fields.

The data-processing systems used sometimes incorporate of a thesaurus (Lower Saxony, England, France, Italy). The interest of multilingual systems was mentioned by the representatives of Belgium and Switzerland, even if Jean-Marie Pérouse de Montclos underlined, in his introduction, the difficulty posed by problems of terminology with the whole range of regionalist variants, even within monolingual systems which were reckoned to be simpler. In this respect, John Bold referred to the liaison work recently undertaken between the British English of the RCHME and the American English of the AAT project at the Getty Foundation.

Some systems allow the inclusion of free texts (Germany, France), and hence, presumably, the software which permits the scanning of the entire text.

Very few examples of computerization applied to maps, plans and cadastral registers were discussed or described, except in France by A. Noé-Dufour (based on the digitised cadastral registry of the city of Toulouse), in Italy by F. Poggi (SIRIS project), in Norway (SEFRAC project), and possibly before long in Poland, where the use of a scanner is envisaged.

There are even fewer examples of image processing or storage using optical reading back-up or requiring digitalization, apart from one or two pilot projects already mentioned: Norway (SEFRAC), Italy (SIRIS), France (Toulouse), and we might add York for the RCHME, even though this is an area undergoing a full technological revolution.

It should be noted that, whereas the file of architectural items (monuments, complexes, sites) tends to be the first corpus to be computerized, much interest is also being taken in the creation of files listing associated stocks or primary documents, called, in English, either "archive records" or "reference records": photographic references (iconography), graphic document references (maps, plans and abstracts), and bibliographical references. It is also hoped that there will be closer links with files dealing with the environmental context (landscape, building setting, geographical and geological features). These links can then be translated logically into connections with a proper system of geographical data (GIS or Geographical Information System, in English). This kind of data structuring does nevertheless pose certain problems of general design in the data system.

A part from certain office automation software packages, only two types of software have been mentioned: data-base management systems (DBMS), such as SQL-base, Informix or Oracle; Information Retrieval Systems such as Basis, Mistral or Stairs.

Some inventories use a central computer (France, Norway, Netherlands), others just micro-computers, sometimes hooked up to a local network, as in Saxony, for example.

It would seem that computerization and the rigour imposed by it facilitate the processing, operation and retrieval of data gathered during surveys.

What emerges from a majority of the papers is that the computerization of the data collected is undertaken, or desirable, for several reasons:

- to offer better access to documents and facilitate documentary searches (information management);
- to rationalize conservation measures by increasing the possibilities of comparison and sorting (heritage management);
- as an aid to regional/physical planning (set of instruments to aid decision-making),
- as a method for statistical and cartographic processing;
- and lastly, as a potential source of data exchange, in particular with local government bodies, which can thereby gain better knowledge and better control of their heritage.

[In connection with the "core data index", much was said about the possibility of cross-border exchanges, but it would seem that the adoption of an indexing standard might also have a beneficial effect in terms of data exchanges within the same country: from region to region, organization to organization, and even within one and the same organization. As John Bold aptly observed, the "core data" does indeed represent the highest common denominator of all our inventories.]

A last reason can be added to this list: setting up a handy means of editing and re-editing lists, a method that would help to make a clever marriage between publication and data-bank by using the functional qualities of DTP (computer-aided) (or desktop publishing) system, to prepare, for example, the bulky catalogues containing the Swiss inventory - which constitute outstanding scientific achievements, - presented by N. Caviezel, thus complying with M. Horler's wishes.

The use of data-processing and new technologies, the implementation of computerization projects, their follow-up, and their development, all these things come up against a certain number of obstacles which it is as well to bear in mind:

- problems of cost: the technologies required are still expensive and call for major investments, particularly when it comes to computerizing maps, plans and images, as was stressed by M. Kuipers of the Netherlands;
- problems of time and priority hierarchization: "Is it better to have a few data about everything, or complete data on a few items?", to borrow the question raised by A. Kostarczyk of Poland;

- problems of up-dating and effective follow-up, mentioned by L. Skoviera of Slovakia and G. Wester of Norway, who complained of having access to a "static file, when it should be dynamic";
- psychological problems and training problems involved in making the move from pencil to portable micro-computer;
- problems of capacity which, over and above the strictly technical discussion, relate to the previous discussions on the exhaustive nature of the methods concerned, opposed to a greater selection of data. "The investigation work is easy, storage is more complicated," observed our colleague from Holland.

A carefully thought-out selection today can be a plus point, and tomorrow a drawback, warned Nicolas Cooper of the RCHME, slightly provocatively. He even went as far as to suggest considering, for today, a total exhaustiveness (if we may use such a tautology). The fact is - and it is paradoxical - that the new technologies, because of their cost and the budgetary dictates imposed by them, will, on the contrary require draconian selection procedures, especially if one takes into account the storage and transmission of digitised images. But in the words of G. Wester: "Are we quite sure we want to exchange everything? quite sure we really want to have access to 400 000 listed buildings (in her country)?"

III. Conclusions and recommendations

We have tried to put forward one or two proposed recommendations at this juncture in the discussion. These recommendations can be put into three categories.

1. Use of new technologies

It seems difficult to give overly restrictive technical specifications; the hard- and software is very varied, and buying policies are linked to the specific history of each one of our organizations.

But the following five tracks can be suggested:

- studying the possibilities of developing a common software to help operate the "core data" and meet general requirements. Is this feasible? is this utopic? There has been talk of selection criteria for monuments. Might it not be helpful to define these, the better to be able to choose the software programmes and data systems, in particular to assist those who have not yet selected their systems?
- provide better knowledge of DTP, in so much as it is a fact that paper and publishing are still the best ways of creating awareness and circulating information,
- studying the possible bridges with geographical information systems (GIS) to better design this "relation to the territory" referred to by M.L. Polichetti,

- coordinating current or future experiments to do with multi-media storage, filing and data-processing systems (problems of text integration, graphics and images, use of standards in force, etc.), because the risk of error or deadlock is considerable and the costs cannot easily be borne by any single institution,
- defining data exchange protocols (texts and/or images) using existing data transmission networks, bearing in mind the norms and standards in force for coding, compression and decompression of data etc.

2. Definition of European norms on informational content

The "core data" proposal made by our working group represents a point of departure. We propose four axes to refine this proposal and take it further.

- it seems necessary to define more precisely, and without ambiguity, each one of the "core data" fields to enable swift and independent computerization of the data-processing systems being used, for example for data on dating, administrative location, and cartographic co-ordinates with, where necessary, the installation of conversion systems;
- we must study the feasibility of a "core data" extension, currently planned for isolated architectural items, groups or complexes, sites or sectors of patrimonial interest ("areas of special value", architectural and urban protected heritage areas, preservation areas etc.);
- it seems urgent, in view of the creation of multi-media systems, to deal with possible link-ups with other files (photographic or bibliographic references) or other sub-files, perhaps more detailed, but created on a local basis - files which could go to make those satellite files mentioned by John Bold - and to study the possibilities of bridges between our heritage files and the files created and managed by institutions other than ours (planners, environmental experts etc);
- last of all, the increased number of access systems and data exchanges calls for the design, development and management of multilingual thesauruses.

