Interdisciplinarity in museology
MuWoP  Museological Working Papers
A debate journal on fundamental museological problems

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Carry on, MuWoP!

This is the second issue of MuWoP — Museological Working Papers, a journal providing the necessary forum which has hitherto been lacking for an international exchange of ideas concerning problems of theory and method in the museum sector. The journal has been published by the ICOM International Committee for Museology in association with Statens historiska museum — the Museum of National Antiquities, Stockholm.

The Museum of National Antiquities, principally through the agency of V. Sofka, has assumed responsibility for editorial work on the journal. The Museum has also substantially contributed towards the cost of publishing the introductory issue, which was financed by ad hoc grants from the Swedish Government and various Swedish foundations as well.

With the publication of this issue, however, the Museum of National Antiquities must relinquish all financial responsibility for the publication of MuWoP. Other financing agencies will now have to take over.

Resources must be secured for continued publication. The journal has too important a part to play in connection with international museum co-operation for a closure to be acceptable. Its survival is in the hands of you, the reader. You can keep it alive by subscribing to it and endeavouring, within your own museum and country, to procure the financial resources which publication requires. This will be a test of the loyalty and interest of museums and the museum profession.

MuWoP’s future is in the hands of the museum workers. Let us be optimistic enough to believe that the good initiative producing it was not in vain and that it will be able to survive and develop. If this proves possible, the Museum of National Antiquities is prepared to take charge of editorial work for some years ahead.

Roland Pålsson  Olov Isaksson

Roland Pålsson is Riksantikvarie — Director General of the Central Board of National Antiquities of Sweden
Olov Isaksson is Director of Statens historiska museum — the Museum of National Antiquities in Stockholm
Editorial

The Museological Working Papers (MuWoP) will continue to appear as a forum for discussion at the theoretical and methodological levels, under the editorship of the International Committee for Museology (ICOFOM).

ICOM Triennial Programme 1981—1983, par. 37

A short, concise statement among fifty-seven programme points in the impressive document on planned ICOM activities, approved by this world organization of museum workers at its 13th General Assembly in Mexico City in 1980. A few lines which are supremely relevant to the journal you are now holding in your hands.

What does this statement mean to MuWoP, to its Editor and Editorial Board, to ICOFOM, but above all to museum people and museums throughout the world?

The answer to this question is both gratifying and challenging.

Firstly, this is the official announcement of a new international journal about and for museums, and in the service of the museum profession.

We — you and me and everybody who is concerned in the museum work — have acquired a new platform for a continuous interchange of thoughts and ideas, knowledge and experience, the results of research and various experiments. A medium which has long been wanting.

Do we not have every cause for satisfaction?

Secondly, the foundations of the new journal are laid. Directly through the statement and indirectly, through the decisions which underlie the statement and were made a short while previously by ICOFOM and by the ICOM Executive Council when the prototype issue, MuWoP No. 1, and the editing plan were presented and approved.

The journal's policy — "to be an open forum for a permanent discussion on fundamental museological problems" — "at the theoretical and methodological levels" has been confirmed.

The structure of the journal has been accepted. By devoting each issue to a special selected theme according to the editorial plan and presenting in it basic papers written by authors from all four corners of the world, MuWoP will be enabled to serve its main purpose: discussion of the wide spectrum of opinions which are thus juxtaposed in order to be compared, confronted, analysed and developed into a common approach to the problems.

The editing plan for the journal has been discussed and finalized for the next few years. Questions concerning the object/subject of museology and the system of museology are to be penetrated first. Museum collecting activities and the role of museums in research and education are to be analysed next.

ICOFOM can note with satisfaction that the task of "working out a skeleton programme for working papers on fundamental museological problems, concentrating such papers and publishing them" according to the decision made at the Committee's annual meeting in Poland in the fall of 1978, has been successfully completed. The prototype of the journal has been outlined, evolved, tested and approved. Warszawa/Nieborów 1978 — Torgiano 1979 — Mexico City 1980. Meeting places of ICOFOM, are milestones on the road towards this goal. The hard work which has been done to bring MuWoP into the world, has not been in vain. ICOFOM and everybody who helped to perform this task can be satisfied with the result.

Thirdly, responsibility for the new journal is vested in ICOFOM. The Committee's decision to delegate has passed this responsibility on to MuWoP's Editorial Board, which under present working conditions means your Editor.

But what does responsibility for the journal add up to? An obligation to comply with the formal decisions made concerning MuWoP, its field and policy? The task of ensuring that it appears at least once a year? Or positive action to secure the realization of the ideas on which it is based, to make the journal a living forum which the museum profession will turn to and find useful, a high quality publication in a continuous state of development?

I find all three interpretations important, but the third in my opinion is the most important of all, because it is concerned with MuWoP's future.

The future is made up of visions and the reality destined to surround them.

Let us dream a while before returning to drab realities. What are the Editor's visions concerning MuWoP's future? MuWoP No. 2, the first regular issue of the journal, provides some foretaste in this respect. The museological discussion, the main concern of this journal and a determinant of its life or death, is now in progress. No less than seven contributions deal with the ideas on theme 1 presented in MuWoP No. 1. Basic papers from sixteen writers tackle the next problem, theme 2: Interdisciplinarity in museology. A new section, entitled News Spotlight, is being devoted to up-to-date information from the museological sector concerning publications, symposia and conferences, but also new inventions from other branches of science of actual or potential importance to museum activities. Encouraging links have been forged with the readers of MuWoP, and the section headed Contacts — Opinions — Confrontations has opened for an exchange of ideas about the journal, which is essential in order for MuWoP to live and develop.

What, then, would your Editor like to see happening in future issues?

One of the most important of our immediate objectives must be to broaden MuWoP's basis of cooperation still further. Our network of personal and institutional contacts, primarily within the ICOM framework but also outside it, must be built up and activated.

A genuine and livelier discussion is needed. We do not only seek to present opinions, we also want to confront them and, where appropriate, see them contradicted.

In both the presentation and the discussion of basic papers on various subjects, it is important for opinions to be voiced from all quarters of the world. We are still looking for African participants, and we would like to see more from Asia, Australia and Latin America.
But the presentation of opinions of another kind is no less desirable and important. Interdisciplinarity is the word. We feel that viewpoints will have to be admitted from other branches of science besides those traditionally associated with museums. We need to be informed about new discoveries and confronted with new ways of thinking. Our discussions must include people who are concerned with the theory of science, with philosophy. In other connections, sociologists, psychologists or educationalists, specialists in information techniques, mass media and futures researchers may be called upon to participate. There is any amount of knowledge and experience which we will have to make our own.

Needless to say, we must also monitor the most important developments in our own field. We want to be notified of new publications of general museological relevance and of important symposia and conferences, and we hope to receive books reviews, essays and reports concerning the theoretical and methodological conclusions arrived at by symposia or by experimental work.

Finally, in everything it does, MuWoP should provide a natural forum for the refinement and development of museological terminology; as things now stand, our lack of a common terminology makes writing and editing an adventure fraught with unforeseeable and unheard of misinterpretations.

Dreams, idle dreams, I hear somebody saying in an ironic tone of voice. On the strength of experience with MuWoP so far, I venture to assert that the dreams I have outlined are not unrealistic and could be made to come true without any great difficulty. Interest in contributing to the journal has been unexpectedly vigorous and is more than satisfactory. Readers’ first reactions have been favourable and statements concerning the need for the journal have been highly encouraging.

So what’s wrong?

To answer this question, we must come back down to earth. ICOFOM’s decision to bring a new museological journal into the world and ICOM’s programme statement concerning regular publication of the journal are an important confirmation of the need for the journal and serve to define its status among other ICOM and Unesco periodicals. These decisions, however, have not in anyway provided the most essential prerequisite of the journal’s continuing existence, which is a solid financial basis — nor were they meant to.

MuWoP No 2 is appearing a few months behind schedule, but not for lack of material. The reason for the delay is that publication funds have not been assured.

It is Statens historiska museum — the Museum of National Antiquities in Stockholm, the Swedish Government and the Sven and Dagmar Saléns Foundation that have made it possible for the prototype, MuWoP No 1, to be developed and presented and for MuWoP No 2, the first regular issue, to be published. We have these three agencies to thank for providing the quite considerable funds that were needed.

Having made this unique contribution, Sweden is now consigning the journal and its future to the museum profession itself. Are we equal to the task? The reality is clear and hard: No matter how fine and how appreciated our plans for the journal may be, if the money for translations and language checking, typesetting, printing and distribution is not forthcoming, there will be no more MuWoP!

But what to do, how to assure the necessary economic basis?

The simplest and most logical solution is for as many as possible — museum workers, museums, universities, libraries etc. — to buy or subscribe to MuWoP. 2 500 subscribers are needed in order to cover costs. This does not strike me as a very large number, since we are all the time concerned with a world-wide readership. Nor should the price, about USD 10 per issue and per annum, be a serious obstacle. The most pressing task, as I see it, is to disseminate information about the journal, to arouse interest and to canvass subscribers. We need your help with this vital task — effectively and quickly!

Another expedient would be to find one or more suitable patrons — foundations — prepared to finance publication — completely, partially or per issue — or prepared to underwrite subscription losses. Have you any advice, hints or contacts to offer?

The third alternative is to find a publisher prepared to take charge of the technical publication of the journal, in collaboration with ICOFOM which is responsible for editorship. If you have any ideas, please let us know.

One might object that if the journal is a good one it will sell itself. But things are not that simple, as other, well-established museum periodicals would be the first to admit. We do not possess the machinery and money required for a world-wide publicity drive. We were not able to start firm canvassing until the prototype issue had been approved and publication decided on in the autumn of 1980. But having now been given this foundation and opportunity — MuWoP 1 och 2 —, can we take over responsibility and carry on with the journal?

In this issue, the Swedish representatives tender the valentiory conviction that MuWoP is needed and that the journal will be able to survive and develop. In his inaugural essay, published in the first issue of MuWoP, the Chairman of ICOFOM wished MuWoP “a long life”, the Editorial Board “fascinating activity” and “to museological professionals their proper useful and indispensable tool”. And in the first reader’s letter published in MuWoP, the hope was expressed that “the journal may well prove to be one of the most effective agencies of the International Council of Museums”.

Let us make this our objective.

Vinoš Sofka
In memoriam
Jiří Neustupný

I am sure that none of the MuWoP editorial board members had any idea that Jiří Neustupný's contribution to the No 2 issue of MuWoP would be the last appearance of this researcher in an international forum discussing substantial problems of museology.

On 28 August 1981, however, Jiří Neustupný died suddenly in Praha, at the age of 76.

In his person passed away not only one of the most outstanding representatives of both Czech and of international efforts to assert the rights of museology as a theoretical instrument of museum practice, but also a widely significant scholar in the field of prehistory.

It was Jiří Neustupný who through his work “Otázky českého muzejnictví” (On Czech museum work) and by his subsequent appointment, in 1950, as Assistant Professor in prehistory with special regard to museology at Charles University, Praha, marked a basic step forward in museum thinking in Czechoslovakia.

Both in this pioneer work as well as in his whole subsequent theoretical research in museology, he showed that the necessary transformations to museum work can only be achieved through museum practice supported by its own theoretical basis. This is why he tried to define the conception of the so-called general and special museology, in close connection with those branches of science which participate in museum work. Neustupný's conception of special museology as a museum application of a respective branch of science has played an important role in museum thinking in Czechoslovakia and it has also manifested itself in the ideas of quite a number of the foremost representatives of world museum work.

Jiří Neustupný did not stick fast to his starting position. He followed in a very active way all domestic and international developments in the sphere of museum work and of museology. He was one of the founding members of our international organization ICOM, and in the years 1948—57 was active on the editorial board of Museum and on the Commission for historical and archaeological museums. He took part in a number of international museum undertakings and he always contributed new incentives and ideas both on museology itself and on its practical application, particularly in the solution of conceptions of archaeological museums and, above all, of prehistorical exhibitions. In this sense he achieved a truly original solution for the “Prehistory of Czechoslovakia” exhibition at the National Museum in Praha, where for more than forty years he was Head of the Department of prehistory and protohistory.

In close connection with research efforts in prehistory, Jiří Neustupný endeavoured to deepen his own conception of museology. This manifested itself most markedly in his work “Museum a věda” (Museum and research), 1968, which can be considered as the peak of his museum theoretical efforts. In it he tried to solve the currently significant problem of the role of science in museums as well as the relationship between a museological approach and that of an individual branch of science. By the methodological level of this work he delimited not only the requirements for museological works (which was no matter of course at that time) but he also laid the foundations for solving the most important questions of museology which, today, have become the focal point on the pages of this issue of MuWoP.

From the very beginning, Jiří Neustupný understood that the question of putting museology across as a theoretical instrument of museum practice was not simply a matter for theoretical considerations by a limited number of students but that it must become the common cause of all museum workers. That is why, having obtained the degree of Assistant Professor in 1950, he managed to establish museology courses in prehistory at Charles University. Later on, he sought to apply this instruction to other branches finding their application in museums. He also welcomed very warmly the foundation of the Department of museology at J E Purkyně University in Brno, in 1963, and from the very outset he was one of its most active collaborators. This strengthened his efforts to establish a similar kind of museum education at Charles University, which were crowned with success in 1967 when the Centre of museological education was created, with the task not only of coordinating museology courses in the individual scientific branches but also of providing graduate courses in museology. Professor Neustupný achieved this aim step by step and the attainment of his goal required no small effort. In accordance with his own conception of museology he directed these studies primarily towards material sources. In this way he formed a whole system of education oriented in this manner.

This is why Jiří Neustupný's passing away is a great loss for Czech museology, both from the point of view of theoretical research and, above all, from that of museological education. Jiří Neustupný's personality was at the core of all these strivings. With his death the museological centre in
Praha loses a figure which is irreplaceable at the present time and there is therefore danger of interruption in the continuity of museological progress.

Jiří Neustupný's death is also a setback on the international forum. He was an acknowledged scientific authority. His ideas and viewpoints on the conception and role of museology have always had a wide impact amongst museum people and his loss will necessarily also manifest itself in the international museological community.

The work of Jiří Neustupný has come to an end and now as we take our leave of him in the pages of MuWoP we must bear in mind those principles which he continually observed in his museological work and with which he contributed to the formation of museology and to its inclusion within the framework of university education. This creative heritage of his should encourage all those who are currently engaged in similar work to continue strengthening the role of museology.

Jiří Neustupný’s most stimulating contributions to the development of museology will inevitably become a basic component of its conception. In this way the memory of Professor Dr Jiří Neustupný, DrSc, will become everlasting.

Z Z Stránský
MUSEOLOGY — SCIENCE OR JUST PRACTICAL MUSEUM WORK?

Introduction by the Editor

WHAT IN HEAVEN'S NAME IS MUSEOLOGY?

With this desperate question the Editor concluded his introduction to the discussion section of MuWoP No 1. After studying a survey on museology by V Toft Jensen among European museum professionals in 1975, this was all he could do. Confusion reigned supreme.

Nevertheless there was some hope of new light being shed on the matter. MuWoP — Museological Working Papers, the new international debate journal whose declared purpose was “to be an open forum for a permanent discussion on fundamental museological matters”, set about tackling the problem in its very first issue. No less than fifteen eminent experts from all over the world have their answers to MuWoP’s question: Museology — science or just practical museum work? Fifteen weighty basic papers were thus delivered on MuWoP’s theme 1, this fairly delimited question. What happened? Was the question resolved?

To expect such a result after many years of discussion and searching would be expecting a miracle. The very presentation of the fifteen basic papers in the Introductory summary pointed to a wide spectrum of views. However, certain points of contact could be identified, and an attempt can now be made to group the different views together.

The largest group regards museology as a discipline, a science or, rather, an emergent science. The view is also represented — though less widely — that museology is both a science and practical work, an art or an applied science.

The aim in MuWoP No 1, however, was not to solve the problem but to present and map the situation. This attempt has been highly successful as regards both the number of basic papers and the breadth of geographical representation.

The aim of encouraging an exchange of thoughts and viewpoints required the authors of the basic papers, but also other museum people, to discuss the problem in subsequent issues and, if possible, to arrive at a synthesis.

In this issue we are publishing MuWoP’s first round of discussion. Unfortunately only one of the contributing experts from MuWoP No 1, ZBYNĚK Z STRANSKÝ, has responded to the challenge in MuWoP No 1 “not just (to) rest on their laurels but (to) enter the battlefield ….” Six new combatants, however, have entered the scene to join issue with him. All six represent more or less the view that museology has already become, or is in the process of becoming, an independent discipline, a science. FLORA S KAPLAN expounds her views, like Stránský, by analysing all or nearly all the basic papers in MuWoP No 1. ILSE JAHN does the same on a limited scale, in the sense of replying to fewer authors, as does JUDITH K SPIELBAUER, who on the other hand puts forward a comprehensive paper containing an advanced general analysis setting out her own views of the problem. Finally we have contributions by JOSEF BENĚŠ and JERZY SWIECIMSKI, which are also general essays based on the cavalcade of opinions from MuWoP No 1 but first and foremost comprising their own systematically arranged concepts of museology — new basic papers, one might say. Our discussion must also include viewpoints on museology presented by G ELLIS BURCAW in a contribution published in our Contacts — opinions — confrontations.

The main tenor of their contributions is as follows.

Continued overleaf
Josef Beneš: “Today no activities of social importance... can be realized successfully without the knowledge of the respective theory... I cannot see any reason why exactly museology should form an exception and realize its special activities without a theoretically founded museological basis.”

G Ellis Burcaw: “…I agree that in western countries, at least, museology is not a science; but with east Europeans I agree that where it is not yet a science it ought to be and will be someday.”

Ilse Jahn: “In our country — as in some others — museology already has the significant features of a real discipline, while in certain other countries this state has perhaps not yet been reached.”

Flora S Kaplan: “I consider it useful to think of museology as a social science... In my view, hypotheses testing and theory building have as their goal, not so much the setting forth of irrefutable laws, using controlled experiments as proofs, but the discovery of meaningful and perhaps, predictable patterns of behavior, expressed in actions and artifacts. These could lead to an understanding of the phenomenon of museums.”

Judith K Spielbauer: “I consider museology to be a developing science, with all of the concomitant problems and potential such a designation presents to us... We do not, as yet, have consensus within the profession as to the essence, intent and appropriate direction of the discipline. When we can resolve this problem and develop the necessary formal body of theory, structure and data, the result will be recognition...”

Jerzy Świecimski: “...museology has the same position as the theory or history of art, which need some field of facts as a basis on which to grow. Theory and history of art are necessary to understand art. On the other hand they are needed by art, because they help the artist to build up his consciousness of what he is creating. But they do not create art directly. Nor are they art themselves. In the same sense, museology is not practical museum work.”

Our basis of discussion has been further widened, so where do we go from here? According to the plan presented by your Editor in MuWoP No 1, contributions landing on the editorial table after the appearance of MuWoP No 2 will also be published.

If, on the other hand, we feel that everybody has said what they have to say, we will proceed to the next stage, that of summarizing and evaluating the discussion on theme 1. Our dream is for a special working group of experts to be convened to carry out this task in the form of a small live symposium. And of course, the conclusions will be published in the following issue of MuWoP.

But now for the discussion and the new viewpoints! And remember, all ideas and viewpoints are welcome. Do you agree with the other contributors or some of them, and if so, why? Or in what way do you disagree? Drop us a line!
A contribution towards clarifying the conception of museology

I welcome very much the publication of the Museological Working Papers-MuWoP, an international platform for the exchange of views on museology. It does not make any difference that various authors contributing to the papers adhere to various approaches and use different terminology, due to different traditions, background knowledge of literature and also due to the attitudes of their given scientific discipline towards museum and its social mission. It does not matter that we have not achieved unity, neither in views, nor in terminology and that we do not use a codified language of a generally acknowledged scientific system. Museology as a young scientific discipline, still at the stage of birth, has not been able to get clear of its "children's complaint", in contrast to many long established scientific disciplines. There is only a single thing I consider unacceptable, namely the views that museum activities do not need any theoretical basis. Today no activities of social importance, no matter whether in the productive or non-productive spheres, can be realized successfully without the knowledge of the respective theory; theory, to wit, determines the principles of work on the required level, far beyond the range of mere pragmatism. I cannot see any reason why exactly museology should form an exception and realize its special activities without a theoretically founded museological basis.

In my opinion the contradictions consist in the fact that the individual authors approach museology from rather narrow and limited viewpoints. That's why I have started my paper with tackling exactly this problem, before dealing with the subject of museology proper.

1 Approach to the concept of museology

Ignoring the links and relations is a very serious shortcoming in cases when one's attitude is directed by the aspects of branch research exclusively or by the interests of a single type of museum, or with the problem of the museum system in its isolated sense.

1.1 Limiting the aspects to the research in a given branch can be explained by the fact that each museum professional has specialized in special research, the methods of which are known to him from his studies. He, however, does not differentiate between a museum with several other functions and between a research institute, underestimates the importance of the care of the collections and their use for educational purposes. Analogically we could expect that a university professor would prefer research to the detriment of the teaching process, but the mission of the university puts priorities in the opposite order. Museum professionals are inclined to accept the scientific character of the research activities of their discipline only, not recognizing the scientific character of other museum activities, or identifying it mistakenly with the scientific character of their own discipline. There are such paradoxical situations that a museum professional using exact scientific methods in the research of his own discipline, is working at the same time as an amateur in other fields of museum activities, making use of his common sense and experience, or of the mass of knowledge published by his colleagues, i.e. without any theoretical basis. If we transfer this approach by analogy to the sphere of education, it would remind us of a teacher perfectly mastering his subject, e.g. geography or mathematics, but without any knowledge of pedagogy, as a general basis, and of theory and method of teaching the given subject, as a special part of his professional qualifications and necessary training.

1.2 Limiting the aspects to the museum proper, respectively to museums of the same profile, results in non-objective evaluation of the individual activities that should be seen in the whole complexity of the branch system, i.e. including the managing and controlling units securing the conditions required for the activities of the individual institutions, determining their concrete tasks, providing professional methodical assistance and training of the museum professionals. The same holds also for museologists active in the spheres of theory and methodology securing in due time the necessary preconditions for the development of the domain of museums in the form of a worked-out theory and methodologies of the individual activities of the system approached in a uniform way. The system of the domain of museums often lacks appreciation, or is at least underestimated and most languages even lack the term adequate to the German Museumswesen or to the French domaine de musées, Polish muzealnictwo or Czech muzejnictví, and the notion must be expressed periphrastically (compare Spanish asuntos de mu-
1.3 *Any approach from the viewpoint of the interests of the domain of museums* neglects the links of the branch with the sector of cultural legacy, one of the joint features of the two branches is to preserve for the future and to apply at present the important documents forming part of our cultural wealth, original sources of scientific study and means of education influencing the development of society, not only the development of culture, science and education. The prestige of the domain of museums (system of museum work) and of the museum profession depends very much on the degree of applying the instruments of work of the museum. In contrast to monumental care and environmental protection preserving important objects in situ, the task of the domain of museums, libraries and archives is to preserve certain selected mobile documents in fondo, namely objects belonging to various branches; in the case of museums, objects belonging to the material culture, in libraries, printed matter and in archives written documents in general. These objects and documents are the instruments of their labour, and the corpus of their collections is formed according to these criteria. The heterogenous character of museum documents, comprising artifacts and naturefacts of hundreds of types of very different objects, belonging roughly to some scientific branches represented in the museum collections, has led to the wrong conclusion that these different documents of the natural and social development have nothing in common and that each single discipline determines its own criteria of selection, working methods and ways of their application. By the way, in most cases only their documentary value for research is taken into account, while the cultural value of the object and its educative value are mostly neglected, or in some cases they are identified with their documentary value. These different approaches to museum objects have caused that the instrument of labour (the subject matter) of the domain of museums has not been theoretically explained; the relative homogeneity of the objects gathered in libraries and archives have resulted in considerable progress in this direction.

2 Domain of museums, museology and museum competence

The most important requirement of a theoretically well-based work is the explanation of terms (categories) as a prerequisite for successful communication between professionals.

2.1 *The domain of museums*, in my view, is a specialized branch of activities in the sector of culture, which in the interest of society provides for the preservation and application of certain selected material documents of the development of nature and society. The original documentary character of these objects motivates and substantiates their removal from their original environment and attaching them to the museum collections. As a sub-system in the system of cultural legacy the domain of museums (or museum system) has been attached legislatively to the state administration, it has its own institutional basis, its own history and international organization providing for co-operation. As every original and individual branch of human activities it cannot do without a special theory worked out by theoretical-methodological institutes, usually providing also for the teaching of museology. If we use an analogy with school, i.e. with education in general, realizing its social mission through specific teaching and educative activities, we can see that the domain of museum comprises the same components, including pedagogy, teaching methodology and other professional features, in addition to its basic discipline.

2.2 *Museology*, the theory and methodologies of the domain of museums, studies the development of museological thinking and practice, formulates the objectives, methods and means and ways of work with material documents in their entire hierarchy of activities, beginning with managerial work and ending with the practical realization of concrete tasks in the individual institutes of the museum network. The purpose of this theory is to offer the required theoretical basis to all activities in the domain of museums, for improving the standard of all related activities. Museology thus creates from partial and isolated pieces of knowledge a complex scientific system, using special terminology and securing the necessary prerequisites for professional training of the personnel. Museology thus has its own subject of study, social raison d'être, its own system of conclusions, i.e. it can anticipate, plan and control the development of the domain of museums in the future. Its basic principles have general validity and they form the system of general museology. The application of the general principles in the practical work of the individual disciplines, respecting the special features of their instruments of labour and differentiated orientation provide for branch modifications, worked out by the specialized branches of museology for each individual scientific branch.

2.3 *The museum worker* is the final executive link in the system and his duty is to realize the practical tasks. Each museum worker has studied a special branch, such as geology, archaeology, history, etc, and in addition should be trained in museology. A basic knowledge of the problems of the history and theory of museology should be acquired.

The museum worker should be acquainted with the basic problems of history and theory as a full-time student, and his day-release or postgradual study should concentrate on his particular branch. University graduates who during their studies did not hear a single word about the mission and problems of the domain of museums and have not been prepared for studying museological literature, will hardly become fully efficient museum workers. It is therefore in their own interest, as well as in the interest of the museum and of the whole society, to let them acquire the necessary museological training and education and to deepen their knowledge through systematic studies, similarly as doctors or teachers do. In case the museum worker specializes in the study of theory and methodology of museum activities, he can work also as a theoretician of the branch, i.e. as a museologist, or "museographer" as he is called officially in Romania, and be active beyond the limits of the work of an ordinary museum worker.

3 The subject of museology as a theory, doctrine and science

In my view the subject matter of museology can be only a set of specialized activities, with the help of which the domain of museums is realizing its social mission, namely through mediation of its instrument of labour on the one hand, and through its institutional system, on the other. The subject matter of museology cannot be formed by the museum proper, nor by the museum objects or museality, or the concrete discipline on which the museum collection is oriented. This standpoint is explained like this:

3.1 *The museum proper cannot form the subject of museology*, since it is only an executive instance, it is an institution inside the system, having its partial share in the total contribution of the domain of museums for the society, in line with its profile and the extent of its activities. Similarly the school as such cannot form the subject matter of pedagogy — according to its profile it realizes only part of the overall programme of the educational system as a branch;
3.2 Museum matters cannot form the subject of museology (Czech "muzeálie" = museum object) — it is only an instrument of work of the given branch. This is one of the most important features distinguishing the domain of museums from the domains of libraries and archives, which also work with mobile matters and whose character is the basic differentiating criterion between these related documentary branches.

3.3 Museality (German "Musealität" = museum value) as a determining character of the working instrument of the domain of museums cannot form the subject matter of museology since it is only one of its criteria, enabling us to differentiate a museum object from other artifacts (or nature facts for that matter), lacking the necessary documentary value, and thus it cannot be added to the collection;

3.4 The individual discipline making use of certain types of artifacts as original sources of scientific study, and for this reason represented in the museum, cannot be the subject matter of museology, since archaeology, geology, history, etc., as sciences basically differ from museology as a science, whose basic feature is a theoretically well founded approach to the objectives, means and forms of museum activities in a complex way, so that it is not studied nor programmatically covered by any branch discipline. The application of branch interests and needs on the museum, as it is sometimes realized in various disciplines and in various degree, is a modification of the museological principles and their adapting to the conditions of the given branch. Certainly it is not a concession of the given discipline to the conditions and needs of the museum;

3.5 The specific relation of man to reality resulting in the need to preserve the artifacts of durable documentary value cannot form the subject of museology since it conditions the character of the whole sphere of cultural legacy, without specifying the instrument of work. It forms a common basis for all branches preserving and socially applying the selected cultural values, and, as explained above, each of them has a different instrument of work. Besides, in this formulation we are concerned mainly with the relation of the subject as regards individual approach, not the interests of the society, and thus it holds also for the preservation of personal keepsakes and relics, as well as works of art in private collections; the latter can by no means be classed as public activities realized in the interest of the human society, and thus it is not controlled by and sometimes financed from public means — in various extent and degree, depending on the given social system.

4 General characteristics of the relation between the domain of museums and museology

4.1 The domain of museums is characterized by the following moments:

a) special branch of the culture, a sub-system in the sector of cultural legacy, serving for the preservation and application of the documents for culture, science and education;

b) its concrete social mission consists in preserving and applying museum objects as cultural legacy in general. It is the preservation and use of original sources of scientific study and means of education and their potential practical use;

c) administrative division in line with the valid legislative standards, providing for orientation and control by the state organs, very much in line with development plans;

d) its institutional basis is formed by a network of special equipment in horizontal (museum profile), and vertical (national, regional or local) approaches, from the viewpoint of control, management and professional assistance;

e) disciplines represented — all scientific branches working with material documents for the scientific study of natural and social processes.

4.2 Museology is characterized by the following moments:

a) the relation of the domain of museums as a branch of culture to the theory of each branch, conditioning the increase of the standard of all kinds of activities from the viewpoint of control and management, realization of the work and training of professionals;

b) institutional basis: theoretical-methodical institution within the network of museums, research and pedagogical university institutions, both of them staffed with museologists-highly trained professionals of the branch and realizing a lot of publication activities;

c) subject of study: specific activities in the branch of the domain of museums, with special regards to their development from the past to the present situation, in connection with the whole sphere of cultural legacy;

d) objectives and application: to formulate the principles of all main activities and organization of work in the domain of museums in order to improve the standard of work and upgrade the education of museum professionals;

e) research methods: systematic study of the past and present practice, analysis of the knowledge published in the special literature, its evaluation from the viewpoint of the studied objectives, their synthesis through the formulation of generally valid principles for professional activities in the domain of museums;

f) system of knowledge: a system of understanding the problem in an interdisciplinary context, expressed by professional terminology, divided into general museology and specialized branch museology of all the disciplines covered by museums.

Relation of general museology to specialized museologies can be explained also from the viewpoints of the proportions of history, theory and methodologies as necessary components in their study systems. It can be graphically explained by the following simple diagram:

![Diagram]

This analysis, however, does not mean that all the preconditions of museology have been realized. Most of the work is still in its preparatory phase and this phase must be rapidly overcome through purposeful museological work. A quicker advance in this field is being forced by the actual needs of the museological teaching at the universities.
In my paper “Museology — a discipline of research and teaching in museums of natural history...” in Neue Museums-kunde, 22 (1979), 23 (1980) I have shown that there are many different concepts on museology in present day literature. Most of them deal with the role of the institution “museum” and its tasks in society as the main object of museological studies. The articles in MuWoP No 1 have shown the same features. There are three major lines of opinion on the subjects of museology; most of them deal with the applied aspects of and the methodological and technical approaches to the work of museums.

This state of museology has been maintained for the last 100 years. In my above-mentioned paper I tried to show that this is a typical developmental stage of a new not very well established discipline, which can only change in response to special social demands, and which may advance at different rates in different social systems.

Today the need for conservation is generally felt throughout the world. It is therefore essential to promote and make readily available a thorough knowledge of good museological practices, i.e. the possibility of rapidly learning how to collect and to preserve, to document and to communicate etc., both natural and social authentic or “witness” objects (“Sachzeugen” or “musealia”). Such knowledge is necessary not only for the work within museums, but also in other institutions which collect and preserve authentic objects for research or teaching purposes, and also for private collectors who often intend to give their collections to a museum in the future.

It is therefore not sufficient to treat only the institutional aspect (“museum and society”) as the constitutive idea of museology. On the contrary, it is essential to have a theoretical basis which better responds to the cognitive or gnoseological contents of a scientific discipline, as it is stated for example by Z. Z. Stránský. In this respect I fully agree with the statements in the basic papers of K. Schreiner and Z. Z. Stránský in MuWoP No 1.

Moreover, I should like to stress that the accumulation, communication, and tradition of knowledge would best be realized by means of an appropriate teaching system, i.e. a chair of museology within the university. It would then be possible to stimulate special research and to obtain a degree by means of museological dissertations, as is already possible at the J E Purkyně University in Brno, Czechoslovakia, for example, and other universities (Kraków, Wrocław, Zagreb, etc.). We have a “Dozentur” of museology in the GDR since 1980 (especially for natural history related fields) at the Humboldt-University in Berlin, where it is now possible to obtain a degree (Diploma, Doctor, and Doctor of Science) based on special museological subjects such as the theory and methods of thesaurisation, documentation, and exhibition work. There is not yet a fixed system of direct or postgraduate study, as in Brno, but this will soon be created, as it is socially necessary for all museologists and aspiring museologists, to have a common basic knowledge.

In conclusion, I should like to say, therefore, that in our country — as in some others — museology already has the significant features of a real discipline, while in certain other countries this state has perhaps not yet been reached. I have illustrated my theories in a diagram (Neue Museums-kunde, 23 (1980), 271), which will be modified for my next contribution to MuWoP.
Toward a science of museology: comments and a supposition

The historic first issue of the *Museological Working Papers* (1980) set out to assess the current status of museology, and to initiate an ongoing international dialogue. It posed the question, "Museology — science or just practical museum work?" It is my task to comment on that issue, and to add my own thoughts on the subject.

Fifteen museologists from Australia, Great Britain, Canada, Czechoslovakia, France, Germany, Japan, Syria, Sweden, Union of Soviet Socialist Republics, and the United States of America responded to the query. Their answers to the question reveal a consensus, despite the range of opinion expressed. Most of the respondents considered museology either a science (Gregorová, Czechoslovakia; Lewis, Great Britain; Neustupný, Czechoslovakia; Schreiner, German Democratic Republic; Zouhdi, Syria), or an emerging science (Reynolds, Australia; Stránský, Czechoslovakia; Tsuruta, Japan). For some it was both a science and practical work (Hubendick, Sweden; Scala, USA). One was inconclusive (Porter, USA); and two others saw it as an "art" (Desvallées, France; Lemieux, Canada). Only two (Piščulin, USSR; Swauger, USA) saw it as just applied.

In his answer to this ubiquitous question, B Zouhdi, of the National Museum and the University of Damascus, Syria, quoted an anonymous author who wrote with relief, in 1883, that serious consideration of museology as a science would now no longer arouse "either a compassionate, or a contemptuous smile among many people" (1980, 50). It is itself a commentary that after nearly one hundred years the question remains a central issue, to be considered as the theme of the first International Committee for Museology, of the International Council of Museums.

The *Museological Working Papers* marks an important advance. Its birth in Sweden was facilitated by the energy and vision of Dr Vínoš Sofka, and was welcomed formally by the distinguished scholar and museologist, Dr Jan Jelinek. J Jelinek tellingly describes the historical process and the social and political changes that underly the founding of the journal, a theoretical and speculative professional platform at the university level. Essential to this endeavour, he says, are the "specialists in the theory of documentation, in social anthropology applied to cultural activities of modern museums, in the theory of conservation, and in the theory of education by means of three dimensional objects and in many other subjects" (1980, 4). He further notes that new methods of documentation and dissemination of information, or misinformation, knowledge or illusion at the same time — photography, cinema, video, and the computer — herald a "new human era", in which museums are "living cultural centers and not only sanctuaries" (1980, 5).