3. Establishment of a strategy for data-base management

It seems necessary to bear in mind three principles for consideration when defining this strategy: coherence, compatibility and durability:

- coherence with the missions of our institutions, the political and economic context, with the aims assigned us, by incorporating new technologies within the documentary chain, and constantly retaining an overall view of the whole system, despite its growing complexity,

- compatibility: not only in terms of data-processing standards for data exchanges, but also in functional and organizational terms to adapt to the development of both content and structures,
- durability, because we must be mindful of the need to protect and conserve monuments; we must also be mindful about the safekeeping of data which must be durable or alternatively easily transferable from one storage medium to another medium, from paper to magnetic disks, from the magnetic medium to optical media, so that the current state of things can be transmitted to and used by future generations.

Finally, it is important to reassess the need for strategic planning for the development of information systems.

With limited availability of resource and expertise within organisations, it is important that prospective users of IT consider their objectives in functional and management terms before they embark on expensive and time consuming development of computer systems. Experience within both public- and commercial- sector organisations has shown that when information systems are not aimed from the outset at supporting the full range of business objectives and functional needs for information management in an organisation, the value of IT investment can be diminished and possibly lost altogether.

We therefore see that there is a need for advice to be available from a panel of experts to assist inventory- making organisations in the necessary planning and analysis preparatory to the development of computer systems. By providing support at the planning stage, it will be possible to assist organisations which have yet to start the process of inventory computerisation. As the resource that inventory- making organisations can call on is generally very limited, it is important that expertise can be called upon to help ensure that investment in computer systems is effective and as economic as possible.

Common Data Value Standards and the AAT

Donald H. Sanders and Mary Prevo

This colloquy's goal--to draft common standards for a minimum European documentary data entry form--is an important first step toward making possible quick and accurate communication among heritage documentation centres. This is still only a first step, as many of you know and as has already been discussed here in the last few days. Once the minimum documentary data entry form is agreed upon, common standards for the core elements need to be defined.

The Art and Architecture Thesaurus was developed to fill the need for standard subject access to databases of art and architectural monuments and related documentary material. It provides data values for part of an object data entry form. The AAT is not a standard for proper or corporate names, geographic place names or iconographic subjects. You will not find "Le Corbusier", "the Louvre", "Rome", or "the Annunciation" in the AAT. Rather, it is a standard for object names--in the field of architecture this includes types of sites and complexes, as well as building types, and their constituent parts and systems. Supporting these object names, the AAT provides vocabulary for the broad concepts associated with art and architecture, the physical attributes of objects, styles, periods, materials, and genres of people and organizations that affect art and architecture.

The first edition of the AAT was published in 1990 by Oxford University Press in a three-volume hardbound edition and an electronic edition. It is now also available in a PC-compatible version with retrieval software called the Authority Reference Tool. When the second edition is published in January, 1994, the AAT will comprise thirty hierarchies grouped in seven facets, with a total of over 90 000 terms. The vocabulary is expanded by users who submit new terms to the AAT editorial staff as candidates for inclusion. The AAT is a project of the Getty Art History Information Program which is committed to the continued maintenance of the thesaurus.

After the publication of our first edition, we were surprised and gratified to learn that over half of the copies were purchased by organizations outside the United States, primarily in Canada and western Europe. It illustrated in concrete terms what we already suspected from our communication with archives, museums, and libraries around the world--that the American English AAT was filling an important need for a comprehensive, hierarchical subject thesaurus for the arts and architecture. The challenge then became to learn how to work with these new users to develop vocabularies linked to the AAT that cross language and ethnic barriers.

In developing the AAT we have also come to know other important vocabularies in this discipline, most notably the large bodies of work in progress by the Inventaire général in France and the ICCD in Italy. Like the AAT these vocabularies are constructed with a scholarly rigor that sets them apart from other authority lists

currently used libraries and museums. They rely to a certain extent on the same sources for research on terms and can be used as controlled vocabularies in computer databases. Some also include foreign language equivalents. The ICCD's dictionary on liturgical objects has included translations into French, German, English, and Latin ¹. Others, like the *Inventaire général* and the Royal Commission on the Historical Monuments of England have expressed an interest in developing multilingual links to their object names. Any thesaurus project for art and architecture must take their work into account and find paths of collaboration with them.

Efforts to bring institutions together to investigate multilingual vocabulary have been coordinated from the AAT since 1989. This task came to us on the recommendation of a working committee of the International Committee for the History of Art (CIHA), named TAU (Thesaurus Artis Universalis). The TAU committee considered the role of automation in the history of art and articulated the need for multilingual vocabularies that would make the databases of art information across Europe and the Americas available to scholars in the language of their choice ². With support from the Getty Art History Information Program, TAU sponsored a feasibility study for a bilingual French-English thesaurus at the Canadian Centre for Architecture in Montreal. This was followed by a pilot project to establish French, German, Italian, and Spanish equivalents for a selected group of 150 American English architecture terms from the AAT. Four institutions participated in this experiment: the Bildarchiv Foto Marburg, the ICCD, the Universidad Autónoma de Madrid, and the Université de Montréal. This experiment showed that term-to-term equivalents could be developed.

It soon became clear that one institution could not be responsible for developing equivalents for a thesaurus as large as the AAT. But rather than abandon the hope of a multilingual thesaurus, we began to identify institutions and projects that have an interest in bilingual or multilingual terminology and might donate either data or expertise to the task. Since 1989, the participants in the original TAU experiment have been joined by several institutions, each focusing on various parts of the AAT: the *Inventaire général*, the Swiss National Database, the University of Laval in Quebec, the British Architectural Library of the Royal Institute of British Architects (RIBA), the Royal Commission on the Historical Monuments of England, and the Victoria and Albert Museum and its affiliated National Art Library. As major users of the AAT they are participating in the multilingual project by expanding the Anglo-English terminology in the fine and decorative arts hierarchies of the AAT.

This long-distance work was followed by a series of residencies during 1991 and 1992 in which staff from various organizations visited the AAT to work on sections of the terminology. These residencies revealed the different approaches that each institution

¹ Istituto Centrale per il Catalogo e la Documentazione, Dizionari Terminologici; Suppellettile Ecclesiastica I, Florence, Centro Di, 1988.