The new journal creates an opportunity for communication and discussion which are integral to the establishment of museology as a profession and separate discipline. Among the hallmarks of any new discipline are a body of extant and cumulative knowledge, full-time practitioners, and the teaching of the subject in colleges and universities, degrees, and professional journals and publications. All of these are found in museology today. But is it a science? The question posed in the first issue acquaints us with a broad spectrum of ideas. While the question is certainly not a new one, the forum is; and in gathering and disseminating cross-cultural thinking on the subject, the *Museological Working Papers* has made an important contribution. The journal creates a self-conscious and heightened awareness of the tasks of theory that lie ahead; it brings museum professionals closer to realizing their common purpose, concerns, and standards, within the world framework of ICOM.

The fifteen museologists writing in the first issue agreed there was indeed a discipline of museology, scientific in nature, if not in fact, at this time. They also agreed the museum, as an institution, was somehow special, requiring specialized knowledge of its history, methods, techniques and functions. They identified aspects of the museum in general, and of museums, in particular, with their reliance on the artifact and/or collections; on their activities and/or functions; and their relationship to recognized disciplines. To these commonly perceived aspects each of the respondents added his or her own voice to consensus, and individual insights, emphases, and models for consideration. These may each be examined in greater detail in the first issue of the *Museological Working Papers*.

This issue also includes the results of a 1975 international survey of museological views, by V Toft Jensen of Denmark, based on fifty-three detailed answers from ten countries. Like the fifteen museologists queried later in 1979, in the same issue, the survey exhibits a similar range
of variation, concerns, and a consensus. There is general agreement on what constitutes the main ideas and practices of the profession, on the need to define museology as either an independent or applied science, and on the existence of a "museum profession", apart from the disciplinary ones (1980, 6-9).

Similarly, the Editorial Board reports their four-pronged effort to define the concept of museology. "As the museum is the only institution which performs all of the sociocultural functions, museology might also be defined as the science of the museum and its roles and functions in society", Jensen observes (1980, 11). Klausewitz characterizes it as "a socio-cultural phenomenon and as a scientific institution with its specific functions in object documentation, research and education" (1980, 11). Razgon elaborates these points, and divides museology into three main categories (1980, 11):

A Museum system and the museum as a historically conditioned social institution, its functions and internal organization.

B Specific aspects of primary objects gathered and kept in museum collections for scientific and educational use.

C Special aspects for studying the events, natural and social phenomena corresponding to the profile of the given museum.

Sofka stresses human activities which "give the museum institution the character of a remarkable combination of original object store and information base, research institution and at the same time a medium for mass education." He, too, sees it as a socio-cultural institution, and "the idea and philosophy behind the museum, its aims, organization, development and role in society — constitutes the chief purpose of museology and museological research and gives to it its name" (1980, 12).

These editorial views, the surveys, and my own concept conceive museology as an independent discipline, a profession which is scientific in nature. The definition of science, therefore, is relevant here, and Gregorová, Hubendick, Lemieux, Lewis, Reynolds, Schreiner, Swauger, and Zouhdi take particular time and trouble to define it, with differing results. But in general, it is seen as a systematic body of knowledge, based on observable phenomena, and capable of experimentation and replication, for the purpose of arriving at underlying laws and principles, or for grasping the nature of the phenomena that is the subject of study, namely, museums.

I consider it useful to think of museology as a social science, as Reynolds and others do (1980, 34). In my view, hypotheses testing and theory building have as their goal, not so much the setting forth of irrefutable laws, using controlled experiments as proofs, but the discovery of meaningful and perhaps, predictable patterns of behavior, expressed in actions and artifacts. These could lead to an understanding of the phenomenon of museums. Neustupný calls attention to the considerable extensions and regroupings that even the most classical academic disciplines have undergone in recent decades. As a consequence of such changes, he says, "theory" and "discipline" are now almost synonymous terms (1980, 28). Lewis agrees, seeing a similar relationship between science, theory, and discipline. Neustupný is more concerned with the existence of the discipline of museology, than with a prejudgement of a science. He finds noteworthy the distinction made by German colleagues. They see museology as an interdisciplinary science; and he himself calls it an heterogenous discipline (1980, 28).

Neustupný's observation that museology is "very close to the contemporary sociology or theory of culture" (1980, 28) supports my supposition regarding the nature of museology. Based on museum experience and reflections in the course of university teaching of the subject, I have come to view museums as themselves cultural artifacts and social nodes in societies that have or are developing a centralized political organization, i.e., states. They embody and reflect through collections, their arrangement and use, a philosophy, knowledge, world view, and values through which the given society forms, perpetuates, and reconstitutes itself anew. This, of course, is only one of many suppositions and working hypotheses that will, in time, bring us closer to a science of museology, or force us to revise our notions. In any event, we will come closer to a deeper understanding of the subject that so challenges, occupies, and engages us all.

Museologists agree there is some confusion about what constitutes theory in museology, and find a lack of theory, in general. Stránský puts the current case succinctly (1980, 43-44); Lewis both reviews the paths to science and issues a call for action (1980, 26-27). It seems to me some of the confusion arises from the following: the mixing of levels of analysis, so that the institution, its activities, goals, techniques, are equated with theory — which should, rather, serve to explain or account for them; the pairing of micro and macro research interests, when one or the other must be given tentative precedence in theory building. Otherwise, they must be related to a meta-theory. In some cases, the presence and application of different disciplines in museums — their teaching, research, methods, techniques, and theories — are taken for those of museology.

Presently, most of the considerable knowledge about museums is, as Neustupný declares, "descriptive" (1980, 28). The speculations generated and shared in the first Museological Working Papers move us more firmly towards a science of museology. To this end, I have directed my conjectures and comments.
I will begin by stating that along many of the contributors to MuWoP No 1, I consider museology to be a developing science, with all of the concomitant problems and potential such a designation presents to us. Much that needed to have been said, as a base for discussion, has been very well established in these previous papers through the definitions provided for museology, museography, and science and in the enumeration of fundamental museum functions. In referencing these, they need not be repeated here. Before discussing some of the problems and potentials in applying scientific method to museology, I would like to briefly comment on two subsidiary concerns that arise from the discussions in MuWoP No 1.

First, there appears to be an underlying wish to have museology recognized as a science by becoming a discipline accepted by the academic world. The subtle assumption seems to be that if we have a place in the university, we will gain in prestige, support and position in the broader community, gain unanimity within the museum profession as a whole, and be transformed into a valid science. In spite of my own vested interests in the recognition of museology as an independent and valid discipline with a place in academia, I must express concern about the effect such an assumption, even casually voiced, will have both internally and externally for museology. Validity and concomitantly recognition, as Reynolds suggests, derive from the internal integrity, structure and methodology of the science itself, not from external acceptance or association. We do not, as yet, have consensus within the profession as to the essence, intent and appropriate direction of the discipline. When we can resolve this problem and develop the necessary formal body of theory, structure and data, the result will be recognition by both the profession and academia, and through that, by the wider community. This is not a question of the validity of museums, museum work or even museology and the training of museologists, and I do not imply by these statements that efforts towards the development of adequate and consistent training in museography and the fundamental increase in museological knowledge and understanding at the university level should cease. I mean simply that to attempt to link museology as a science with its academic affiliation, or even the reverse, will in the long run do a disservice to the potential scientific aspect of the discipline. Its place as a valid discipline can be as effectively and equally based on humanistic and/or socially defined planes. There is a convenience to university affiliation, but such association is not necessary for the development of science or the validity of the discipline. If, indeed, museology is a science, it must be so on the basis of firm, valid and independent theory, and methodology, that is at home in either the museum or the university.

Second, there has been made both a stated or implied distinction between the science of museums as museology and the other recognized and established sciences that museologist and museum workers use in fulfilling many of the functions allocated to the museum as an institution, and the equation of these sciences with museology as the source from which museology gains its scientific nature. It is the distinction that must be emphasized. If museology exists as a science, it is more than the simple sum of its parts, seen often as the various museum functions, and much more than the borrowing of concepts, theory or methodology from associated disciplines. Museology must provide a broad, encompassing theoretical framework in which the interaction of all these individual elements is interpreted and understood in explanation of problems and situations unique to the museum in its broadest definition. Science is a dynamic process, as well as a body of organized data, facts and observations. There is continual readjustment in form and substance as new fact demands reformulation of theory and reformulated theory structures the perception of new fact. The goal is explanation and in explanation, the prediction and control of phenomenological and ideational fact. To be a science, museology must be independently capable of this action. The presence of data within our museological universe that is shared with other sciences or the utilization of these sciences for museological ends should cause no great concern or confusion, for it is not the subject matter but the theory that determines the character of a science. Theory allows us to see relevance in observation, identity in fact and significance in interrelationships. Each science has a unique perspective that is brought to bear on a shared universe. The commonality of that universe, or a segment therein, can not, by itself, make or negate the uniqueness of any approach, nor should it discourage scientific development. Our difficulties lie not in defining or in sharing the data base, but in elucidating the unique theoretical structure of museology through which we examine, interpret and explain that data base.

Many of the problems and potentials of museology as a
functioning science are currently based in the formulation of this theory and in the understanding of the role of theory in the full context of scientific method. All of us operate within a theoretical structure. It is an essential part of being human as well as being a museologist. The current variability in perceptions of that theory is found not in the fact of use, but in the degree of awareness, conscious formal expression and, therefore, the significance that we give to the particular part of our theoretical framework that we apply to our work in and understanding of museums. For museology to be a science, the theoretical structure in current use must be capable of simple, clear, and unequivocal statement. The interrelationships set forth in our working theory must be viewed in concert with our current understanding of museological fact, the basic axioms and postulates that we accept, and the problems that we perceive of as in need of resolution. These aspects, which can be in part uniquely museological, combine with rigor, controlability and objectivity as integrated aspects in the dynamic process of science.

As an independent science, museology must share with science as a whole the primary axioms and postulates that state the basic conceptualizations about the orderliness, regularity and uniformity of nature, the natural basis of human behavior, the knowability of nature and thus human behavior, and the relativity and provability of truth. The appearance of generality and self-evident simplicity in axioms and postulates hides the profound effect that such statements have for structure and logic of science in general and in turn for museology in particular. Museology, as a science, must consider the ramifications inherent in all such statements, and elucidate clearly the additional underlying principles concerning human interaction with the tangible world that may derive from the unique perspective of museology. What we must guard against is the substitution of platitudes for postulates and the assumption that our easily and commonly made statements on the value of, collection of, or function of ideas and objects within the museum are somehow self-evident and thus true and, therefore, not in need of analysis and proof. Nothing in science is self-evident and truth is relative. Axioms and postulates are structured by the constraints of logic and scientific methodology and allow for the analysis and understanding of the perceived phenomenological and ideational universe and are stated specifically and emphatically as the basis for the logic of any scientific inquiry.

It is of equal importance in meeting the necessary requirements of scientific inquiry to evaluate the form and intent of the questions being asked. Not every problem faced by the museum needs scientific analysis for resolution, just as not all activities of the museum must be scientifically based. The questions asked by museologists as scientists, however, are structured and delineated by the dictates of scientific method. Formulating each problem into a clear, unambiguous and objective question capable of scientific analysis is not a simple process, since we all build into our thought and vocabulary values, biases and predispositions. Without implying an original scientific intent on the part of the authors, allow me to suggest, as an example, that even the title of MuWoP No 1 would not be acceptable as a scientific question, for it implies a prejudgement as to the relative values of science and practical museum work through the inclusion of the word “just”. The questions that we need to ask now in consolidating a scientific museological theory are only tangentially concerned with the complex method and technique “how to” questions of everyday museum activities. Current museological science must resolve questions of “why” and of the methodological “how”. We all use in our work a generalizing knowledge and understanding of museums, museum history, functions, and goals. It is because of that general background that the fundamental questions such as “Why should museums exist?” and some of those expressed by Piicultin and others, seem to have been already answered. All of us can create a long list of reasons and rationales in answer to such questions, most answers, if not all, having no basis in scientific explanation. Dependence on historical fact and analogy, feelings about the nature of human interaction with the tangible world, general comments on the goodness, meaning, and practicality of collections for the human spirit, for posterity or for the development of “civilization” may be good for increasing monetary support and museum personnel, but have no place in science. An understanding of the crucial variables in the museum universe and in the museum’s place as an integrated part of the larger society, individual or pan-human, can not result from the definition of categories or terms, from the description of phenomena, or from statements whose only claim to truth and validity is founded in common usage and repetition.

Confidence in determining the variables and interrelationships that answer the fundamental “why” questions and form the basis for subsequent questions comes only through control of the analytical process and of the gathering of appropriate data. Control need not always take the form of traditional experimental procedures so closely associated with some of the physical sciences. Museology, if it is a science can only operate as one of the social sciences, since, in spite of the tangible nature of museum collections, their existence and significance can only be found within the realm of human social behavior. Being a social science, museology must deal with aspects of control that are not easily solved by simply placing data into an established formula and calculating the results. We must deal with multidimensional social phenomena and seek guidelines from those sciences that have already begun to find solutions for the methodological problems currently perceived in the study of human behavior. While we, as other social scientists, can not yet determine analytically the reasoning that stimulates behavior, human behavior, itself is observable and in its empirical nature is capable of scientific control and understanding. This ability to potentially understand human behavior and its manifestation within the museum universe is of special importance to us as museological scientists since we are ourselves so much a part of the museological data we seek to understand. Use of the strictures placed on analysis by the scientific method are of extreme importance in developing an objective understanding and in controlling the available data base. We are seldom free to stand back and impartially observe museum phenomena, since our own actions are frequently the very subject of analysis. Even if we should eventually be dissuaded from museology as a science, the adoption of scientific methodology may have its own reward in providing a mechanism for understanding ourselves, and our own actions in and impact on that museum universe we serve.

There is yet one other aspect of museology as a science that must be mentioned as it is shared with all the orientations given the term museology. This is an aspect of value and places us in the middle of an unresolved debate within the scientific community. We have within our reponsibilities more than the maintenance and understanding of the current museum world. Our concerns must also consider what should be the case, or in other words, what constitutes a good museum. Whether or not such questions of value can be encompassed within scientific analysis is not a problem that can be resolved here, but awareness that we must function effectively in both spheres will prevent unsuspected interference of one realm with the other. I am, myself, not yet convinced that value can not be scientifically studied and until persuaded to the contrary by logical argument, will not give up the potential that such analysis has for museology. I am not speaking here of the value judgements that are a part of our everyday life and which may find their way as a falsifying element into scientific analysis. What I would an-
participate is the ability of museology as a science to analyze in correctly definable terms the questions of value that are based on the nature of museum interrelationships with society.

Before ending I would like to comment on what I feel is perhaps the most provocative concept for museology to have been stated in MuWoP No 1 and which is found in the comments of Gregorová. It would not surprise me to find that the future developments in museological science will be to move away from the conceptualization of the museum as the all inclusive universe to that of the museum as a vehicle, albeit a primary one, for understanding humanity and its relations to what Gregorová and others have termed reality. Without getting involved in a semantic discussion as to which of the multiple meanings of the term “reality” is intended, I would hope that consideration will be given to the impact and potential such a shift in conceptual orientation has for the scientific dimension of museology. Such a shift may allow us to step back from the confines of the limited perspective that analysis of a social institution deriving from a specific historical context presents to us. The museum is not a pan-human institution, currently or historically. What is pan-human is the necessity of a relationship between people and “reality”, however specifically defined. An understanding of the common basis of the relationship would open a whole new realm of knowledge to the specific roles of the museum in both past and present society and of the potential significance of the institution for the future.

I have attempted here to list some of the areas of potential difficulty and concern for museologists who would function as scientists. The initial papers in MuWoP No 1 have dealt effectively with establishing the differing perspectives between museology as a science and museology as practical museum work, and individuals on either side of the debate will not be persuaded to the other until more specific scientific analysis is completed or is attempted and found lacking. If museology is to continue developing in the direction of scientific explanation and control, as I believe it can, that development must be based on the actual scientific analysis of museological questions. Science is time consuming, hard work and more often than not lacks the immediate satisfaction that can be gained in the daily activities of a museum. There must be a purposeful decision on the part of individuals to invest this time and energy since the structures of scientific analysis exist as a whole and we can not arbitrarily choose those aspects of methodology in which we wish to partake and neglect those in which we have no interest.

While not every museologist should necessarily stop what they are currently doing and begin a new life as a scientist, each of us should demand of those who claim science as the basis for decision making that they meet completely the criteria established by the scientific community. Museology is a multifaceted, unique configuration within the totality of human knowledge and, without a doubt, has a potentially significant role to play in human life, today and in the future. Science is not the only basis for maintaining the viability of museums, but it does present us with a new source of understanding to supplement the already extensive range of museological knowledge.
Questions are gates leading to the truth

Chinese proverb

It was a pleasant surprise to obtain the first number of MuWoP. When I took it into my hands I was overwhelmed with curiosity: what were the answers to that provoking question?

First I scanned its pages cursorily, then I studied the whole material in detail, preparing an analytical conspectus. However, I have come to the same conclusion in both cases: the conception of museology has remained full of contradictions — just as it was more than fifteen years ago when I made an attempt to define the individual types of differences in opinion, and as I specified later in the early nineteen-seventies (Stránský 1966, 1974).

Does it mean that in the recent years there has been no substantial progress in museological thinking? Not at all. This would be a false conclusion!

Let us take into consideration the quantitative growth of museological literature during the past decade, as documented by national and international museological bibliographies. I do not have in mind the production of articles in periodicals only, but of all the large amount of important monographs (International museological bibliography, 1967).

Let us mention the development of courses in museology, forming part of the curriculum at universities on every continent; it has become an obligatory part of every museum worker's qualifications (Training of museum personnel, 1970; Museum training at university level, 1980).

Let us mention the foundation of the International Committee for Museology of ICOM, a fact significant of far-reaching changes in the approach in general. I can document it with my own experience too. In 1964 I asked the Director of ICOM whether it would not be useful to create a committee for museology within the framework of ICOM and he turned to me with a condescending smile and with the question: "What for?"

Perhaps, the most telling document of the deep changes in the approach of museological workers to museology is the very existence of the first issue of MuWoP, anticipating an even more important project, the Treatise of Museology.

But why — in spite of the evident progress in the development of museology — am I forced to state with regards to the first issue of MuWoP that the conception proper of museology is as contradictory and antagonistic as ever?

The answer to this question lies in the individual statements of the participants of the first round of the international discussion on the question: Museology — science or just practical museum work?

1 Not all participants of the discussion fully realize the whole meaning of the question. No doubt, everybody has the right to choose his own approach. I fully understand the use of the essay to elaborate these points of view. Comparing the management of a museum with the work of a conductor — as Lemieux did — is certainly evocative, but the author of this metaphorical approach does not seem to realize that the art of conducting also has its theory, and that theory must be mastered also by the students of this art. It applies even more to the "managerial arts", forming part of a widely developed branch of the theory of organization and management.

On approaching this problem from any subjective position, from various geographical latitudes, from different philosophical, scientific and cultural backgrounds, we must take into consideration what the objective aspects are which will determine our answer to the above question. This question — on the whole — confronts us with the problem of the theory of a scientific branch; briefly, it has a metatheoretical character.

Our knowledge of various branches, in which we are specialists and in which we are active in museums, is not sufficient for solving this problem. Extensive practice over many years in a number of museums in all continents would be of little avail. A positive solution can only be reached within the intentions of theory itself, in this case, the theory of science. One could perhaps object that this question could be better solved by professional theoreticians of science. However, this would be a faulty orientation.

The solution of our metatheoretical problem must be in line with the standard of the present theory of science. We must make use of all stimuli and impulses we can get in this sphere. But no specialist, no science theoretician, can replace museum workers and solve the concrete problem of meta-museology. They lack one of the basic factors to be able to do so: they have no personal experience, they never lived in close everyday contact with museum reality and practice.
Of course it does not mean that science theoreticians and other specialists cannot cooperate. Quite the contrary! Such a cooperation would have useful results, since the problem of museology as a possible science cannot be solved within the close confines of museology. The problems of museology must appear in a wider context of the present stage of scientific knowledge, since only in such a confrontation and competition is it possible to acquire the necessary incentive and to fight one's way through to one's own right to exist.

Those who participated in the discussion, whether globally or in detail, and fully realized the character of the question, in particular Gregorová, Hubendick, Schreiner, Swauger, Tsuruta, have managed to advance and have contributed towards the solution of the problem through new approaches, and by discovering some of the novel features of the problem. At the same time they concretely document that the required knowledge can be reached only through a consequential scientific process of learning.

2

It is natural and useful that most experts participating in the discussion tried to grasp certain specific features of museum work. In these specific features also lies, in their opinion, the very raison d'être of museology. However, it is very difficult to identify these specific features. We face a totality of museum realities that is full of complexities and variables. Museum workers are directly connected with this reality. Their approach is totally under the influence of their daily experience.

One of those who tried to cross the barrier of empirics was Desvalles. His procedure of elimination has brought him to the conclusion that “the one specific field which is universally recognized as belonging to the museum is conservation”. At the same time he realized that this cannot eliminate the rest, and thus he states finally that “the components of museum work as a whole do have a specific quality which makes it a unique discipline”.

The procedure of Swauger is similar. However, he excludes protection as well as the study of the collected objects, and concludes that “unique to museums is collecting”. With this orientation, museology can be detached as a specific science, but it must include all the basic principles, such as collecting, protection, study and use of the collected objects.

It seems that in spite of the efforts to arrive at a specific feature of the museum reality, there is little success. The authors who consider the orientation proper of museology are often pressed by the empiric reality.

The impossibility of defining the determining component in the totality of museum activities leads Pičulin and Schreiner to seeing the variety and complexity as a specific feature of museology. But this will not bring us very much forward as long as we are not able to find out the factor converting the components of this variety into an entity. None of the above-mentioned authors answers this question. Pičulin on considering this approach from the viewpoint of scientific study concludes that it is necessary to engage a whole series of scientific and technical branches. What will then remain of real museology and of the six topics he has defined?

Let us mention in this connection also the conception of Reynolds and Hubendick. Reynolds emphasized not only the need to distinguish the museum from other related institutions, but he also points out their practical commitment. In contrast to a generally accepted academic scientific discipline, he holds that museology must find its place both in relation to archaeology or to conservation, and at the same time “It must be more than the study of the mechanics of administration, communication and curatorship within museums”. Hubendick’s views are based first of all on the efforts to distinguish between what is science on the one hand, and what is practice, on the other. He forms this way the necessary criterion for distinguishing these two aspects of museology in order to perceive their mutual combination, and to discern which aspect is the determining one. And the determining factor — according to Hubendick — is the collections. But he does not comprehend them in the usual practical way and relates them to the basic function of the museum: “to continuously document evolution”. Focusing his attention on this basic function he derives further functions, defining thus a certain specific functional structure of the museum, along with the functional structure of museology. In this way he manages to integrate various museum activities and at the same time to distinguish between science and practice.

The need to make the effort to penetrate through empirical reality to the essence of studied phenomenon, and at the same time to surpass the level of all branches concerned, is underlined in the contributions by Lewis and Neustupný. Lewis stressed the importance of the notion “museum thinking”, pointing out that this way of thinking is encumbered with the specialized-branch approach of museum workers. On the other hand, through more acquisition of knowledge of all branches that can be engaged in museum work, we do not get to the core of the problem. Neustupný, who presented the theoretical conception of the so-called “specialized museologies” already in the early nineteen-fifties, arrived at similar conclusions. He saw the core of museological approach in the concept of specialized museologies (1950, 1968). Now he not only emphasizes the task of general museology in relation to special museologies, but he also concludes that “in museum work this 'more' is provided in the discipline of museology”.

All attempts to penetrate to the core of the specific feature of museum work — as follows from the discussion — are heavily encumbered with the complexity of the reality. The attempts to avoid minor and secondary problems lead nowhere, since they remain in the empirical plane. Only some authors show — as I have indicated — intentions to penetrate more profoundly. But they are successful only to the extent to which they are able to free themselves from the practical sphere of museum work. Hence follow conclusions which fully correspond to gnoseological laws.

If we continue being encumbered with empirical knowledge, we shall move only inside the sphere of daily museum practice and we do not manage to break through this barrier by means of a studying process, then we shall never be able to find out the very essence of the problem and to grasp the social sense proper of the phenomenon called museum work.

As the saying goes: we can't see the forest for the trees.

3

Defining the object of study appears most conspicuously to be the problem to be solved in defining the subject of museology as a science. It is what determines the existence of any scientific branch. On defining its sphere of study depends not only its integrity as a science — the sphere motivates the whole structure of the given scientific branch, as regards the selection of methods, the formation of a study system and its significance — but also its social practice. It is perhaps symptomatic that in spite of the fact that some of the authors have cleared the way to the most essential moments “of the museum approach to reality”, at the end all of them — with the exception of Gregorová — yielded to “the museum”.

Jensen, who has contributed to the first issue of MuWoP with an extensive analysis of a survey on the conception of museology he had organized earlier, has managed to penetrate most deeply to the problem and as one of the members of the Editorial Board, he has also made an attempt to define the subject of museology. If we do not take into account certain inaccuracies in the conception of the subject of museology, such as “museology is a science which has as
that should lead us to the fulfilment of the objectives.

Museology as a science cannot exist in objective dependency on the museum, this would limit its study contribution to this sphere only and to the practical needs of its development. It would not serve the general requirements of the development of its scientific study. Museology cannot develop in tow behind the museum, it must stand in front of it, inside it and behind it.

In my view, the exacting complexity of the solution to the whole problem follows from the definition of the three basic circles in which the essential problems are enclosed. But if we are to make any progress we shall have to follow the way set out by the Editorial Board of MuWoP. Only through the widest confrontation can we arrive at learning more about the basic pillars of museology. I think that we should not close the discussion to the first question, on the contrary, we must deepen it, namely through concentrating our attention on the determining moments — as I have pointed out in my contribution to this international discussion.

At the same time we must realize that the discussion on the pages of MuWoP cannot continue to develop usefully without relation to the contemporary museological production, in which more and more often, and in a widening scope, appear metamuseological questions. The solving of these principal questions on the existence of museology cannot be realized without critical use of the theoretical contribution of other museologists, namely we must not neglect the recent publications of Jahn (1979, 1980), Gluzinski (1980) and Mezentseva (1980).

These methodological postulates for setting questions and for their answers in MuWoP have led us to our objective: to learn the truth.

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First of all, I should like to express my gratitude to the Editorial Board of the International Committee for Museology of ICOM which has given me the pleasure and opportunity of taking part in the discussion on the basic character and the definition of museology. It is a great joy for me to join the debate in the field in which I have been doing research for many years.

The views which are expressed in *Museological Working Papers No 1* give such a broad and diversified range of definitions that it would hardly be possible to add anything new to them. The diversity of the particular views stressed by some of the authors seems to be a natural phenomenon, for any scientific concept which develops in different centres and is based on different kinds of experience usually evolves in diversified forms. On the other hand, each case leads to an attempt to find the definitive solution to the problem — it actually stimulates it. One single answer to this problem of the character and definition of museology has become a necessity.

One can ask whether the final concept of museology should remain a pluralistic one and present a multitude of various, sometimes controversial definitions, classified into several groups, as some of the authors felt, or whether, regardless of this multiplicity, a synthesis, or selective and unique definition is possible: a definition in which initial controversies and confusions could definitively be avoided. It would be, the discussion on the basic character of museology would enter its second phase, and it is here that I join in the debate.

In my opinion the crucial point which determines the answer is the system of criteria which is applied to the analysis of facts. Not only the method of research, but also the range of facts to be taken into consideration are determined strictly according to the system of criteria used.

I am convinced that simple registration and classification of different concepts of museology into groups does not lead to a real synthesis. It does not reach factually beyond the initial phase of discussion, and actually ascertains all the controversies developed in it. The only progress achieved through such classification is that some order is put into the multitude of primary, independent, individual concepts. In other words, it can be regarded only as a preparatory phase on the basis of which a definite synthesis can potentially be built. I say potentially, because it is not excluded that individual concepts which are intended to be "elementary partic-

les" of a future synthesis can make its construction impossible. Besides, I am convinced that in order to reach a synthesis, or a selective (and in both cases, unique) definition of museology, not only the various definitions presented by different authors, but the totality of museum phenomena should be taken into consideration. Particular views and definitions of museology would, in this context, be recognized only as a special kind of museum phenomena, developed within the "museum milieu", or if beyond it, then in close relation to it. They should be incorporated into the analysis not as an exclusive element, but as one element among many others. Such an approach would give a much broader outlook.

What I shall try to prove now is that a synthesis, a selective definition of museology, is really possible. I am convinced too that in such a definition the controversies which are so characteristic of the individual ones (especially when we examine them as a group), can be avoided. Most of these controversies are based on confusions in the comprehension of the problem.

Three essentially different kinds of approaches to the concept of the museum should be distinguished:
1 the visitor’s approach
2 the creative, technological and organizational approach
3 the scientific-analytical approach.

I shall try to prove that only one of them, the third, is the basis of museology, sensu stricto. The other two lead to different problems which may have nothing in common with museums (and even less with museology), or may connect with museological problems only by chance, or which may deal with museological problems but at the same time are not part of its field of scientific activity and consequently cannot be incorporated into museology. On the other hand, facts which can be retained as belonging to particular approaches may become the material for museological examination.

1
When the museum is seen from the visitor’s point of view, the objects of cognition are:
a) The collection, most often not as a whole, but as selected parts, in particular the exhibits or the scientific collection. The visitor concentrates on the content of particular exhibits or of their groups, or on their artistic qualities and aesthetic expression. The latter case is especially characteris-
tic when the object of the visitor's cognition is the exhibits on display.

b) The visitor may concentrate on scientific ideas, that is, a certain conception of the definite object of research, or else, on products of the given idea and hence conceptual objects of a different kind. Such an idea can be constituted by the visitor himself, creatively, through the analysis of one aspect of the collection, or it can be "de-coded" from the collection which, in this case, is programmed as a conveyer of scientific content. Particularly characteristic of this are exhibitions designed for their didactic and informative content.

c) In the visitor's contact with the exhibition, objects of the visitor's cognition can be the aesthetic "climate" or "mood" which is based both on aesthetic qualities of particular exhibits and on the design of the exhibition as a whole.

When the museum library becomes the object of the visitor's interest, cognitive relations become similar to those which occur in his contact with the collections.

The visitor can be interested in museum laboratories or in museum storage. It is the case when the visitor is a professional who looks for an appropriate place for scientific work. His attitude towards the laboratory or the storage is exclusively "instrumental". He uses the laboratory or the storage, he spends in it the hours devoted to his work, and if he analyses e.g. the laboratory as such (e.g. its design) he does so only from the point of view of a concrete place in a given time. His attitude is quite different from that of a museum architect, who designs laboratories, but who does not use them for practical purposes. For the average visitor many details for the laboratory arrangement remain completely unnoticed as they are "unimportant" — for the visitor's work, of course — a feature which would be intolerable in the case of a museum designer.

To sum up: the visitor, irrespective of whether he is a layman or a professional, views the museum essentially in relation to his cognitive or aesthetic needs, which are as a rule extra-museological. The museum and all its installations: collections, libraries, laboratories, etc., including all of its activities and organizational structure, is seen by him exclusively as a means which enables his contact with a definite object of scientific interest or aesthetic contemplation. One should note that the visitor's contact with the object of his interest may relate only accidentally to the museum. The visitor goes to the museum only because he knows that in special cases the objects of his interest are kept there. The process of cognition or of aesthetic contemplation would have occurred in the same way if the given objects were accessible not in a museum, but in some other place: in the open countryside, in somebody's studio, at the university, etc.

The museum, in other words, is in the majority of cases a good and practical place where some types of objects can be examined. It provides the visitor with many facilities, a favourable atmosphere for concentration, but it is not absolutely necessary as a basis of the type of cognitive processes which characterize the visitor's approach. Museums are not a necessary condition for its existence.

The visitor's approach cannot lead to any museological research: the museum never appears in it as the central object of cognition. To the visitor, the museum is an object which is noticed and used to practical ends. It may become important in respect to the good or bad conditions it creates for work or contemplation, but it is always "aside" of the main stream of the visitor's interests. One can agree, then, with those authors who feel that to be a good specialist in some branch of science is not sufficient for being a good museologist. It is very characteristic that even prominent scientists, if they become museum curators, often show little interest in museological questions or ignore them totally. The lack of interest is in their case a natural consequence of the distance which separates museum (and in particular, museological) problems from their own field of research. Examining collections and carrying out scientific research based on them, even though it occurs in a museum, is not museology.

2

Genuine museum problems first appear in the creative, technological and organizational approaches. The object of cognition here is essentially connected with the museum. Without museums this type of approach would never exist. It belongs integrally to the "museum milieu". It is, however, very characteristic that in each of the approaches in this group the object of cognition is not the completed museum, in particular the completed entity including the museum architecture, the museum organizational structure, etc., but exclusively the conception of the museum: the new idea of its external shape, of its style, of its type of organization, activities, etc. This conception can have the form of an imaginary "vision" (that of a designer) or the form of a theoretical programme. If in some cases the cognitive approach is directed toward a complete museum element or structure, this object is not treated as something which acquired a definite (and satisfactory!) form. On the contrary, it is treated exclusively as material or inspiration for the conception which is an innovation in relation to it. The conception which is built on the background of a ready and functioning structure is intended to improve (in the author's opinion, at least!) what in fact exists. In other words, in this group of approaches, cognition goes beyond the existing museum objects, structures or functions.

It follows that the scope of problems covered by the technological, creative and organization approaches is very broad: it embraces the totality of museum problems. It is very characteristic that no essential difference in regard to the value of the object in question is made between the problems of the collection and its scientific content, and of its "frame", that is, the interior setting in which the collection is kept and specially arranged. In cases where the content of the collection (to be exact: the new idea of this content) is examined, the aspect under which its analysis is carried out is essentially different from that of the visitor's approach. The main point of interest is now shifted towards the formal, instrumental or structural qualities of the collection. The museum curator who is involved in organizing collections for the future visitor is interested in the collection's content not for itself, that is, for its significance in the theoretical programme. If in some cases the cognitive approach appears as the centre of his interest, now appear only as designates of the collection's structure or arrangement.

Creative, organizational and technological approaches are aimed at direct, practical goals and are manifested in practical activities: in museum designing, in programming and working out new museum structures, in the production of new museum elements. All of what is popularly called "museum work" belongs here. It may therefore look paradoxical if we say that this group of approaches and activities does not constitute a museum science. Museum work, although it deals with museological problems, and even creates factual material for museological dissertations, is not museology itself. Its position reminds us in many respects of that of art: although art deals with aesthetic problems and creates facts for aesthetic dissertation, it is not aesthetics itself. The thesis about the non-scientific character of museum work should not be confused by the fact that museum practice, besides its intuitive and creative groundwork (which in many cases makes up its essentials) is simultaneously based on science. This brings up another resemblance between museum work and art, for art is always based on science regardless of what kind of art it may be. One can...
not paint without knowing the elemental chemistry of dyes, one cannot design a proper building without knowing the principles of construction, or the technology of stone, wood, glass and steel, or sometimes without the essentials of psychology and ergonomy. But despite this scientific foundation, art is not a science. One can agree, then, with the authors who stress the non-scientific character of museum work and its subordination to practical aims. On the other hand, one must object to calling this work museology. The error of such a definition is the result of confusing two different types of approaches and consequently, different types of activity. The thesis, according to which “museology is not a science”, contains a basic contradiction of terms.

3 Museum problems can finally be seen from the scientific-analytical approach. This view is different from both that of the visitor, as well as from the group of creative, technological and organizational approaches. It can be characterized by: first, the range of objects of cognition, and secondly, by its aims, programmes and consequently by the methodology applied to it.

In this type of approach the object of cognition can be: a) The museum as an institution with a specific type of organization, function, internal structure, activity etc. In this respect, particular museum departments such as exhibitions, libraries and so forth, are discussed. b) The museum as a work of architecture, engineering and applied fine arts. c) Factors conditioning the programme of the museum structure, organization or activity, those governing the external shape of museums and their installations, that is, of museum exhibitions. In other words, the factors originating beyond the “museum milieu”, mostly of traditional-cultural, historical or economic character. d) The so-called “human zone” which exists within the “museum milieu” (within the “milieu” of museum exhibitions) and which embraces the behaviour, experience and feelings of the visitors, the attitudes of designers or museum programmers — all of this provided that the intersubjective expression of this material is possible.