² Marilyn Schmitt, "The TAU (Thesaurus Artis Universalis) Project of the International Committee of the History of Art," Terminology for Museums: Proceedings of an International Conference held in Cambridge, England, 21-24 September, 1988, Cambridge: Museum Documentation Association, 1990, pp. 29-31.

takes toward vocabulary standardization and allowed us to build on the earlier work sponsored by the TAU committee. Most important it confirmed that term-to-term equivalents can be drawn across pre-existing vocabularies, and also that the creation of equivalent hierarchical arrangements or parallel classification is much more complex and may not be necessary, particularly in a computer environment ³.

The protocol for the equivalency work is based on standards for multilingual thesaurus construction developed by the International Standards Organization (ISO), national standards for monolingual and bilingual thesauri, and the experience of the TAU experiment and our residencies ⁴. The standards require a careful examination of each term in the source language and the informed choice of the appropriate equivalent terms in the target languages.

The work begins with AAT term records, which include research on the term's usage, sources where the information on the term is found, the term's hierarchical placement, and (when appropriate) illustrations. The resulting matches are reviewed by independent teams of art and architecture scholars who are familiar with the appropriate languages, which assures that the terms are correct and currently in use in the scholarly and technical literature.

Specifically, the AAT's collaboration with the Inventaire général began to focus on architecture vocabulary during the summer of 1991. Monique Chatenet of the Inventaire général spent a week at the AAT offices in Massachusetts. We worked to match vocabulary from the Inventaire général's architecture cataloguing manual, Système descriptif de l'architecture. Our goal was to find English equivalents in the AAT for the French vocabulary used in the Dénomination field of the Inventaire général's architecture database. The Dénomination field, the principal object name field for the architecture database, contains expressions to describe specific buildings, complexes, and settlements--terms found in three of the five hierarchies in the architecture, or Built Environment, section of the AAT.

We first discussed the differences in the scope and purpose of each of the two vocabularies. The AAT is an encyclopedic subject vocabulary for art and architecture, designed to be used in a variety of databases. It is not tied to any particular collection, geographic place, or time. In addition to objects, the AAT is used to catalogue archival records and visual surrogates such as photographs, and to index literature about art and architecture. Structured in a series of facets and hierarchies, it arranges related concepts in a genus-species order. To eliminate the many compound phrases found in most subject-heading lists, the AAT splits phrases into their constituent parts. For example,

³ Toni Petersen and Mary Prevo, "Towards a Multilingual Thesaurus," CIDOC (International Committee for Documentation) Newsletter, vol. 2, no.1, April 1991, pp. 27-34.

⁴ International Organization for Standardization (ISO), Guidelines for the Establishment and Development of Multilingual Thesauri, Geneva, Switzerland, 1st ed., 1985 [ISO 5964 1985-02-15]. Intended for use with ISO, Guidelines for the Establishment and Development of Monolingual Thesauri, Geneva, Switzerland, 1st ed., 1974 [ISO 2788-08-15 1974].

the AAT separates the compound idea of "stone walls" into the material, "stone", and the object, "walls". Stone is placed under "inorganic materials" in the Materials Facet, and walls are under "enclosing structural elements" in the Built Works Components Hierarchy of the Objects Facet. The user constructs, or post-coordinates, the compound idea of "stone walls" from the two separate AAT terms.

In contrast, the Inventaire général's vocabulary has been developed specifically to describe the architectural patrimony of France after Antiquity. The terminology is part of the cataloguing manual for the Inventaire général's architecture database, Système descriptif de l'architecture⁵. Definitions for the terms are based on the Vocabulaire de l'Architecture of Pérouse de Montclos⁶. The Système descriptif defines each field of the Inventaire général's architecture database and the values allowed in each field. For the fields with standardized values, the Système descriptif provides hierarchically arranged terminology. It is thus essentially a hierarchically structured data dictionary and contains compound terms that would be decoordinated in the AAT.

The two vocabularies also share a number of features. Their primary purpose is to provide standard terminology for the description of objects and both are hierarchically arranged with broader and narrower terms. Both standards can provide access through the singular form of the main object term⁷.

With these features understood, we moved on to construct term-to-term matches. We made bilingual term sheets for each term, noting the Inventaire général's definition and broader term. We then searched the AAT for possible equivalents, comparing definitions or scope notes. When the scopes of an English and a French term were equal we judged that we had a true equivalent. French terms that represented part of the English term were deemed partial equivalents. For some French terms we created English equivalents by combining two AAT terms ("parfumerie" equivalent to "perfume + factories"). While this last category uses the AAT as it is intended, we recognized the need to look critically at the proposed post-coordinated equivalents to be sure that we have combined them properly.

In five days we made bilingual term sheets for 663 French terms. The results of the residency were heartening. Of the 663 terms in the Dénomination field of the Inventaire général's Système descriptif we found equivalents for 274, partial equivalents for 29, post-coordinated equivalents for 152, and no equivalents were found for 208 terms.

⁵ Monique Chatenet, Jean Davoigneau, Jeannette Ivain, Olivier Toche, editors, Système descriptif de l'Architecture. Paris: Ministère de la Culture et de la Communication. Direction du Patrimoine. Inventaire général des monuments et des richesses artistiques de la France, 1989 (revised and corrected, 1990).

⁶ Jean-Marie Pérouse de Montclos, et. al., Vocabulaire de l'Architecture. Principes d'Analyse scientifique. Paris: Imprimerie nationale 1972.

⁷ The AAT provides for the use of singular alternate main terms in the Objects Facet. For the sake of consistency within this study, we used the English plural form of the main term.

Further, we can draw the following preliminary conclusions. The terms at the middle levels of the *Inventaire général*'s hierarchy were the easiest to match. These generally describe complexes or building types ("étable" equivalent to "stables"; "observatoire" equivalent to "astronomical observatories"). Finding equivalents at the broader levels was more difficult. At this level we found more partial equivalents. For example, the French term "édifice", corresponds to two AAT terms--"structures" and "complexes."

The narrower levels of the *Inventaire général*'s hierarchies also presented challenges, principally because they contain terms that are very specific and from the AAT standpoint could be post-coordinated ("usine construction automobile" equivalent to "automobile + factories"), or terms that are specific to French culture or governmental administration ("perception" equivalent to "tax collection + office buildings").

Our work also made clear the American emphasis of the AAT. To be more useful as a base language for bilingual or multilingual thesauri of European languages, the AAT needs Anglo-English equivalents and more pre-industrial European vernacular architecture terminology. To accomplish this we looked for new collaborators and began to think how to incorporate Anglo-English data into the American English AAT term record.

In March of 1992, staff from the British Architecture Library at the RIBA and from the Royal Commission on the Historical Monuments of England came to the AAT to discuss the inclusion of Anglo-English terminology. At the same time a comparison was made of the structures and vocabulary of the AAT Single Built Works Hierarchy and the Royal Commission's Architecture Thesaurus section for Building Type by Form ⁸. We discovered that the degree of overlap between the AAT and the Royal Commission thesaurus was not far from that of the AAT and the *Inventaire général*, primarily because the *Inventaire* and Royal Commission thesauri were constructed for similar purposes, namely inventories for national architectural patrimony. The AAT is designed for broader application across different systems. We did find that the structure of the AAT could expand to accommodate new terminology. This was borne out by our expansion of the schools section of the AAT to incorporate British educational terminology. The process will use the AAT's interactive candidate term and comment process to introduce these new terms into the AAT.

To accommodate Anglo-English terms, the AAT has added new data elements to the thesaurus to hold the Anglo-English alternate terms. The new data elements will link British spelling conventions with the appropriate AAT main terms (e.g., c-o-l-o-u-r and color). This may seem like a minor correction, but I am sure any of you who have struggled with standardizing American and British spelling variants will understand its importance. With these new data elements, we will also be able to provide new alternate

⁸ Royal Commission on the Historical Monuments of England and English Heritage, Revised Thesaurus of Architectural Terms, London: RCHME/EH, 1989.

terms that are cultural variants, for example, the Anglo-English equivalent to the American English term, "public schools" would be "maintained schools".

The AAT is also working with the Bibliography of the History of Art/Bibliographie d'Histoire de l'Art (BHA), a joint project of the Centre National de la Recherche Scientifique of France and the Getty Art History Information Program. BHA is a bilingual indexing service for publications in the history of art. To facilitate access to its publication, it has developed a bilingual subject headings list. Because BHA indexes subject matter throughout the history of art, its vocabulary is far broader than the Inventaire général's term list. The AAT and BHA have recently completed a computerized match of the BHA English subject headings to the AAT. The next step is to review the term-to-term links for accuracy and update the AAT database.

Finally, one of the most important recent developments is the interest of the Library of the University of Laval at Quebec City. Its indexing vocabulary, the Répertoire des Vedettes-Matières, is the de facto standard for subject cataloguing in bilingual Canadian libraries. The Vedettes-Matières also provides a link to Rameau: Répertoire d'Autorité Encyclopédique et Alphabétique Unifié, which is the French National Library subject heading list. This summer the staff of the University of Laval Library attended the AAT Multilingual meeting in Berlin and has agreed to develop equivalents for the Document Types hierarchy of the AAT. This work will be done in Quebec and reviewed by a group of bilingual scholars at the AAT next year.

At the same time that links with projects that produce bilingual subject heading lists are being pursued, the AAT user base is expanding quickly outside the United States. For example, later this year we will be mounted as a reference database within the Canadian Heritage Information Network (CHIN), which will bring the AAT to museums all over Canada.

We hope to continue to generate fruitful collaborations among the vocabularies of different languages in order to provide control and standardization at the terminology level. Residencies will continue to be an important part of future multilingual initiatives. These work periods will need to be combined with sustained follow-up and research on the part of the participants, which will allow us to continue testing our working methods. Our outreach to other bilingual vocabulary projects will also proceed.

Forging links among terms within a group of languages used broadly by art historians has to be seen as a first step in making art information available across language barriers. It requires collaborations among the various organizations that are developing this terminology. The AAT, a complex and costly project taking many years to complete, hopes to participate in this task and form the basis for thesauri in other languages, thus sharing internationally the benefits of the labour spent by its developers.

CLOSING SESSION

**Proposals for a European minimum set of documentary data elements
on architectural heritage**

Chairperson of the sitting: Jean-Marie VINCENT

Mr Jean-Marie Vincent, who chaired the closing session, drew attention first of all to the presence of **Mr Christian Dupavillon**, Director of heritage affairs at the French Ministry of Education and Culture, who had wished to attend the colloquy on the last day of proceedings.

He reminded the participants that the Council of Europe's aim in organising the meeting had been not only to promote better mutual knowledge of practices or investigating the heritage in the twenty-five countries which had participated in these encounters, but also to facilitate the exchange of standard data between the different countries notwithstanding the diversity of their approaches.

The project concerned was the creation of a "core data index" and, on completion of the colloquy, the aim was now to define it in precise detail for submission to the Cultural Heritage Committee of the Council of Europe.

Although this might appear to be a modest result after such lengthy discussions, Mr Vincent felt that their deliberations had, on the contrary, demonstrated that the heritage was one of the strongest links in European civilization. The common cultural heritage was the sum of the individual assets of each participating country and it was essential to be able to pool their knowledge in order to create a coherent and effective policy designed to preserve this heritage in all its diversity.

Mr Daniel Thérond congratulated participants on the work achieved during the preparatory phase of the conference and the result obtained at the colloquy. The Council of Europe now had the makings of a core data index which could be submitted to the Cultural Heritage Committee (CC-PAT) which was responsible for the programme of intergovernmental co-operation in the heritage sector.

Follow-up action might take the following form:

- once the proposed index had been finalised and explanatory notes had been added, it would be submitted to the CC-PAT in the form of a draft recommendation. Once the text had been examined by the Heritage Committee it could be communicated to the Committee of Ministers for adoption. In this way, future recommendation on documentation techniques accompanied by the necessary appendices might be circulated to member states in 1993;
- the programme of activities could continue in 1993 at two levels. Firstly, this could be done by applying the principles expressed in the recommendation to groups of buildings. Meetings could be organised with professionals from various countries on this subject from 1993 onwards. In due course, the Secretariat could consult delegations to the CC-PAT with a view to setting up a working party on this subject. Work should also continue on the archaeological sector where a specialist group would endeavour to draw up a core data index after the pattern of the one tested in the architectural heritage sector.

Co-operation in the field of documentation should be pursued over a period of years in accordance with a programme and at a rhythm dictated by the needs expressed by the countries concerned and the available resources on the Council of Europe annual budgets.

Statement by Mrs Maria-Luisa Polichetti

Human beings, whether individually or as a community, have always felt the need to ascertain their origins in order to gain a better understanding of their own history and therefore of themselves.

In order to understand the cultural heritage, which is the fruit of human labour, identify its quantity and features, and understand its meaning, one has to grasp how society and nations have grown up through successive historical events.

Looking at European history we realise that events, taken in combination or in isolation, have always affected the nations of Europe, albeit in varying ways. The various countries emerged as a result of historical events which, with the passing of time, gradually united them.

The cultural heritage, which resulted from human action as determined by these events, bears witness to the European identity.

In order to define this heritage we must seek the shared origins and features of growth, and deepen the links between peoples with common origins.

It is important to harmonise the methods used in this endeavour. Catalogues are very useful because they are a means of acquiring knowledge, and knowledge of the past helps improve our understanding of present reality and our approach to contemporary history.

The very swift economic changes that have taken place recently have in many cases been even more devastating than the wars which once racked Europe. The architectural and natural environment has been the most dramatically damaged, whether as a result of misuse, complete abandonment or destruction.