The scientific-analytical approach to museum problems is aimed at two equal goals: 1 theoretical, which can be defined as the understanding of museum facts in the light of particular scientific aspects (e.g. the history of culture, particular branches of philosophy, the theory of art, etc.) especially in the comprehension of the essence of these facts or of their genesis; 2 practical, which can be defined as establishing a scientific basis for museum work, such as delimiting the “parametres of design”, establishing the theoretical foundations for programming museum activities, functions, etc. The scientific-analytical approach, unlike the group of creative, technological and organizational approaches, is not intended to produce immediate, direct changes. It develops at a neutral distance from concrete museum activities. It is very characteristic, for instance, that museological dissertations can be created outside of the entire “museum milieu” in scientific centres of non-museum character.

The influence of scientific research on concrete, practical museum activities is only potential: this means that the results of this research can be used in museums, or can be ignored. Their use or non-use does not prove their great or poor value: they are valuable or invaluable exclusively because of their content, regardless of their application. Here another difference between scientific-analytical and creative-technological-organization approaches can be noticed: while the value of the latter approach manifests itself in the effects visible in museums such as new exhibition designs, new programmes of functioning, the products of scientific-analytical approaches which are dissertations only prepare the way for concrete action. They never cross this border and they never enter into the sphere of direct museum practice. To compare once again museum problems with art, museology has the same position as the theory or history of art, which need some field of facts as a basis on which to grow. Theory and history of art are necessary to understand art. On the other hand they are needed by art, because they help the artist to build up his consciousness of what he is creating. But they do not create art directly. Nor are they art themselves. In the same sense, museology is not practical museum work.

The remarks about the essence of museum work as a field of practical activity and the essence of museology as a field of scientific research in museum facts do not exhaust, of course, all the problematics encompassed by museum questions. It only announces some differences and affinities between particular areas of the “museum milieu”. A detailed analysis of these problems, which present a fascinating field for scientific examination, would be too large to describe here.

Having set down my points of view on these questions I join in on the discussions that have begun on basic museological problems and hope that this exchange of ideas will be carried on by other authors too. I am personally convinced that controversies on particular points of view are one of the most inspiring factors for creative research.

Notes
(1) Such an object can exist sometimes beyond the “museum milieu”; in such cases it is designated by the collection, considered as its “illustration”.
(2) In natural history museums: taxonomic units, the species, genus etc., are the most characteristic ones. They cannot be identified with their material “representatives”.

24
Topic for analysis: INTERDISCIPLINARITY IN MUSEOLOGY

Introductory summary by the Editor

In the fall of 1980, when the first issue of MuWoP was presented to museum people from all over the world assembled at ICOM's General Conference in Mexico, MuWoP's Editor presented a report to ICOFOM and the ICOM Supreme Bodies concerning work on the journal during 1979/80. A draft editing plan was presented at the same time and approved.

In this way, Interdisciplinarity in Museology became the principal theme of MuWoP No 2. Circumstances — mainly the need to wait for approval of the journal and its publishing plan — prevented the inclusion in the first issue of a notice concerning the theme to be treated in MuWoP No 2. Information on this subject could not be distributed until after the Mexico meeting.

Later, during the spring of 1981, the editing plan was presented in a letter to all national and international ICOM committees, together with an appeal for comments. No contradictory answers were received, and so the plan still applies. This is not to deny that non-participants in the deliberations may hold different views concerning the issues which ought to be discussed in MuWoP and in which order. Some of the contributors to MuWoP No 2 touch on this question, which of course should be discussed.

The thematic plan for MuWoP comprises a number of closely interconnected issues. A certain "thematic gradation" has been incorporated in the plan, though care has been taken here not to anticipate the discussions. Thus the question of "Museology — science or just practical museum work?" has been followed by the question of interdisciplinarity. MuWoP No 3 will be devoted to a more detailed analysis of the object/subject of museology, while No 4 will tackle the problem of systems in museology.

Viewed in this perspective, theme 2, Interdisciplinarity in Museology, was interpreted as a further development of ideas on museology. This too is the way in which it has been treated by 9 of the 15 authors who have sent basic papers to the Editor. The other 6 contributors analysed the problem of interdisciplinarity from another angle, namely in relation to the museum and its activities. Interesting ideas have been developed concerning uni- and pluridisciplinarity, multi- and interdisciplinarity.

The views presented by the writers in one or the other group are by no means homogeneous. Once again, moreover, the problem of uniform terminology has made itself felt, and here again the Editor feels that the diversity of conceptual interpretations is all to the good, because we now have an opportunity of presenting differences of opinion and, we hope, working out a synthesis.

What are the distinctive features of the authors' opinions?

The "museology group" presents the following views concerning the relationship between interdisciplinarity and museology.

Michaela Dub: "In this lies the originality of interdisciplinarity in museology, i.e. in the multitude of knowledge required to synthetize and harmoniously integrate the elements forming part of the exact sciences with those issuing from the humanities, thus forming a representative sample of all human knowledge."
Anna Gregorová: “Museology, like most new scientific disciplines of our period, makes use of the results, and sometimes also of the methods successfully applied in other scientific branches... Here I see museology’s interdisciplinary character. The specific features of the interdisciplinarity of museology must be looked for, besides the personal relation of man to reality, in the material documents of the development of nature and of human society...”

Ilse Jahn: “I wish to emphasize that interdisciplinarity in museology can certainly exist, but only in so far as museology has become or is in the course of becoming an independent discipline... There are many opportunities for interdisciplinary work between museology and other branches of science and art; there may even exist more such possibilities and necessities than for other disciplines, but not different conditions for interdisciplinarity.”

Flora S Kaplan: “I will return now to the theme of interdisciplinarity in museology... It might be asked whether or not the sum total of its parts equal a museum, or is a museum something more than the sum? If the answer is yes to the first part, then the discussion may be ended; if the answer is no to the first, and yes to the second part, then the discussion is open... Each museum professional partakes of the interdisciplinary nature of museology. In sorting through layers of meaning in interdisciplinarity, and in examining museology in relation to museums and to varied disciplines.”

Jiří Neustupný: “...we must state that museology is a very heterogeneous discipline and that it is obliged to accept the theories and methods of other disciplines... Museology applies these theories and methods to museum work. But, in spite of all this, museology remains a clearly limited discipline, fully and exclusively confined to the theory and methodology of museum work.”

Awraam M Razgon: “Nowadays the concept of the multidisciplinary character of museum research, and museological research proper, has become firmly established... The multidisciplinarity and the interdisciplinarity of museological research logically arises from the subject matter and the subject of study of museology as a scientific discipline.”

Waldisa Rússio: “In fact, man and his life are always the basis of the museum itself, which means that the methods used in museology are essentially interdisciplinary since the study of man, of nature, and of life depends on great variety of scientific fields... Interdisciplinarity must be a method for research and action in museology, and therefore the work method of museums and of training courses in museology for museum personnel.”

Klaus Schreiner: “The close connection of museology to many other scientific disciplines leads to its interdisciplinary cooperation and integration with other sciences... The increasing integration of various fields of knowledge means that the field of activity of one science includes the connection and reciprocal effects of other different fields of knowledge. Thus museology, too, as an independent scientific discipline with a specific subject of study possesses multidisciplinary components.”
Jerzy Święcimski: “There is no other branch of knowledge, of art, engineering, etc which draws on so many fields as does museology: it does not even occur in those branches which partly overlap the field of museology... If museology is an interdisciplinary field — and everything shows that it is exactly so — how is it possible that in spite of this intersection of disciplines museology can preserve its own unique character as one specific field?”

The “museum group” takes the following views of interdisciplinarity in relation to the museum and its activities.

G Ellis Burcaw: “It is a truism, or commonplace, that museum work is multidisciplinary and that much interpretation in museums of various kinds is interdisciplinary. What more is there to be said in a new, international journal of museum theory?”

Louis Lemieux: “In my paper in MuWoP No 1, I compared the role of the museum director to that of the conductor of an orchestra. If the musicians, whom we might equate with disciplines, were merely grouped to play their instruments, the resulting cacophony could at best be called multidisciplinary! But when the musicians support and complement each other so as to achieve the best possible performance under the conductor’s leadership, then interdisciplinarity is achieved. So with the museum.”

Domenec Miquel & Eulàlia Morral: “Pluridisciplinarity is thus implicitly rejected... and a new answer to the public’s demand on museums is sought in interdisciplinarity... Museums are no longer considered to be repositories of collections but have become centres of culture... However, the battle between “pluridisciplinarity” and “interdisciplinarity” is still going on, and one can often say that these two concepts are not opposing criteria demanding a choice, but two complementary realities which must be balanced...”

Robert W Ott: “…the museum must conduct experiences for audiences and visitors which provide for the realization of the aesthetic value of art, its related disciplines and of the museum which acquires, preserves and exhibits these art objects... A unified interdisciplinary approach in the art museum is one that is meant to reach all levels of an audience. Its interphilosophical or eclectic nature serves to provide a flexibility for promoting an aesthetic experience to transpire in the art museum. It is exactly this aesthetic experience which is unique to the art museum...”

Georges Henri Rivière: “…today’s interdisciplinarity shall beware of falling into any form of domination and recuperation, of the idea that it is a thing unto itself which can solve all problems. In return, it should play the dynamic role, which is its own, of comparing and integrating, face to face with its partner, unidisciplinarity, whose role is to till its own field. Both roles are complementary, the systole and the diastole of the same heart.”
Tibor Sekelj: "In speaking of interdisciplinary cooperation we have exhibition work particularly in mind... Increasing cases of interdisciplinary cooperation will lead to the possibility of creating museum displays based on full creative cooperation between the museologist and all the specialists of museum disciplines. This will result in a new kind of display — the integrated display. And the museum whose staff attains a fully interdisciplinary creative cooperation in producing such exhibitions, can be considered an integrated museum."

It is not easy to present opinions in the above manner, in fact it is almost asking for trouble. Perhaps the authors themselves would have preferred other excerpts with which to describe the essence of their thoughts.

To avoid the risk of misinterpretation, let us delve into the essays themselves, follow the authors' ideas and arguments and arrive at our own views concerning uni-, pluri-, multi- and interdisciplinarity. Although your Editor's intention was to analyse the relationship between interdisciplinarity and museology, this can, if you so wish, be undertaken in relation to museology and the museum or museum activities. One more thing. Don't keep your conclusions to yourself. Put them down on paper for MuWoP! Now over to our contributors."
The principal theme for *Museological Working Papers No 2* has been given as "multidisciplinary science in museology",(1) and also as "interdisciplinarity in museology".(2) Some confusion may result since the two versions of the theme have different meanings; "multi" signifying more than one and "inter" signifying between or among. A natural history museum is multidisciplinary since it deals with several separate disciplines — geology, botany, zoology, and anthropology. A health museum is interdisciplinary since its one subject, human physical and mental wellbeing, draws from and overlaps several disciplines — genetics, physical anthropology, medicine, pharmacology, psychology, sociology, and others.

What I assume to be intended by the editorial board is a further airing of eastern European museum philosophy. That philosophy is probably well understood by the ICOM International Committee for Museology, the sponsor of this journal, but, I fear, it is not well known in much of the world. The theme of the first number of MuWoP, museology as a science, is the basis of the system, as I understand it. Inter- and/or multidisciplinarity in the science of museology is a necessary, related concept. Some excerpts from the writings of leading theorists will illustrate:

"Museology is bordering on other sciences and overlaps them..."(3)

"...museology has only the character of a supporting (secondary) science. Hence, and because of its close connection to many other disciplines of science, it will be necessary for museology to cooperate with them and to be integrated in them."(4)

"Museology...is an independent science [in the development of which] it will be necessary to incorporate the findings of other sciences. Accordingly the methodology of museology is interdisciplinary in character."(5)

"The opinion of some German museologists that [the science of museology is interdisciplinary] is worth noticing."(6)

"The diverse tasks and various areas of collecting make museology largely interdisciplinary in character. Therefore museology necessarily has to cooperate with other branches of science focusing on their common object of study: the museum and its activities."(7)

"Museology strives to reveal general principles of museum documentation [that is, of the systematic collection of objects; for example, in the recording of significant information about contemporary society]. The museum documentation, therefore, leads to the integration of scientific disciplines from the documentary collecting point of view. This integrating role of museology explains the multidivisionality of museums. All branches of science are equal and each of them contributes in a specific way to the understanding of reality."(8)

"Museology thus oversteps the borders of its precursor, museum science, and makes vital contact with all related and even far removed branches of science."(9)

Thus, the science of museology necessarily functions in connection with other sciences; multi- and/or interdisciplinarity is basic to it. This applies to the most fundamental activity of the museums; not just at the obvious, superficial level of collecting in all disciplines appropriate to museum work (geology, art, history, etc.) but, more subtly, in that many, if not all disciplines contribute to our evaluation of objects as documents in every appropriate field in our task of achieving an understanding of — and of interpreting — reality, our three-dimensional, material, tangible, natural and cultural environment. That is to say, interdisciplinarity is a basic component of the science of museology. The theme of MuWoP No. 2 is therefore a natural follower of, and to be understood in terms of, the theme of MuWoP No. 1.

Another quotation from Z Z Stránšky is illuminating:

"The fact that the museum documentation [discriminatory collecting] deals with material and authentic data necessitates, in harmony with the dialectical nature of objects (as precisely formulated by V I Lenin in his example with a glass), a multidisciplinal approach because a museum document [object] has a multi-dimensional character."(10)

The purpose, beyond general education, is to spread Marxist ideology to the public:

"Museology is an applied science [which, "in the social role of museums," provides] a method for the choice of museum objects..." [enabling museums to select objects of] "political value" [etc.].(11)
"...the relation of museums to social reality...creates disciplinary science." [Interdisciplinarity is necessary for the "ideological impact of museums" on the formation of social consciousness..." That is, in order to spread Marxist-Leninist thinking to the public.](3)

My point is not that museums in eastern Europe and elsewhere are politically useful. We all agree that the museum, in good hands, is an effective instrument for public education and we expect museum people, wherever they are, to use their museums to inculcate the values of their society. My point is only that the theme of MuWoP No. 2 is a vital building block in the museum orientation of socialist countries and will be so-understood by contributors from such countries. Contributors from other countries may not have as much to say. It is a truism, or commonplace, that museum work is multidisciplinary and that much interpretation in museums of various kinds is interdisciplinary. What more is there to be said in a new, international journal of museum theory?

We can agree with the reasoning of our learned colleagues whom I quoted above. Certainly, the worth of a museum depends on its collections of objects. Good collecting, in any subject field, depends on planning, on a clear-cut purpose for the museum, and on intelligent and well-informed discrimination on the part of the curators who do the collecting. This skillful and knowledgeable work employs not only the factual content of the particular discipline directly concerned, but knowledge of other fields as well. It is easy to understand that good collecting in the subject field of history is in reality the documentation, through artifacts, of culture, society, religion, philosophy, the arts, business, economics, educational systems, recreation, medicine, technology, politics, and so on. Obviously, good historical collecting and good interpretation of such collections must be multi- and interdisciplinary.

But the same is true of collecting in all other fields also, for the collecting is not an end in itself and the good collector does not merely select tangible illustrations for a standard textbook on the subject under consideration. Collecting is done by people for people. The rock or animal specimen is selected for human purposes. What roles do oak trees play in the human experience? What is it that is worth knowing and worth preserving, from our point of view, about natural objects as well as man made objects? Does not the bear, the wolf, or the swan figure in economics, in literature, in folk lore, in recreation? Even an oil painting is appreciated in societal and cultural contexts, and is collected by the art curator according to many factors, some lying outside the realm of art, and not all of which may be consciously understood by the collector (or by the artist, for that matter). It is this systematic, multi- and interdisciplinary, yes — scientific — process in the documenting of the world we live in through tangible evidence that is the basis of the science of museology that is now being developed.

In the United States, and in western countries generally I believe, we tend to view museum work more from the aspect of measurable results than from theoretical foundations. To introduce my students to the matters under discussion here, I have found it to be useful to do it from the standpoint of exhibits. In our visual and product-oriented society, students have no great difficulty in categorizing and evaluating museum exhibits. One way of thinking about exhibits is in terms of their intellectual content:

1 At the lowest level we have the aesthetic or entertaining display of objects as objects. Typical of both the great art museum and the non-professional collection of curiosities, the aim is to entertain the viewer by showing unusual or interesting things. Little or no instruction is intended or accomplished.

2 At the second level is the factual exhibit for which representative and illustrative objects are selected and arranged with some application of logic and the addition of informative labels in order to teach facts. The viewer learns that a certain kind of plow was developed for a certain kind of soil, that the gray tufted heron stands one meter tall, or that oil can be extracted from a kind of shale. Such exhibits are disciplinary; that is, they deal with one subject at a time.

3 At the third level is the conceptual exhibit. The intention is to assist the museum visitor to arrive at generalizations of some importance. Ecology, evolution, the value of religion in primitive societies, the cyclical nature of fashion, the influence of technology on the growth of trade unionism — here we are at the multidisciplinary and interdisciplinary level. Such exhibits are of highest intellectual content, and of greatest educational worth to the public, we believe.

I tell my students to aim all non-art exhibits and other educational products at the highest, or conceptual, level whenever possible. This is probably another way of saying that interdisciplinarity is characteristic of the best functioning of a museum as a public educational institution.

Notes
(1) MuWoP No. 1/1980, pp 63
(2) Letter from the editor to the chairmen and secretaries of all national and international committees of ICOM, 1981-04-15, pp 2; and elsewhere
(3) Awraam M Razgon (Soviet Union), MuWoP No. 1, p 12
(4) Klaus Schreiner (German Democratic Republic), MuWoP No. 1, p 41
(5) Bracketts, [I], enclose my own words, which either slightly alter the original wording in the interest of brevity and to assist the reader's comprehension or insert my own comments and interpretation. Parentheses, ( ), are in the original quotation. Quotation marks, """, enclose the actual words, as published in English text, of the quoted author.
(6) Villy Tofl Jensen (Denmark), MuWoP No. 1, p 11
(7) Jiří Neustupný (Czechoslovakia), MuWoP No. 1, p 28
(8) Vinot Sefore (Sweden), MuWoP No. 1, p 13
(9) Zbyněk Z Stránsky (Czechoslovakia), MS (Museumologie a světa) V (1974), pp 38-39
(10) Stránsky, MS VII (1979), p 10
(12) Jurij P Pikulin (Soviet Union), MuWoP No. 1, p 30, 31
(13) Anna Gregorová (Czechoslovakia), MuWoP No. 1, p 20
Since the beginning of this century, there has been an avalanche of new interdisciplinary sciences, amongst which biochemistry, geophysics, and industrial psychology are just a few examples. Design, recently considered an autonomous discipline, being a combination of art and science and very fashionable today, is one of the most evident cases; like a laboratory synthesising so many apparently opposed disciplines, the design cannot be conceived without elements of mechanics, architecture, biology, anatomy, psychology, and marketing (as well as knowledge in the designer’s specific field).

In so far as the museum proposes to be a seat of culture, a centre of information exchanges and intellectual development of contemporary man, it must be deeply and completely integrated within its social, economic, and even political and intellectual context. A sort of modern humanism, the science of museum is constituted like a system of emission and reception centres, adapted to the sensibility, inhibitions, and needs of contemporary man.

As long as the museum avoids the danger of remaining stubbornly set in a rigid and sclerosed position closed to new ideas, and proceeds to tie up the strings of its spatially and temporarily determined reality, then it has to take into account knowledge and ideas which belong to the auxiliary and complementary disciplines.

Let us first delineate, more or less precisely, the framework of museology and only then let us pass to the relation of interdisciplinarity, when perhaps, by all sorts of complementary disciplines, we shall succeed in defining more precisely the field of museological activity.

There are some for whom the essential task of museology is the conservation, the restoration, and the study of works of art, and there are others who consider museology’s primary interest to be the public, i.e. the desire to teach, to inform, to distract. In our opinion, museology is rather the dialectical relation existing between the work of art and the public of art, which is indissolubly linked. Activities related to the work of art call upon the exact sciences whilst, on the contrary, activities concerning the public are more involved with the humanities. In this lies the originality of interdisciplinarity in museology, i.e. in the multitudes of knowledge required to synthesise and harmoniously integrate the elements forming part of the exact sciences with those issuing from the humanities, thus forming a representative sample of all human knowledge.

But how can we analyze the ways in which the various disciplines are drawn into museology’s sphere of influence if we have not yet defined the functions of museology nor the magnetic poles of complementary disciplines? In addition, how can museology define itself as a discipline other than by the various functions it fulfils? We must therefore start by considering these one by one and grouping them by category; it is by reference to these functions that we shall see more clearly the mechanism of interdisciplinarity in museology, or, in other words, the way in which zones of contact with other disciplines are created.

Let us consider a few of these functions: restoration, conservation, presentation of the art object, research on the art object, administration and accounting, finally, services for educating, informing, and distracting the public.

By creating links of a varying nature with complementary sciences and disciplines, each of these functions requires knowledge of another sphere on the part of the museologist. For example, in restoration and conservation valuable and indispensable help is offered by physics, chemistry, microbiology, and, of course, mathematics. In addition, for the art restorer a wide literary culture is often a rich source of information on the technical details of a work of which he is rediscovering and recreating the process of elaboration. Finally, in addition to theoretical knowledge, the restorer must be highly skilled and gifted in manual techniques. And, obviously, he must have a thorough knowledge of art history, especially of techniques, for points of reference.

Let us consider another function: that of exhibiting an art object. In this case, the museologist must be at one and the same time public relations man, printer, insurance agent, designer, historian, professor, and artist. Printer and designer for the production of exhibition catalogues; public relations man to insert the exhibition as a cultural event into the publicity circuit; historian and professor in so far as the exhibition has a didactic role to play; artist or, to paraphrase Kandinski, painter, who delights in paintings as does the painter in brushes and colours, for the exhibition itself constitutes a new work of art.

The preparation of an exhibition requires a considerable amount of knowledge. Each object must have its right place; just as in the dialogue of a play involving several characters (what then are the exhibited paintings?), each shows sympathy and antipathy towards its neighbours; one may suddenly be enhanced by an “exhibit-friend” or, on the
contrary, disadvantaged next to an incompatible exhibit.

As for the function of the acquisition of new works of art, to be able to distinguish between an original and a fake, the museologist must be an expert in the period of the work he is acquiring; he must be aware of the latest laws; in order to establish comparisons concerning the work, he must know in detail the number of similar examples existing in both private and public collections.

As far as research is concerned, in addition to full and specialized knowledge of the period under study and, of course, of art history as a whole, the art historian must also have some knowledge of philosophy, aesthetics, literature, folklore, history of architecture, history of civilization, economics, and political and social sciences.

In his administrative economic role, in order to ensure, with constant care, a sound budget and material basis for the museum, the museologist must also show himself to be a good diplomat, able to attract the sympathy and interest of wealthy collectors and philanthropists.

Where the public is concerned, in order to supply visitors with a fairly complete and especially basic documentation, the museologist must know thoroughly the material exhibited, and use the most modern methods of presentation for exhibiting the material forcefully and attractively.

At this point, having reviewed some of the specific functions of museology, it is necessary to consider these functions selectively. The rules of priority which we are going to analyze also vary according to various factors, such as, tradition, fashion, subjectivity, and the constraints imposed by the ethnographical, social, political, and intellectual climate. All these conditions, and many more, create a continual shifting and permanent permutation in the hierarchy of a museum's priorities.

Which is the most important and the least important body of knowledge to possess? Which is the most valuable and the least valuable discipline for museology? There can of course be no one reply. There are as many replies as there are varieties of museum in existence.

The criteria we have considered above also establish another structure of priorities. For an archaeological museum, research, but also restoration and conservation, will be in the forefront. In a modern art museum the accent will be placed on pedagogical activities. For a museum housed in an ancient institution — monastery, school, city hall, old fort, or hospital — there will be another scale of priorities and another sphere of influences. The methods used in running a large museum is very different from that used for a small museum. In each case the sphere of knowledge required will be different.

Another question which needs to be elucidated is the specificity of interdisciplinarity in museology as compared to other sciences.

As we have concluded that interdisciplinarity is a specific trait of our civilization, then in what way does museology distinguish itself from other sciences affected by the same "contamination" agent? In the field of museology can we speak of fixed and unshakeable laws, as is the case for the exact science? Of course not. The characteristics of museology are far more subtle, susceptible to change and highly sensitive to influences; this becomes evident when one applies structural grammar to museology, for example.

Let us take another example: cinematography, where interdisciplinarity is intensely involved, and which, by its ambiguous nature, is naturally closer to museology. In this case, what is the difference between these two disciplines, museology and cinematography? Cinematography is a more recent discipline and a great difference in age therefore separates it from museology. Child of this century, cinematography naturally profits from all the benefits of our civilization, including interdisciplinarity as a principle of its workings. Museology, on the contrary, proposes to integrate tradition into contemporaneousness; it succeeds perfectly.

Instituted as an autonomous discipline during the Renaissance, museology has succeeded in conserving throughout the centuries the "Renaissance ideal" by embracing all possible fields of activity and knowledge and at the same time linking them to contemporary reality.
First I should like to stress that the very approach to the above problem should be determined with much discretion, lest we should make a logical error at the very outset. The first theme of our discussion "Museology — science or just practical museum work?" has, with its answers, already defined the above approach; there will be a different approach to the question of interdisciplinarity on the part of those who regard it as practical museum work. I hold, however, that in general the view which considers museology a science prevails. But the point is how to determine its place among other scientific disciplines on the basis of a thorough analysis. Only then should we point out, respectively prove, its interdisciplinary character (which, by the way, has been becoming apparent from the very beginning of its formation). At the same time I should like to stress that if we regard museology as a science, we are forced, with regard to theme No 2, to exclude two rather easy, and at the same time very tempting solutions, i.e.:

1. the viewpoint that museology is an interdisciplinary science due to the fact that museum workers use a variety of social and natural science disciplines — ethnography, archaeology, history, biology, geology, palaeontology, etc.
2. that museology is an interdisciplinary science because besides scientific disciplines museum work also comprises a number of concrete activities of a non-scientific, practical, economic, organizational, eventually artistic character — keeping first stage files on the collections, public services, preparation of objects and their restoration, etc.

The specific features of the interdisciplinarity of museology as a science cannot be looked for in these two seemingly so obvious solutions, since they do not belong to the exclusive domain of museums. Many other institutions call for the application of several different scientific disciplines and a number of activities of a non-scientific character are also realized in these institutions. This is also one of the main reasons (if not the main reason) why we must look for the specific features of the interdisciplinarity of museology elsewhere.

In my opinion it is necessary:

1. to determine the place of museology within the framework of other disciplines.
2. to find and prove the well-founded and inevitable relations with other scientific disciplines, to determine their character and quality, with special regard to museology proper, in which they form implicitly to more or less degree both the very object of investigation and its methodology (respectively its methods). Only thus can we document not only the interdisciplinary character of museology itself, but also the specific features of this interdisciplinarity.

I shall try to answer briefly both questions or groups of problems:

1. The place of museology within the framework of other scientific disciplines

In my contribution to theme No 1, I mentioned my own definition of museology: "Museology is a science studying the specific relation of man to reality, consisting in purposeful and systematic collecting and conservation of selected inanimate, material, mobile (especially threedimensional), objects documenting the development of nature and society."

Out of this broad, and therefore relatively accurate, definition, we must also determine the place of museology among other scientific disciplines. From this definition follows as a priority the specific relation of man to reality. If the object of study of a certain scientific discipline is not reality proper (objective material reality) but the relation of man to reality (material or spiritual), the role of the given discipline within the framework of other scientific disciplines also stands out. The relation of man to reality is being dealt with by various social-scientific disciplines (the so-called humanities, including, in a wider context, psychology, aesthetics, philosophy, philosophy of man, etc), while their classification is based exactly on the concrete, and at the same time specific relation, i.e. on the type of their relation, to reality. Aesthetics examines a different type of relation of man to the given reality than that studied by psychology, social psychology, etc. Nevertheless these disciplines can be classified in a wider context — within the circle of the humanities and social-scientific disciplines.

It follows therefore that museology proper, if we take as a starting point the definition of museology mentioned above, belongs, with regard to the object of its study, unequivocally among the humanities. It is a social-scientific discipline. One of the arguments illustrating the correctness of this assertion is the fact that the natural science disciplines practised in museums cannot determine the character of museology proper as an independent scientific discipline. It cannot be so since each of these disciplines (geology, botany, palaeontology, etc) have their own object and methods of study, putting them into a wider context of scienti-
disciplines on nature, i.e. natural history disciplines. The same holds for history, art history, etc., although the latter two, both social-scientific disciplines, are much closer to the object of museology, due to the type of relation of man to reality, which in fact is the relation of the consciousness to being, and also due to the type of reality they are studying.

In short, museology, with respect to the priority characteristic of its definition (a certain type of relation of man to reality) can be classed as a special and independent science within the humanities, within the social-scientific disciplines only.

2. The interdisciplinary character of museology as well as the specific features of this interdisciplinarity are suggested by an enlargement of the definition of museology determining more closely and more concretely its "genus proximum et differentiam specificam". Thus the object of museology necessarily and inevitably also involves some relativised objects of study of other scientific disciplines. (They are relativised since they explain with priority a certain specific relation of man to reality and his views on reality.) Let me point out at least some of them:

a) Ontology — science of being. Museology as a science could not exist if man, in relation to his environment and to himself, did not realize and did not accept the very existence of being; if he did not take cognizance of the reality (both material and spiritual).

Man not only realizes the existence of reality (namely of objective material existence) but also realizes that this reality is at the same time differentiated, that there are various manifestations of reality; he realizes and recognizes the substance and phenomenon, part and entity, special, unique and general, etc. So in the museum relation of man to reality it is necessary to realize the generic and structural aspects of the reality, pointing in the end to the totality of the reality, to the material unity of the universe. The ontological interdisciplinarity of museology ensues from the present standard of ontology proper (depending in the end on the mass of knowledge also gathered by the natural sciences), and also of gnoseology. Ontological views can and should be applied in museology especially in interpreting the material documents of the development of nature and society, while museology proper can contribute to deepening the knowledge in a wider context.

b) Gnoseology — science of knowledge. The role of museology would be illusory if man had not understood that through the mediation of a certain selected set of realities (especially of a material character) it is possible to acquire a certain amount of knowledge on the development of nature and society and that this knowledge can be put to good use.

c) Psychology — the "historical sense" of man, arising at a certain level of development of Homo sapiens, documents to what degree man is capable of realizing himself with regard to objective reality. It is the result of man's psychical, historical, social, socializing (acculturation) process and development. The very realization of the value of certain activities (realized especially in the form of collecting activities), is a psychical phenomenon belonging to the sphere of science — to psychology. In this respect the interdisciplinary relations between museology and psychology are well-founded and inevitable. These relations are similarly well-founded and inevitable in making use of certain selections, documenting the development of nature and of mankind (including the development of art), i.e. right in the museum in direct dialogue with the visitor. Here the object of museology is extended by various psychological contexts, namely on the level of general psychology, psychology of the personality, and social psychology. The mass of knowledge acquired by these scientific disciplines, their results and methods are actively used and are further developed (or should be developed) in studying ways of forming man, extending his knowledge and interests, helping to form his conception of the world, influencing his feelings, forming his habits, motivations, use of leisure time, creation of cultural formulae, modal personalities, etc., in the museum within the framework of educative and cultural-tuition activities.

d) Axiology — the problems of values and evaluation as a human phenomenon also appears in interdisciplinary relations in museology, on several planes and in different directions. In addition to the moral evaluation mentioned below, and to the forms of evaluation used by practically every scientific discipline, they appear in the forefront of the axiological category (types of evaluation, values and reality, the very character of the values, including the phenomenon of the hierarchy of values, criteria of values, axiological subject and the very act of evaluation) exactly in the relations of museum-visitor and vice-versa. More precisely, the perceiving and evaluating subject and the objective reality (i.e. museum collections) as the object being evaluated. Value criteria come to the foreground in selecting the objects earmarked for certain exhibitions, etc., when the evaluating subject is a museum curator; later they come to the forefront when being perceived by the subject of evaluation of lesser erudition, by the visitor. Here we meet both with positive and negative evaluation, with qualitative (expert) and quantitative evaluation, both individual and collective. It can be, for example, an aesthetic evaluation on a non-professional or on a professional level, etc. The axiological problem penetrates interdisciplinarily the very museology, influencing it practically as a whole. The specific features of this interdisciplinary character should be looked for first of all in the historical sense of man, the possibility of its cultivation and education towards genuine, permanent, and universal values.

The interdisciplinary character of museology as regards the above-mentioned scientific disciplines is consequently rightly and inevitably connected with the specific relation of man to reality we called museum relation. One of the specific features of this interdisciplinary character is the historical sense of man which we have analysed as "an aspect of duration, respectively, a chronological aspect of three-dimensional reality". We must underline that these specific features become manifest in other interdisciplinary relations, namely in relation to,

e) Ethics and to ethical problems in general. Here the objects of study of museology proper are combined with ethical aspects, such as questions of moral values, creation and influencing or forming of moral value orientations or motivations. These questions are also connected with the explanation and interpretation of evolution, namely of the evolution of society, the attitude of man and of the whole of mankind towards nature, etc. The task of museology in this case is to study the most suitable ways of using the material documents on the development of society, not only in the psychical, but also in the ethical influencing and formation of man, namely of youth. Without the knowledge of ethics, its scientific methods, categorial apparatus and its creative application, museology would remain a cabinet-type discipline.

f) Pedagogy and didactics. The interdisciplinary relations of museology with pedagogy and didactics come to the forefront during our work with children and youth. They enable us to look for ways of optimal use of the museum collections, namely to use vivid and instructive methods in line with the basic pedagogical and didactic requirements, that
notion of a new scientific discipline "museum pedagogy" (Museumpädagogik) has been created, but it is a matter of approach. (My personal opinion is that pedagogy is only an interdisciplinary component of museology proper and that objectively there cannot exist any special science such as "museum pedagogy"), neither can there exist such special scientific branches as "hospital pedagogy", "theatre pedagogy", "pedagogy of old people's homes" and the like. Pedagogy as a science cannot be classed in this way. We know of course adult pedagogy, youth pedagogy, child pedagogy, pedagogy and psychology of sick or healthy people, etc, but no science can derive its origin from an institution as such.)

The specific feature of the interdisciplinary character of museology with relation to pedagogy and didactics is its instructive nature. Although object teaching is an inevitable requirement of each school, of each educational-teaching process, nevertheless in museums (including of course art galleries), thanks to the presence of original documents, objectivity, object teaching, are concretized and concentrated to the highest degree, and consequently they are both pedagogically and didactically most effective. And there is a wide field of activities for museology as a science, and also for museological workers, as well as for teachers and educationalists in general. We must add that other mass-communication media, such as television, cannot act so directly, as far as material documents are concerned, as museums do.

g) Sociology. The interdisciplinary character of museology also covers sociology, its objects and methods of study. In spite of the various and sometimes unsettled views on sociology it is certain that museology in the object of its study (because it is primarily determined by the relation of man to reality, i.e. also to itself and to society) can apply, study and develop the social categories and methods, and apply and disseminate them in a creative way. Amongst other things can be noted the structure of visitors, especially their social structure (age, sex, social and class structure, profession, urban or rural origin, etc). Sociological research on visitors is of great importance in this respect, not only orientated on the social structure, but also interested in the views of visitors concerning the museum, its exhibitions and other activities.

In principle the interdisciplinary character of museology is roughly exhausted with the above sciences. Other important recently developed disciplines playing a certain role in the interdisciplinary character of museology are: documentaristics (theory of documentation), informatics (theory of scientific information), scenography, etc. All these disciplines, with their object and methods of study and with their results, form an important basis for the creative application and further development of the theory of museology, forming part of the object of their study in a certain range of problems.