It is obvious that if our shared history is to offer us any hope of salvation we must effectively salvage our past and provide reliable safeguards for our present: we must regard and use all our assets in such a way as to provide a genuine contribution to the growth of society.

Inventories, as a means of acquiring knowledge, must be geared to protecting and enhancing the cultural heritage.

European countries use cataloguing methods which, although they share many features, are not uniform because the cultural situations in the various countries are likewise heterogeneous, the legal systems, *inter alia*, varying widely. The inventory method is based on the constitution of a dossier, that is to say a file, which provides a means of organising information logically. Harmonisation of file structures would enable us to create a common reference framework and therefore secure a method of organising data which is common to all countries.

For some time now, information technology has been providing more and better facilities for the rational organisation and management of data and their rapid exchange.

In the field of classification, information technology is obviously a very important and, indeed, indispensable resource, primarily because it can contribute greatly to the harmonisation of methods. Over the past few days we have been considering the architectural heritage as a set of assets broken down into the three categories: rural, industrial and urban architecture. These three categories, which form a whole, indicate location, type and function and, at the same time, reflect the link between the architectural heritage and the land. We must proceed in the near future to a joint comparison of the methods which the various countries use for recording and organising documentary data, checking on file contents as well as the relationship between the documentary data and the physical structure of the file. However, we must also set together and tackle the wide-ranging, complex issue of glossaries, which are vital for smooth information interchange, especially where information technology is concerned.

Our aim must therefore be to set up a European data bank based on a harmonised information system for cataloguing the European cultural heritage. This would also be concrete evidence of the various countries' shared determination to achieve, at least in the cultural field, the European unity to which we all aspire.

The Core Data Index Summary and Proposals

John Bold

We have made very considerable progress at this meeting, with a great deal of common ground identified. I wish to review some of that progress and also answer a fundamental question posed - why do we wish to arrange for the international interrogation of documentation centres?

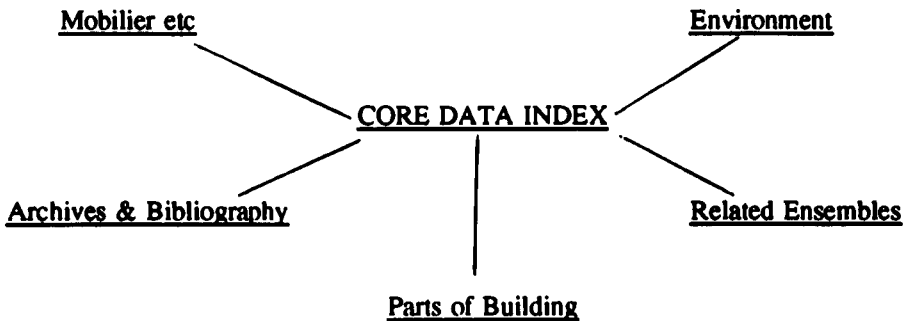
There are a number of reasons why information on the built environment is required - for planning, for protection, for environmental assessment, for education; in short, for public information. The strength of common European access to information lies in the possibility which it offers for learning from each other's experience and each other's records. This is true particularly in relation to building types and to environments which are comparable. Several endeavours are common to several countries, for example industrial activities - coal mining, dockyards, transport systems. Interrogation of other records will facilitate the identification of those elements which are common and those which are singular and national - this is an important point in recommending buildings or sites for protection. Interrogation may be directed also at those sites where an indigenous development is closely related to a wider international development - we might wish to compare information held on Salisbury Cathedral for example with information on Amiens, or information on the Smythsons' Robin Hood Gardens development in London with Le Corbusier's Unité d'Habitation in Marseille or with its derivative Maison familiale in Nantes. We might wish also to share information on those building types on which there has been a two way flow of ideas over a long period of time. One may cite hospitals on which there have been influences from Italy to England and back again at different stages of planning and health care provision.

It may often seem to the hard pressed bureaucrat that there is insufficient time to make such comparisons, but two points should be borne in mind: firstly, that we all have so much work that it is not sensible to reinvent approaches; secondly, that the use of a core data index will make the process of interrogation quicker, easier and more comprehensible, at the level of the first, basic enquiry.

Core data is a key; an enabling mechanism. It is not something which is seeking to make organisations conform to systems which are incompatible with their own needs. At a primary level it represents a way of indexing, ordering and classifying information, independently of whether that information is on paper, card index or database, although naturally the information will be more readily accessible on the latter. A core data file as proposed represents the top level index of information on a building or site. It is the key to further information held in the database, in the repository or elsewhere.

As currently set out, the core data form already includes the facility to record not only the building but also the site of which it may be a component. By the numbering system and the repetition of fiches, it will be possible to index not only the building complex but also its component parts, not only the Textile Mill, but also the engine house, the chimney and the drying house. But as we have discussed over the last two days, each organisation will need also several further files which are related to the core data index. These will be of various types, relating to deeper levels of architectural, environmental, historical and planning information - the levels will vary according to organisational needs and imperatives, and should be defined by the individual organisation.

It has become apparent that delegates to this conference are concerned about bibliographic and archive information, about related families of buildings, about ensembles and about environmental issues, about mobilier and the machinery of industry. I suggest therefore that organisations need a family of fiches, accessed through the core data index. These families will vary in size and complexity according to organisational requirement - a detailed prescription cannot readily be written. However, we can envisage a satellite system of several related fiches, cross referenced to each other, so that users of each will know that they might also find related information in another. Hence:



It is in my view important to keep the building as the primary unit of record and not to overlay the Index with other accretions. It should be kept separate from but related to the dependent or qualifying areas. This is important because the way in which information is structured often conditions the way in which it is used, just as much as the use to which it will be put conditions the structuring of the information. It is a circular process and it is important in these circumstances to maintain the integrity of the information by keeping it as simple as possible at the upper level entry point, whilst allowing as many possibilities as possible to pursue further avenues of information. A core level should enable us to establish a reasonable degree of consistency and constancy on information without disallowing changes of plan, changes of emphasis and developing historical perceptions which will be charted or chronicled in the satellite fiches.

I propose therefore that the core data index sheet should have only the following additions:

- the date of compilation of the record
- the cross references which would direct the user of information to the other information which is specific to a building, to ensembles or to related environmental areas for which records exist in the documentation centre either in paper form or in a database.

Other refinements to the core data would include the more precise structuring of address information, and the extension of the dating system to include "period" as well as "date", in order to make the system more readily compatible with the needs of archaeology.

The core data sheet would thus remain as intended, a key which unlocks other information and information channels - a mechanism to assist those who want an entry point to information, whether broadly or in depth. This process would be aided by consistent terminological control. A proportion of organisations already use a thesaurus of terms for functional types. I recommend that such thesauri might become multilingual, with equivalent terms listed. Experience indicates that this will not be easy and working parties will be needed to work out the equivalents. But if strict parameters are set, limiting the level of detail, and glossaries or scope notes are constructed in order to explain national variations in the application of terms, this should be possible.