The basic feature of the interdisciplinary character of museology, however, remains the specific relation of man to reality: that is why the interdisciplinary character of museology proper is practically limited to the group of social-scientific disciplines, and not to natural science disciplines. The object and methods of the natural sciences do not study the relation of man to reality, but reality itself (material reality, material, nature). However, the results and the knowledge accumulated by the natural sciences as generalized by the above-mentioned social-scientific branches, namely by those related to philosophy (ontology, gnoseology, philosophy of natural history and the like) form the basis of the interdisciplinary character of many other sciences, including museology proper. It would therefore be a great mistake to think that the interdisciplinary features of museology should also be looked for in direct contacts with the natural sciences. This contact and specific feature of interdisciplinarity in this case has only been mediated by the generalizing social-scientific disciplines, namely by those of a philosophical character. They study a certain type of relation of man to reality and of man’s views on this reality (and on himself), on a generalizing and universally valid plane.

We could summarize what we have said above in the following way:

a) The interdisciplinarity of museology follows from the very object of its study, directly issuing from, or directly dependent on the humanities, the social-scientific disciplines, especially philosophical ones, such as ontology and gnoseology, but also on psychology, pedagogy, sociology, etc. In a mediated way — through the above disciplines — we can also follow interdisciplinary connections or links with the natural sciences, which is manifest and fully applied in the interpretation of the material reality (nature and the very material) and in its regularities.

b) The specific features of the interdisciplinary character of museology consist in the fact that this interdisciplinarity (besides the theoretical knowledge of other sciences) is also inevitably connected with:

1. the historical sense of man, and
2. material documents of the development of nature and society, i.e. museum objects. The museum object is not only a material reality, it also has a financial, artistic, etc, value. At the same time it has a documentary or museum value in the proper sense of the word. In addition to this, museum objects — especially groups of objects purposefully selected from their original environment and function — contain definite gnoseological potential. Naturally, this potential is used in the first place by the respective discipline, especially "museum" disciplines such as archaeology, ethnography, etc, but also by others, including, in particular, disciplines of the natural sciences of a descriptive character, such as botany, geology, zoology, etc. However, the results of these individual disciplines — in spite of the fact that they are directly connected with the material documents of the development of nature and society, i.e. with museum objects — are generalized only in the framework of these disciplines. Broader generalization is realized on the level of a whole group of these disciplines (e.g. of historical and social-scientific character). More suitable for generalization are the results of the scientific disciplines of a philosophical character (philosophy, ontology, gnoseology, etc). In my opinion the special task of museology is to study precisely the specific relation of man to reality which has led to the creation of collections of material documents on the development of nature and society. Besides that, one of the tasks of museology is to study and generalize the overall gnoseological potential fixed to the material documents of the reality, as well as the task of studying the specific features of and generalizing the possibility of the versatile scientific and cultural-educational use of the collections.

Museology, like most new scientific disciplines of our period, makes use of the results, and sometimes also of the methods successfully applied in other scientific branches (namely in those of a social-scientific character, in the humanities). Here I see museology's interdisciplinary character. The specific features of the interdisciplinary character of museology must be looked for, besides the personal relation of man to reality, in the material documents of the development of nature and of human society, and in this respect museology correctly and inevitably makes particular use of the three-dimensional material and mobile documents of this development.

I have laid out some of what are in my view the basic problems of the interdisciplinary character of museology. But due to the extent and character of this article I do not consider them final, thoroughly analysed, or even unfailling (this paper is based on the manuscript of my as yet unpub-
lished work, where the problem is subjected to a more profound and broad analysis). Museology is a new discipline in the process of birth. It opens up new fields of activities and each of the above-mentioned problems deserves a special study. The articles published in MuWoP No 1, however, are orientated more towards well-based theory than towards well-based pragmatism or practicism. Although we realise in the end that “Each theory is grey, and evergreen is the tree of life” (Goethe), we also realize that without theory there cannot be any practice up to the standard of the period, and, on the contrary, theory must be based on practice and must serve for practice. Its practice, in my view, is the unique chance of making museology serve man, which from the process of the humanization of the ape should continue with the process of the humanization of man. The experience, mass of knowledge and, above all, the sufferings of thousands of generations, documented by numerous museum objects, oblige us.
Interdisciplinarity in museology — presuppositions and requisites

In relation to my contribution on museology as a science, I wish to emphasize that interdisciplinarity in museology can certainly exist, but only in so far as museology has become or is in the course of becoming an independent discipline.

When one speaks about "interdisciplinarity" in general, one pre-supposes that there exist two or more real disciplines, each with its own methods, facts and theories; these two (or more) sciences or branches of science may interact when carrying out research on one specific problem that cannot be solved by one of the disciplines alone. This means that interdisciplinarity can never be the specific state of a discipline as a whole, or the characteristic feature of one branch of science; it can only be a state of temporary interaction with the objective of solving a specific problem.

It is difficult to imagine that two sciences can exist in a state of permanent cooperation, i.e. in permanent "interdisciplinarity", without sooner or later constituting a new discipline. Therefore, it is only possible to speak about "interdisciplinarity in museology" if there is agreement on those concepts that consider museology to be a real science. An interaction would then be possible, for example between zoology and museology in order to solve special problems related to the selection and conservation of zoological (or anatomical, histological, etc.) objects or information necessary for modern zoological taxonomic research or for exhibitions. Another example could be the interdisciplinary work among zoologists, museologists, and artists to present and interpret original objects for an exhibition.

There exist many as yet unsolved scientific problems in the theory and practice of museal selection, thesaurization, and presentation, that can only be solved by interdisciplinarity work. Nevertheless, two main possibilities are open for interdisciplinarity in museology today. The first of these would be when two specific museological fields, e.g. museology of a zoological museum and museological knowledge of archaeological sciences must collaborate to work together in a regional museum. Interaction is then specially necessary for the purpose of collection and exhibition, i.e. for museal selection, thesaurization and presentation. The two disciplines must find a common pragmatic basis for museological solutions.

The other possibility for interdisciplinarity can only arise if a distinct museological discipline exists. Then museology could interact with, for instance, some branch of the zoological sciences (taxonomy, embryology, genetics, ecology, etc.) to solve a problem of thesaurization, or to cooperate with sociology in solving questions on the territorial demands made on a museum, or to interact with architects on problems of conservation or presentation. Thus zoology, sociology, applied arts, or even museology each have their own field of action. It is therefore essential that museology be established as a discipline with its own basic foundations and principles, as a necessary pre-requisite to the development of interdisciplinarity.

Without such a discipline, many efforts to solve "interdisciplinary" problems will be of a purely pragmatic and amateur nature, of only temporary value, and the solutions obtained will not be of use for other branches of museum work. In other words an "interdisciplinarity" sensu stricto does not exist.

We therefore insist that "interdisciplinarity" presupposes the existence of a discipline "museology" that must be an equal partner of other disciplines. Such interdisciplinarity will then lead to a further steady increase of museological knowledge.

In conclusion, I wish to say that there are many opportunities for interdisciplinary work between museology and other branches of science and art; there may even exist more such possibilities and necessities than for other disciplines, but no different conditions for interdisciplinarity. This means that one cannot speak of interdisciplinarity as a special feature of museology, though it may be a characteristic feature of museum work. Besides, it would not even be correct to speak of museology as a "multidisciplinary" science. Once constituted it is not more or less multidisciplinary than any other science.

The following diagram shows two different possibilities of interdisciplinarity in museology, perhaps also two states of development of museology:

a) interdisciplinarity between the "museal sciences" with their special museological demands, using some knowledge of other (non-museal) disciplines like sociology or design (right side); the result of the "interdisciplinarity" would be several pragmatic solutions for each museal science.

b) interdisciplinarity between a science "museology" and parts of museal (left side) and non-museal (right side) disciplines to solve special problems of museal selection, thesaurization, communication (especially presentation) and their history; the result of this would lead to a steady increase of museological knowledge.
<table>
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<th>Subject</th>
<th>Interdisciplinarity</th>
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<tbody>
<tr>
<td>History of arts</td>
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<tr>
<td>Archaeology</td>
<td>+ some museological aspects</td>
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<td>History of technology</td>
<td>+ some museological aspects</td>
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<td>History of culture</td>
<td>+ some museological aspects</td>
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<td>Ethnography</td>
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<td>Anthropology</td>
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<td>Zoology</td>
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<td>Botany</td>
<td>+ some museological aspects</td>
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<tr>
<td>Paleontology</td>
<td>+ some museological aspects</td>
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<tr>
<td>Mineralogy</td>
<td>+ some museological aspects</td>
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**MUSEOLOGY**

(= theory and practice of selection, thesaurization, communication and their history, in general and in particular)

<table>
<thead>
<tr>
<th>Subject</th>
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<tr>
<td>Technical sciences</td>
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<td>Physics</td>
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<td>Chemistry</td>
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<td>Sociology</td>
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<td>Pedagogy</td>
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<td>Arts (such as design and architecture)</td>
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etc.
The relationship of interdisciplinarity to museology must be examined on several levels: the first aspect is the nature of museology itself. This was the subject of the first issue of the Museological Working Papers (1980). Though there was no uniformity of response on the question of whether or not it was a "science" or just practical work, there was consensus that it existed as a field of study. Our international colleagues in Europe, Canada, Russia, the United States of America, the Middle and Far East were in general agreement that there was a body of knowledge pertaining to museology, full-time practitioners, journals, college and university teaching of the subject. In effect, all the hallmarks associated with a field. They differed on it being a "science", an "art", and a set of methods and techniques. In my review of this issue, I suggested it might be more useful to think of it as a social science rather than a physical science, albeit on a microlevel. And, perhaps, it may best be subsumed within an existing discipline like anthropology or sociology in considering its role in society, and museums as human institutions. In any event, the methods and techniques derived from several disciplines and used in museums are applicable in various types of museums and in the many disciplines represented in museums (with allowances for content).

To see the question on a macrolevel, the ongoing dialogue and debate on the nature of anthropology and the concept of culture provides an interesting comparison. Anthropologists differ on whether their discipline is a science, social science, humanities, or history; they see culture as "out there" in a real world, in the mind, in a set of rules or meanings, in the relations of production, and so forth. Anthropology being seen as cultural, social, physical anthropology, archaeology, linguistics, folklore, and human geography, together and separately in different parts of the world. As an amalgam of different disciplines in different countries, anthropology continues to define and examine itself with vigor and controversy. In raising the question regarding the nature of museology, and its relationship to interdisciplinarity and to itself, we have, hopefully, begun to follow a similarly healthy debate and dialogue.

Interdisciplinarity may be sought not only in museology itself, but in the museums, and in the disciplines themselves. These include museums of art, of science and technology, of history, and of natural history, along with many specialized museums within each type; they comprise living cultural centers today, not sanctuaries (Jelinek 1980).

Their common goals of collecting, researching, disseminating knowledge, require the orchestration of many parts. L. Lemieux, Director of the National Museum of Natural Sciences, in Ottawa, Canada, likens the parts of a museum to the instruments of a symphony, with the director "conducting" the sections (Lemieux 1980). This "art" requires knowledge of the instruments and their potential in documentation, conservation, administration, and curation and so forth, for a harmonious public performance. Though it does not require the conductor or anyone else to play all the instruments, as Lemieux points out. In this way it can be seen that museums of varied kinds, have in common their theme, but draw for their parts on many disciplines that provide content and direction, methods and techniques.

While Lemieux's analogy illustrates some things about interdisciplinarity in museology, it suggests two things that need to be clarified: The image of a symphony presents a view of the parts with the same score, organized around the theme of a museum's goals; and it suggests a conductor can control the many parts to make music. In fact, each discipline provides its players with a different score, derived from its own history, and current objectives. It is not even certain that the goals of a museum are the concerns or theme a discipline wishes to address. While a good conductor or director can often get them to play together, the results may sound more like cacophony than harmony — or at best some kind of "modern" music. Still, that they can sound together and yield to conducting imply the existence of a museology.

The previous comments are relevant to those who find disciplinary preparation only both necessary and sufficient for museums. In this view, museums provide employment and represent another application in a given field. Methods and techniques may be acquired either on-the-job or through apprenticeship. An historical perspective and critical sense of mission in terms of functions are derived solely from the discipline, or they may be seen as refinements, if they are seen at all.

This viewpoint is still widely held, though it clearly does not represent the consensus among museum specialists in the international sampling presented in the first issue of the Museological Working Papers, and evidenced at the International Council of Museums triennial meeting in Mexico City, in 1980. The traditional viewpoint produces a division within museums into those with curatorial and research functions, drawn from the academic disciplines, and those
with managerial and service functions at varied levels, drawn from business, education, and craft ranks. This division and hierarchy has its counterpart outside the museum. The comparison between curators and professors customarily ranks curators and their presumed applied concerns below professors and their teaching and research concerns. These dichotomies like so many others, are over simplified and should be abandoned. In any case, they seem to operate best only in very large institutions, which are few in number. For example, the 1971—72 survey of American museums, by the National Endowment for the Arts, showed only 5% of all museums surveyed had budgets annually over one million. Most museums today require a knowledge of all aspects of its functions for the operation of the several departments as well as the institution as a whole. These are in addition to any particular disciplinary training, especially in medium to small museums which comprise the other 95%.

It is time to call attention to the role of museums in the formation of anthropological, archaeological, historical, and scientific thinking, and their emergent disciplines in the 19th century. Dwindling national cultural resources and world heritage are again thrusting museums into center stage. This will, in turn, force the disciplines as well as museum professionals, to reconsider their roles, and the responsibilities of their practitioners with regard to collections. The present dichotomy that contrasts museums and universities, the applied and the intellectual, obscures the origins of each and the interactive and cumulative process that has benefited both. After all, universities are rooted in the craft guilds of the Middle Ages and museums in the humanism of the Italian renaissance.

I will return now to the theme of interdisciplinary in museology, and the question of the relation of the parts to the whole. It might be asked whether or not the sum total of its parts equal a museum, or is a museum something more than the sum? If the answer is yes to the first part, then the discussion may be ended; if the answer is no to the first, and yes to the second part, then the discussion is open. This is reminiscent of Kroeber’s argument regarding the concept of culture in anthropology as he saw it; it is reminiscent, too, of Durkheim’s notion of “social facts.” While I do not wish to take an omniscient view of museums as either culture or social facts, I do want to call attention to the force of social institutions to shape and reflect and reshape a culture and its ideology.

Museums and museology are products of human beings, not products of manifestations of immutable and universal laws that belong to a physical universe in the sense scientific phenomena do. They are, however, products of what we call civilizations. As such they may be likened to social sciences where interaction produces and reproduces patterned behavior. But they represent only one kind of institution, and are perhaps better seen within the history of science, the sociology of thought, and within anthropological theory. In the former instance practical techniques, empirical facts, and methods have a respectable place, though there is still much confusion regarding “theories” of museology in scientific terms, as I have pointed out in my review. In the latter instance there is increasing blurring of genres, as C Geertz points out so pointedly (Geertz 1980, 166); and it is now even more difficult to see them as “underdeveloped natural sciences.” Still, as he suggests, interpretation is a form of explanation that “trains its attention on what institutions, actions, images, utterances, events, customs, all the usual objects of social-scientific interest, mean to those whose institutions, actions, customs, and so on they are...it issues in constructions like Burckhardt’s, Weber’s or Freud’s...systematic unpackings of the conceptual world” (Geertz 1980, 167). Thus, the missions of museums and their messages, given in interpretations, are valid and important. Does museology, the knowledge, methods and techniques by which these are accomplished, represent transferable skills that make it a profession? Does it enhance the many disciplines represented in museums? Are the historical and anthropological and comparative perspectives, giving direction to the philosophy and purposes of museums useful and consciousness raising? Do they better serve the public? If the answers to these questions are in the affirmative, then museology has a place and a future as a profession.

Turning to renewed interest in the structure of education among anthropologists, Eickelman comments on P Bourdieu’s notion that “social practice in specific historic contexts produces ‘objective’ structure (economic and power relations) that in turn produce cognitive and affective dispositions of the social world common to members of given social groups or classes”...there being a presumed dialectical relationship between those elements (Eickelman 1979). Museums, in imposing legitimate meanings on the symbols of society, and by concealing the power relations that underly those symbols and society itself, play an important role in the production of culture and in the education of its members. These concerns suggest that an institution like a museum is itself worthy of study, within a discipline like anthropology or sociology. Eventually, the means by which the institution conveys its knowledge, its educational role, and its relations to power structures will be examined in depth by us.

In the meantime, the disciplines which inform the curatorial, educational, managerial, and service parts of the museums and related cultural institutions contribute their accumulated information and skills. Those who master them are better able to serve the museum community. Except for the content of a curator’s subject, and in addition to it, each museum professional partakes of the interdisciplinary nature of museology. In sorting through layers of meaning in interdisciplinary, and in examining museology in relation to museums and to varied disciplines, I am hopeful that we may at last see the emperor in his new clothes — and it will be a splendid sight.

References


Jelinek, J. (1980). MuWoP: We wish you well, Museological Working Papers, No 1, 5
As I began to organize my thoughts in preparation for the writing of this essay, I experienced some difficulty in defining clearly the concepts of museology and interdisciplinarity.

By referring to MuWoP No 1, one realizes that the meaning of museology is still unclear. As for interdisciplinarity, the reading of MUSEUM 32 (1980), No 1/2, which deals with the theme "Museums and Interdisciplinarity", did not enlighten me much. My dictionaries define discipline, but do not even mention disciplinarity. Finally, the prefixes inter, multi and trans gave me problems.

So, I took it upon myself to develop my own terminology and will briefly set it down so that the reader may (hopefully) follow my rationale. For discipline, I use the simple definition: a field of study. For example, histology, anatomy, physiology, etc are disciplines. If the practice of a profession (such as medicine) requires knowledge of several disciplines, then that profession is multidisciplinary. When several disciplines interact toward the achievement of a common goal, the action is interdisciplinary; for instance, medical treatment or rehabilitation that requires the involvement of medical doctors, therapists, psychiatrists and sociologists, is of interdisciplinary nature. To use another example, I would say that committee meetings which people from various disciplines attend are multidisciplinary, whereas task forces or working teams set up to accomplish a specific and finite purpose are interdisciplinary. As for museology, I am using the definition of it given by Sofka in MuWoP No 1: "Museology is the study of the museum and its activities".