In view of the significant progress which are made, I urge those who will be responsible for drafting final resolutions to stress two things:

- firstly, that by taking short, pragmatic steps, we recommend the adoption of a common, core indexing system for information held on historic buildings and sites, with appropriate cross referencing to dependencies and related areas.
- secondly, that we continue to believe, despite the stress, constraints and opportunities imposed and afforded by political and economic change, that we are in the public service and that all possible levels of information should be in the public domain in a comprehensible and accessible form. Without public support the historic environment cannot be understood, respected and, where appropriate, conserved and preserved.

Adoption of the "Core Data Index"

Following the address by Mr Bold, numerous questions and further statements provided an opportunity for John Bold and Mrs Monique Chatenet to give details on the method of using the core date index and to take into account certain proposals concerning its content (multiple entry fields, date of collection and updating of data). It was also made clear that the index, which had of necessity been reduced to the minimum, was not intended to meet all documentary needs; further research was currently being conducted, for example by the *Inventaire français* and the *Catalogo italiano*, with a view to defining jointly a data sheet for containing fuller information based on the minimum data sheet and designed to take account of the specific features of certain types of heritage; the two bodies concerned were prepared to make their experience available to other countries.

Coming back to the subject of the core data index, Mr Vincent consulted the representatives of the various countries present. All expressed their favour of adopting the index, with the exception of the representative of Poland who approved the principle of the index but regarded it as inadequate.

At this stage, it was felt advisable to define an action programme for continuing work on this joint project whose value was recognised by all. Mr Vincent proposed three types of action:

1. Formation of a group of experts to ensure that the groups of buildings ("ensembles") were taken into account in the core date index, a need that had been strongly expressed throughout the colloquy. Various countries indicated their interest in taking part in this work.
2. Drawing up a bilingual (English-French) thesaurus on "architecture" in collaboration with the GETTY TRUST, whose representative pledged the support of the body concerned.
3. Combining images with the date index: it was decided to await the results of current experiments, particularly in connection with the IMPACT PROJECT run jointly by the Italian, British and French authorities, before considering the possible exchange of standardised data accompanied with images.

Conclusion of the Colloquy

Christian Dupavillon

We who bear responsibility for the heritage in twenty-six countries of Europe are today faced with a formidable challenge: in a world undergoing radical change, a term which has exceedingly more tragic overtones for some of us, all traces of a past which is disappearing before our very eyes acquire value in terms of the heritage.

Each day our attention is solicited either for some derelict rural settlement, or a factory closing down, or the medieval centre of a small town which the local authority intends to modernise to the detriment of the historic fabric concerned.

And while these urgent questions arise here and there calling for immediate responses, what have you been doing since Wednesday in Nantes and since this morning at Clisson? You have been discussing "analytical methodology", a "core data index", "transmitting information", "the last quarter of the nineteenth century" and so on.

The paradox is only an apparent one! For having been too often obliged to play the role of fireman, I am all the more convinced that it is you who are right.

KNOWLEDGE of the heritage, classified in a rigorous, systematic manner, is not only a necessity, it is an obligation.

No ambitious project to safeguard, preserve and enhance our heritage is possible unless it is based on the fullest scientific knowledge available.

As public servants of greater Europe, we are the caretakers of a vast common heritage which is the outcome of several millennia of civilisation and for which we are jointly answerable to our children and our grandchildren.

This common heritage, the result of major currents of civilisation which permeated our continent and took on a variety of local forms is something which we jointly hold in trust. Its very wealth depends precisely on its diversity, and the difficulties which one or other among us may encounter jeopardise this common heritage and impoverishes us all.

The conservation of the European heritage is our common duty. And since knowledge is the essential foundation of all conservation, we must begin by acquiring the means to exchange our knowledge, even although it may this morning appear somewhat futile to be discussing a "core index".

What do we hope to achieve with our exchange of knowledge?

First of all, a better understanding of our own heritage in terms of our own culture.

Secondly, mutual aid so that the experience gained by those who are best endowed may help those with fewer facilities to make up the leeway and take advantage of all the technological achievements.

Lastly, a gradually increasing awareness of a EUROPEAN HERITAGE which calls for coherent and joint responses.

I was reminded that in almost all of your countries cataloguing went hand in hand with conservation. I have just ensured that this will be the case in France and I welcome the fact that this measure will promote international collaboration.

It would be logical for us to put our minds to the question of devising genuine strategies for protecting our common heritage, based on this exchange of knowledge. The question was raised with respect to the industrial heritage. It applies equally to the rural heritage so that the significant traces may be preserved.

I am therefore entirely in favour of your plan to continue your collaboration. I should like it to concentrate on the guidelines which you defined earlier on.

But allow me to go one step further. I should like to address myself to the representative of the Secretary General of the Council of Europe and ask him to be our spokesman vis-à-vis the European authorities in order to recommend them to intensify joint action to protect the most seriously threatened forms of our common heritage. The French Ministry of Communication and Culture, for its part, is more than ever determined to contribute to such action, particularly with regard to the rural heritage, the industrial and technical heritage, and the heritage of the twentieth century.

By way of conclusion, I wish to thank all those who made this meeting possible:

- the representative of the Secretary General of the Council of Europe and his collaborators,
- our British colleagues who not only passed on the torch lit in London in 1989, but have helped us to prepare this new lap in what I would describe as a very friendly atmosphere of co-operation,
- all of you who have come from all the corners of Europe and taken such an active part in these proceedings, more particularly the session chairmen and rapporteurs,
- the cultural affairs directorate of the Loire region and the regional department of the "Inventaire général", without whom this meeting would not have been possible,
- our hosts, whose hospitality has more than justified the reputation of this beautiful area: the Prefect of the region, the Mayor of Angers, who is also the Chairman of the Conseil général de Loire-Atlantique,

- Lastly, if you will allow me, my own team from the Sub-directorate of the French heritage catalogue, documentation and protection service, who succeeded in combining the preparation of this meeting with the increasingly numerous and varied tasks and duties which I ask them all to perform.

If this colloquy, which began at Nantes and finished in this enchanting site of Clisson, has been such a success it is thanks to one and all, it is thanks to your friendship born of a common passion for the heritage: the heritage of each of our individual countries and the heritage of our continent of Europe.

APPENDICES

APPENDIX I

PROGRAMME

Wednesday, 28 October

3.00 - 5.00 pm

Nantes, L'Atlantique - Cité des Congrès
Registration of participants

5.00 - 7.00 pm

Official opening of the Colloquy

General introduction:

Mr J.M. Pérouse de Montclos, Vice President of the Commission Nationale de l'Inventaire Général
Presentation of the results of the questionnaire on inventories in Europe made by the Council of Europe in 1991:

Mr J. Bold, Royal Commission on the Historical Monuments of England (RCHME)

7.15 pm

Departure by coach for the Hôtel de la Préfecture, Nantes

7.30 pm

Reception given by Mr A. Orhel , Prefect of the Loire Region, Nantes

8.30 pm

Coach back to the hotels. Evening free

Thursday, 29 October

Morning

Study and documentation problems in rural architecture

9.00 am

Chairperson of the sitting:

Mrs M.L. Polichetti, Istituto Centrale per il Catalogo, Rome (Italy)

- Introduction

Communications

9.10 - 10.40 am

- Heritage inventory in Belgium especially in Flander. Rural architecture: density, diversity and complexity:

Mrs S. Van Aerschot (Belgium)

	<ul style="list-style-type: none"> - Monuments file and monuments topography. A method to investigate rural architecture in Northern Germany: Mr W. Wulf (Germany) - The protection of rural architecture and the general inventory of cultural monuments in Slovakia: Mr L. Skoviera (Czechoslovakia) - Inventory of the Norwegian architectural heritage: a non-selective approach Mrs G. Wester
10.40 am	<i>Break</i>
11.00 - 11.40 am	<ul style="list-style-type: none"> - Inventory of the architectural heritage at Mişunesti, a village near Bucarest: Mrs R. Nemteanu (Romania) - Inventory of a site in the Po Valley - Methodological questions: Mr F. Poggi (Italy)
11.40 - 12.45 pm	Discussion/Conclusions
1.00 pm	<i>Lunch, Cité des Congrès</i>
Afternoon	Study and documentation problems in urban architecture
2.00 pm	<p>Chairperson of the sitting: Mr M. Horler, National Inspectorate of Historic Monuments, Budapest (Hungary)</p> <ul style="list-style-type: none"> - Introduction <p>Communications</p>
2.10 - 3.30 pm	<ul style="list-style-type: none"> - The Swiss Inventory of Architecture 1850 - 1920. Twenty years experience and the year 2000: Mr N. Caviezel (Switzerland) - The Monuments Inventorisation Project (1850-1940) in the Netherlands; its implementation in four major cities: Mrs M. Kuipers (Netherlands)

- From the historical monument to the built environment: the inventory of urban and rural heritage in Eastern Pomerania:

Mr A. Kostarczyk (Poland)

- The approach of the Royal Commission on the Historical Monuments of England (RCHME) to the description of some declining industrial quarters:

Mr N. Cooper (United Kingdom)

3.30 pm

Break

3.50 - 4.30 pm

- Vienna, a 19th Century metropolis; searching appropriate methods of investigation:

Mr A. Lehne (Austria)

- The "Inventaire général" in urban areas: the Toulouse experiment:

Mrs A. Noé-Dufour (France)

Mr B. Toulhier (France)

4.30 - 5.30 pm

Discussion/Conclusions

5.45 pm

Departure by coach to Angers

7.00 pm

Visit of the gallery of the Apocalypse of Angers, Château of Angers

Visit of the Museum St Jean, Tapestry "Le chant du monde" of André Lurçat

9.00 pm

*Reception given by **Mr J. Monnier**, Mayor of Angers, at the Hôtel des Pénitentes*

11.00 pm

Return by coach to Nantes

Friday, 30 October

Morning

Study and documentation problems in industrial heritage

9.00 am

Chairperson of the sitting:

Mrs M. Nisser, Professor, University of Uppsala, Sweden

- Introduction

Communications

9.10 - 10.40 am	<ul style="list-style-type: none"> - Mining heritage in Europe. Study and documentation as a basis for a European conservation programme: Mr R. Slotta (Germany) - The criteria for the statutory protection of industrial buildings: Mr M. Cherry (United Kingdom) - Industrial heritage inventory in France: from the survey to the protection: Mrs C. Cartier (France) - Inventory methods of industrial heritage in Finland and examples of their practical applications: Mr E. Härö (Finland)
10.40 am	<i>Break</i>
11.00 - 11.40 am	<ul style="list-style-type: none"> - The industrial heritage inventory in the Spanish Basque country: Mrs M. Zabala (Spain) - Industrial heritage in the Netherlands. Watertowers: Mr P. Nijhof (Netherlands)
11.40 - 12.45 pm	Discussion/Conclusions
1.00 pm	<i>Lunch, Cité des Congrès</i>
Afternoon	Summing-up and discussions on methodological problems
2.00 pm	Chairperson of the sitting: Mr J. Hume, Historic Scotland (United Kingdom) <ul style="list-style-type: none"> - Introduction Summing-up on:
2.30 - 3.15 pm	<ul style="list-style-type: none"> - Survey methods and selection criteria: Mrs M. Chatenet (France) Mr R. Thornes (United Kingdom) Discussion

3.15 - 4.00 pm

- Entry forms for documentary data:
Mr J. Bold (United Kingdom)
Mr J. G. Van Laar (Netherlands)

Discussion

4.00

Break

4.15 - 5.00 pm

- Data-processing and new technologies:
Mr O. Toche (France)
Mr S. Grant (United Kingdom)
Mr H. Gustavson (Sweden)

Discussion

5.00 - 5.45 pm

The French/English Thesaurus Project of
architectural terminology:
Mrs T. Petersen (Getty Trust)

Discussion

6.00 - 6.30 pm

Conclusions

Evening free

Saturday, 31 October

*Clisson (Loire-Atlantique), Domaine Départemental
de la Garenne-Lemot*

Morning

Closing session

**Proposals for a European minimum set of
documentary data elements on architectural
heritage**

9.30 - 10.00 am

Chairperson of the sitting:
Mr J.M. Vincent, Sous-Directeur de l'Inventaire
Général (France)
- Introduction

- Prospects for documentary co-operation in the
framework of the Council of Europe
Mr D. Thérond (Council of Europe)

10.45 - 11.45 am	Discussion on the European minimum set of documentary data elements
11.45 - 12.15 pm	<p>Conclusions of the Colloquy:</p> <ul style="list-style-type: none"> - Mr C. Dupavillon, Directeur du Patrimoine (France) - The representative of the Secretary General of the Council of Europe
12.30 pm	<i>Visit of the "Domaine Départemental de la Garenne-Lemoï"</i>
1.00 pm	<p><i>Reception given by Mr Ch-H de Cosse Brissac, President of the General Council of the Loire Atlantique</i></p> <p><i>Departure in the afternoon for Nantes and the airport</i></p>

APPENDIX II

The minimum set of documentary data elements on architectural heritage

Proposals drawn up by the Council of Europe's group of specialists

In its work on the protection of the architectural heritage the Council of Europe has always emphasised the importance of inventories and documentation in underpinning conservation policies. In particular, it has given priority to encouraging the sharing of heritage information at national and international level. At the London Colloquy (1989) on "Architectural Heritage - New technologies in documentation", it was agreed that the following action should be taken in furtherance of co-operation on information exchange:

- i. the setting of standards relating to a minimum core, or set of data elements textual, cartographic and pictorial) needed to create records that identify and describe historic buildings.
- ii. agreement on technical specifications for the communication of this information between systems.

Subsequent meetings in Strasbourg have resulted in the preparation of a draft set of core data elements. These data elements relate to location, classification of structure, physical status and statutory protection. The definitions of the data elements are followed by an example of a specific building. However, it must be stressed that before the standard can be applied a more rigorous approach will have to be taken to both the structuring of these elements and the control of the terminology used in records. This will be necessary in order to ensure that the information recorded by individual centres of documentation is as retrievable as possible, and that it can be exchanged with and used by other centres throughout Europe.

1.1 Name of Building

This enables identification of the building in association with locational and functional information.

1.2 Unique Record Number and record cross reference numbers

These will enable the record to be uniquely identified and retrieved within a repository and enable cross referencing to other relevant files in the documentation centre or associated centres.

- 1.3 Location** - Country, region etc
 - Address
 - Map reference

2.1 Building Functional Type, both broad and narrow

The broad type, or category, will place the building in its functional grouping, whilst the narrow type will define it precisely; for example:

RELIGIOUS	-	CHURCH
EDUCATIONAL	-	SCHOOL

2.2 Present Function

This will enable further classification and retrieval if the usage of the building has changed since it was built; for example a COUNTRY HOUSE might have become a HOTEL and it would be desirable to retrieve information on the building through either term.

2.3 Date of Building

This should allow for the possibility of giving precise dates when known or date ranges when there is doubt; eg. 1740, or 1730-50.

2.4 Persons and Organisations associated with the building

These may be divisible into two separate categories, those associated with its construction, eg. architects, and those associated with its use, eg. the original or subsequent owners or organisations, and historical personages associated with the building.

3.1 Building Materials

These should normally be the principal materials of which a building is constructed, eg. brick, stone, ferro-concrete.

3.2 Physical Condition

This may note whether demolished, ruined or restored and whether in good, fair, poor or bad condition.

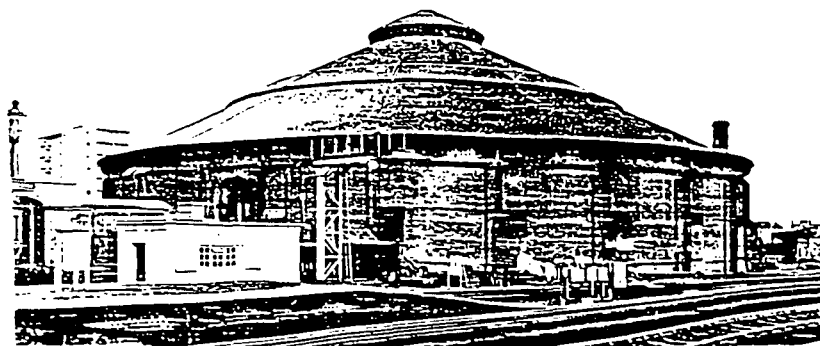
4.1 Protection Status, whether existing or proposed

This should state whether the building is protected and if so, the grade of protection and the date at which it was granted. It may also be used to indicate that protection is required.

EXEMPLE DE FICHE/SAMPLE RECORD

(Remplie avec des données documentaires de l'Inventaire Général, France/Completed with data from the Inventaire Général, France)

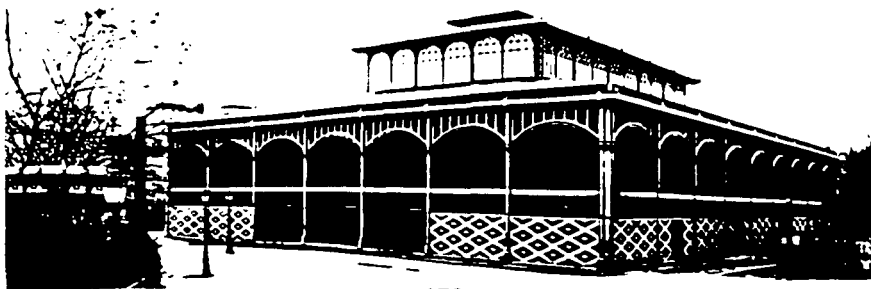
- 1.1 Name of Building: THE ROUND HOUSE THEATRE
Nom de l'édifice
- 1.2 Record Number: 94071/00
Numéro d'identification
- 1.3 Location: ENGLAND
Localisation LONDON NW1
CHALK FARM ROAD
TQ 283 843
- 2.1 Functional Type: TRANSPORT - LOCOMOTIVE SHED
Fonction d'origine
- 2.2 Present Function: THEATRE
Utilisation actuelle
- 2.3 Date of Building: 1846-7
Datation
- 2.4 Associated Persons and organisations: ROBERT STEPHENSON (Engineer)
Personnes et institutions associées LONDON & NORTH WESTERN
RAILWAY (Owner)
- 3.1 Building Materials: Wall: BRICK
Matériaux de construction Roof: SLATE
- 3.2 Physical Condition: FAIR
Etat de conservation
- 4.1 Protection Status: II*; 10.6.1954
Protection



EXEMPLE DE FICHE/SAMPLE RECORD

(Remplie avec des données documentaires de l'Inventaire Général, France/Completed with data from the Inventaire Général, France)

- | | |
|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1 Nom de l'édifice:
<i>Name of Building</i> | CENTRE CULTUREL ANDRE
MALRAUX PAVILLON BALTARD |
| 1.2 Numéro d'identification:
<i>Record number</i> | 00049971 |
| 1.3 Localisation:
<i>Location</i> | Pays: FRANCE
Région: ILE DE FRANCE
Département: 94
Canton: NOGENT SUR MARNE
Commune: NOGENT SUR MARNE
Adresse: VICTOR BASCH (RUE)
Cadastre: 1983 Y 103
LAMBERT 1 0610200 X-0125850Y |
| 2.1 Fonction d'origine:
<i>Functional Type</i> | EDIFICE COMMERCIAL - HALLE |
| 2.2 Utilisation actuelle:
<i>Present Function</i> | CENTRE CULTUREL |
| 2.3 Datation:
<i>Date of Building</i> | DEBUT 3E QUART 19E SIECLE |
| 2.4 Personnes et institutions associées:
<i>Associated persons and organisations</i> | BALTARD VICTOR (ARCHITECTE) |
| 3.1 Matériaux de construction:
<i>Building Materials</i> | Murs: VERRE-FONTE-FER
Toit: VERRE EN COUVERTURE |
| 3.2 Etat de conservation:
<i>Physical condition</i> | RESTAURE |
| 4.1 Protection:
<i>Protection status</i> | CLASSE M.H.1982 |



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