It is important to note that many disciplines active in a museum are not museological by themselves. Art history, anthropology, history, taxonomy, etc, do not require to be carried out in a museum, although this is often where their conduct takes place. Specialists who work in a museum are not necessarily museum workers or museologists. As a matter of fact, there are still many professionals on museum staffs who pursue only their own research interests, caring little for the well being of the institution as a whole; as a result, priorities for collecting and research often reflect personal interests rather than those of the community which the museum serves. Such scientists would be better off in universities and research bodies, using museum collections for their studies.

The three major functions (or activities) of a museum are: to collect, to study and to disseminate knowledge. Let's consider whether or not their conduct calls for an interdisciplinary approach.

The collections are the basic element of the museum and distinguish it from any other kind of institution. The management of the collections is the task of curators, persons often specialized in a discipline related to the study of objects in the collections. Collections management includes the drafting of a collecting policy, collecting, preserving, identifying and documenting, registering, cataloguing and storage. It is a complex task regardless of the types of objects collected, be they plants, locomotives, works of art, arrowheads or fossils. We expect to find working with the curator, registrars, preparators, conservators, cataloguers and computer experts, who contribute to the development and maintenance of a collection that is significant, representative of the area served by the museum, well preserved, and readily available to those who have a right to it. That is truly an exercise that is interdisciplinary. A good collection requires the input of several disciplines interacting to attain a common objective set out by policy. Some smaller museums can afford to have as curator of their entire collection only one person who can hardly discharge all the tasks mentioned above; such a person should perhaps better be called custodian or keeper, terms still employed. Other museums use the term curator to designate the person in charge of the institution (my Webster agrees with that definition). My own view is that the curator is manager of a collection.

The research (or study) function is most important because it seeks and reveals the meaning of objects and collections, and is normally carried out by specialists on staff or hired under contract. By itself, this function is not interdisciplinary since the experts involved seldom have to interact with other specialists to obtain their results. There are of course exceptions; our museum, for instance, currently pilots a study of climatic change which calls for the contribution of palaeobiologists, historians, meteorologists, etc; that team is interdisciplinary.

Dissemination of knowledge by museums takes several forms: exhibits, publications, public programmes and workshops, etc. The exhibit is a good example of interdisciplinary action. Once the theme of an exhibit has been selected and its production decided, many museums find it useful to appoint a team to carry out the project. The group will include curators, thematic researchers, educators, designers, security experts, fabricators, public relations staff,
evaluators and others. All areas of the museum may be represented and working together in the conduct of the project.

As for the directorship of a museum, it cannot be termed interdisciplinary if filled by one individual only; however, larger institutions appoint assistant directors, project officers, etc who form an interdisciplinary team with the director. In my paper in MuWoP No 1, I compared the role of the museum director to that of the conductor of an orchestra. If the musicians, whom we might equate with disciplines, were merely grouped to play their instruments, the resulting cacophony could at best be called multidisciplinary! But when the musicians support and complement each other so as to achieve the best possible performance under the conductor’s leadership, then interdisciplinarity is achieved. So with the museum.

In conclusion, and with reference to MuWoP No 1 “Point for discussion: What is museology”, it is evident that I subscribe to the concept of museology Category II that sees museology as an independent science that “formulates those features which are common to all kinds of museums, but unique to the museum as an institution among institutions” (1980, 9). I also believe that the study of the museum’s functions, and their fulfilment must be based on general criteria, regardless of the type of museum planned for or existing, and that these criteria are to be developed through the interdisciplinary method of museology. Individual disciplines will of course have a role to play at the museum, but they are not the designers of the format of the institution.
Modern Catalan culture has been and still is a culture of resistance. The conquest of Barcelona in 1714 by the armies of Philip V during the Spanish war of succession marked the fall of Catalonia, whose institutions were abolished, laws repealed, and language forbidden. The people still remained conscious of their own personality, which they upheld and transmitted from generation to generation. During the second half of the 19th century a movement of cultural revival appeared, and developed in every field. One can say that the principal characteristic of this movement is that it started from private initiative, creating its own means for making the "Renaixença" possible. Historical research on it, as well as the knowledge of its origins, are of capital importance now that the language, which had never completely disappeared, has gained a new significance. Witnesses of the art and material culture of the past have been preserved with particular respect, and they are the basis of the creation of the first museums in Catalonia, through the enthusiasm of individuals who wanted their cities to have what they had seen in others. Gifts and deposits of objects of historical, ethnographical or artistic interest, rescued from buildings in ruins or which had escaped from antique dealers, were the grounds of these collections, complemented by the finds from the first archaeological excavations.

The recovery of Catalan institutions with the Mancomunitat (1914—1925), later the Republic, the Estatut d'Autonomia and the Generalitat Government allowed the development of many local and regional museums which numbered close to 30 at the time. The civil war from 1936 to 1939 once again led to the loss of these institutions and the prohibition of the language, but it could not destroy what had already been won. The protection of the Catalan identity is also evident in the material remains which are displayed to the public in museums, a form of cultural dissemination contributing to the people's awareness of their identity. During the last years of Francism, the number of local and regional museums increased, and with the arrival of democracy and the recovery of Catalan institutions, the expansion of museum development which followed can be explained by the need for Catalonia to affirm its cultural personality. Here, for a total surface of 31,930 km² and more than 6,000,000 inhabitants, there are 252 museums, of which only one belongs to the Spanish government.

The local museums in Catalonia all grew out of the concern of people or groups of people for the material witnesses of their cultural heritage. The creation of a museum was always preceded by a period of unpublicized work, collecting and assembling objects, often resulting in an exhibition which first persuaded local authorities or larger groups to acquire premises for permanent display. From this point on, the museum could begin to operate as such, thanks to the dedication of totally disinterested citizens. It was only in 1975 that a few isolated attempts at professionalism appeared, restricted by limited financial means. Volunteer work gave a special, paradoxical character to local museums. One could think that if museums were founded spontaneously by the people and not by the authorities they would remain popular. This is not exactly the case: on the one hand, all the objects were obtained through research and gifts, that is to say that the people were interested and not only contributed, but still contribute to building collections. On the other hand, the basic essentials necessary for installing a museum are impossible to obtain due to a lack of resources, and the
self-taught volunteer is extremely valuable but more often than not, he feels that the museum is his private collection and not an educational institution. This appropriation of cultural material diminished the popular dimension, and hindered communication with the public.

It is possible that self-teaching is a characteristic of the Catalan people, due, in a large part, to the fact that they were inflicted with continual repressions. Professionals in every area devoted their spare time to tasks for which they had received no training. For example, one can find financial managers transformed into archaeologists, engineers doing research in art, workers who have become experts in mineralogy. The result is obvious: each museum will become what its voluntary staff wants it to be, that is, the reflection of its owners, with no theoretical planning or any relation to the demands of the public.

Volunteer work has divided these local museums into groups that are not homogeneous. They are pluridisciplinary museums capable of grouping together the most varied types of collections: archaeology, arms, numismatics, ornithology, mineralogy, costume, ethnography, arts etc, but each in a separate section and in competition for funding and for a few more square meters for display.

Nevertheless, "pluridisciplinarity" was a positive factor in Catalonia at the time of cultural resistance. First, it led to the existence of diverse groups of collaborators who were more or less specialized, a very important factor when work is not remunerated. Secondly, through this approach a great many objects were safeguarded because there was always someone to whom it was imperative that these objects should be preserved. In the third place, people became aware of the fact that the witnesses of history are not only masterpieces of art, but also objects of daily use, all of which have their historical significance, whether positive or negative.

The principal factor leading to the saturation of museum displays were an increase in collections, their over-specialization, and the acceptance of private collections in a context of poor conditions of permanent display. This gave the visitor an impression of weight and oppression, quite contrary to the aims of museology.

Does this mean the failure of "pluridisciplinarity" in Catalonia? Obviously not; the real reason lies in the type of management which had been employed up until then, in the scientific over-specialization or in the "collectionitis" of museum collaborators, who lost the view of the public as the finality of museum work.

Pluridisciplinarity has nevertheless contributed to creating an image of the local museum as one of a group of specialized museums, coexisting in the same building but without any relationship to each other. An overall view was lacking, and, above all, a philosophy as to why a museum, and for whom it has been conceived.

At the end of the 60's and beginning of the 70's, these problems came to a crisis. It could be seen that the public did not visit museums as had been expected, and that when school children visited they often could not find the various objects belonging to the same historical period! The pluridisciplinary divisions had reached unheard-of proportions. To learn about the rural life in the 18th century, the domestic objects illustrating the theme were classified in different departments according to their nature. The same was true of ceramics which were divided by types of tiles, decorated or not; tools in iron were separated from other utensils, and it was up to the visitor to make the relationship between the objects. The larger specialized museums progressed in their work independently from one another, and the particularly difficult situation of the country turned these museums into refuges for researchers, cut off from the public and free from the interference of school groups, resulting in abnormal situations, such as museums with no fixed opening hours.

New generations have started to show that they cannot accept this situation, and to believe that the museum institution has no meaning if it is cut off from the public. It would be a research centre or a data bank, but not a museum. One cannot speak of a revolution, but rather of an evolution of personal attitudes in search of a valid solution. The Llibre Vermell dels Museus d'Art de Barcelona, and the monographic issue on museums of the journal CAU are the most important expressions of this attitude.

At the same time as the struggle started for the establishment of educational departments in those museums depending upon the municipality of Barcelona, the first requests were made for the renovation of local museums. Teachers learned of the educational role of museums in "summer schools" and at the seminars held at the Institut de Ciències de l'Educació at the university. At the Congrès de Cultura Catalana (1977) a first assessment was made of Catalan museums. The results were examined by the Assemblea de Treballadors de Museus (Assembly of museum workers) which has compiled several studies and made proposals on museum policy, coordination and operation.

Local museums also joined in the trend. They questioned their reasons for existence; while the partisans for collecting stayed in their ivory tower, the more progressive group was opening the way to interdisciplinarity. After the publication of the Llibre Blanc dels Museus de Barcelona which the municipality of Barcelona had ordered from a team under the direction of Mr. L Monreal, Secretary General of ICOM, a complementary study followed, Els Museus de Catalunya, aproximació a la seva problemàtica, at the initiative of the Comissio Tècnica de Museus Locals i Comarcals. Both of these works advised setting up a new form of coordination among museums, based less on their collections as on their theoretical objectives, the geographical origin of their collections and the regions they serve. A definition was proposed for regional and local museums: those museums which collect, preserve, document and disseminate the cultural and natural heritage of every town or district. This definition is the result of different theoretical levels of detailed analysis and synthesis, and of using history as a guideline. It is believed that the sequence of particular facts and their relationships with one another is what enables us to understand our own cultural identity.

Pluridisciplinarity is thus implicitly rejected as founded on departments isolated one from another, and a new answer to the public's demand on museums is sought in interdisciplinarity. Catalan museums are coordinated in the following over-all plan:

- local museums — specific details
- regional museums — a detailed synthesis of a relatively large geographical area
- museum of Catalonia — a synthesis of the whole country.

Museums are no longer considered to be repositories of collections but have become centres of culture. The use of history as a guideline has brought about the simultaneous display of material which had been previously separated. Household objects, works of art, sacred objects, arms, coins, tools, etc, are all used to explain different events at one particular period, to measure the influence of these events and to improve our understanding of their significance. All of this supposes that museum work has changed. The specialist who was previously secluded in his field is eager to communicate the results of his research to others. This synthesis is reached through teamwork. Numismatics or technical objects are no longer displayed as such, but exhibitions now show economical history, the industrial revolution or social conquests.

However, the battle between "pluridisciplinarity" and "interdisciplinarity" is still going on, and one can often say that these two concepts are not opposing criteria demanding
a choice, but two complementary realities which must be balanced, particularly in the case of extremely rich collections.

Exhibitions which display the synthesis of a region, the ecosystem in its human and physical aspect, are compatible with other complementary well-defined exhibitions in which specific concepts are more exhaustively examined. The symbiosis of interdisciplinarity and pluridisciplinarity can bring results of a high cultural value, interpreting history and material culture on many levels of interest to the visitor.
On the homogeneity of museology

The character of museum work and museology is multifarious and heterogeneous. This can be seen on several different levels, each of which is incommensurable with the other.

The most striking fact is the participation of museums in research activities as well as in the popularization of knowledge. The museum is a type of institution which combines research and popularization within a single indivisible system in which popularization emanates naturally from research. Museology is, therefore, obliged to concentrate on the problem of how to employ museum collections so that they serve both research and popularization.

Research and popularization co-exist as one single unit. This, in my opinion, represents a characteristic feature of modern trends in the development of culture. The steadily increasing interest of the public at large in knowledge is a very progressive feature which creates a potential advantage for museum work. A strict separation from research, which prevailed until recently in most areas, did not adequately guarantee that the dissemination of knowledge to the public would be of sufficiently high standard and that the knowledge would spread in an easily accessible form throughout the public at large.

Even if museums were to be incorporated into their corresponding research institutions — a proposition which is logical as well as economically sound — they would necessarily participate in building the new structure by contributing their collections and by providing experience concerning specific forms of popularization through exhibitions. Museums would continue to exist within the framework of such new research institutions as a tool for the popularization of the results of research. In this context, museology possesses an indisputable place as a means of developing the theories and principles governing the integration of research and popularization into one single entity, in the interest of increasing society's cultural awareness.

The multifarious character of museology is also manifest in the management of various museum activities, both internal and external. On the one side there is, for instance, the task of preparation, restoration and conservation of objects for the purpose of their use within corresponding research disciplines, and on the other side there are the tasks required by their popularization, especially through exhibitions. The work within the framework of conservation and restoration, predominately of a chemical physical or technical character, represents one of the basic operations of museums, which in their present-day form remain the principal guarantee of the preservation of sources of knowledge for the future. Activities which negatively affect the preservation of collections should, ideally, have no place in museum work. Museology should devote particular attention to these questions, since some activities of a popularizing character, such as travelling exhibitions of rare artefacts, shorten the life span of museum collections. Museology, together with other corresponding disciplines, considers the suitability of individual methods of conservation and restoration: the museological approach is that the preservation of sources of knowledge for future generations should have priority.

Another sphere of interest to museology lies in the theory of records management: the documentation of collections and the dissemination of information to the public. There are the questions of the registration and the cataloguing of collections, and of their location in storage, according to the needs of research and popularization. Museum work still remains, in principle, in the position of a system based predominantly on memory and only partially using automatic methods, frequently obsolete from the point of view of contemporary information sciences. A considerable obstacle to introducing modern methods of information services in museums is, among other things, the fact that collections often remain unclassified and without a satisfactory description from the point of view of their discipline. Museology has a wide-opened possibility here to introduce modern information methods. It is imperative, however, to consider the fact that application of these methods presupposes respecting the specific features, principles and needs of individual disciplines according to which museums build their collections, and carry out their work on research and on informing the public. While introducing data processing it is necessary to avoid a purely formal approach through which heterogeneous knowledge would be accumulated with little chance of application.

The repertory of museum exhibitions is far from complete and can develop further, for instance in the direction of so-called “research exhibitions”. These exhibitions either point to the data base, research procedures and conclusions of a problem already solved and published, or they foreshadow the solution to a question which so far no one has attempted to solve, or they creatively broaden the knowledge.
within a given discipline.

Since museums preserve the “data base” for a series of disciplines and are concerned with their popularization through exhibitions, it is only logical that they also become one of the centres of adult educational programmes to disseminate the most recent developments within these disciplines, in the form of lectures and courses. The larger museums organize schools in the disciplines represented in their collections — the so-called “people’s universities”. This type of popularization necessarily becomes another one of museology’s concerns.

The *historiography of museums* is, no doubt, a task for historians. However, a historian of museums must be intimately familiar not merely with their outer facts and framework, but also with their inner relationships. We cannot be satisfied with a history of museums or of their particular activities if they are portrayed without the knowledge of the principles, trends and problems of the work carried on by museums. To write an historical treatise on museums presupposes an acquaintance with the museological principles of the corresponding periods, as well as with the most advanced theories of museums. In just the same way, we cannot accept historical research about museums which is presented with a fine knowledge of museological problems but with no respect for the rules of historiography. A truly historical research about museum work must place museums and their activities in the general framework of human culture, and must not remain a mere enumerative recapitulation of events, both internal and external, in the development of museums. Museology also has, therefore, its role to play in the historiography of museums.

Museology is also in close relationship with sociology. It is particularly general museology which can be considered as a specialized component of the theory of the sociology of culture. The aim of museums in the present and future society is one of the foremost tasks of museology. Its analyses and conclusions should be of primary importance for the organization of museums, their interrelations and divisions of labour, their inner structure, the training of the museum staff, etc. The administration of museums within a particular area, or of individual museums, must also respect current museological trends.

Museology ought to influence *architecture* with regard to the most appropriate design of museum buildings, especially of their internal structure, according to both the present and future needs of museum activities. There are common tasks for museology and architecture in designing exhibition rooms, exhibition compartments and show cases, and in reconciling the artistic and technical aspects of exhibitions, in solving the question of materials to be used, lighting, climatization, arrangement of exhibits, etc. The realization that exhibitions are to be carried out under the management of specialists and museologists must take precedence over the concept that exhibitions are carried out and directed by architects and designers: these professionals principally give them an aesthetic form, underlying their aims.

The non-homogeneity and multiformity of museology becomes evident especially in the application of particular disciplines to museum work. Specialized museology, which determines the principles of such application, must naturally respect the principles, interests and needs of individual disciplines. This means, among other things, that the application of the corresponding disciplines can be carried out only by specialists in those disciplines. Lack of consideration for particular disciplines would cause a leveling, amateurization and vulgarization of museum work. Hence, specialized museology must sometimes challenge attempts to ignore the particular disciplines in the work of museums, to weaken their specific requirements in order to achieve an immoderate generalization and compactness, which may be perhaps desirable from the administrative point of view. Particular disciplines may be grouped in museums according to their similar though not quite identical trends in documentation and popularization; however, they remain different as far as research and some other museum activities are concerned.

We must be aware that museums containing several disciplines are not homogeneous institutions with uniform activities and that their administration must take into consideration the theory of both general and specialized museology.

To summarize, we must state that museology is a very heterogeneous discipline and that it is obliged to accept the theories and methods of other disciplines — for instance of sociology, of education science, of historiography and of the academic disciplines represented in museum collections. Museology applies these theories and methods to museum work. But, in spite of all this, museology remains a clearly limited discipline, fully and exclusively confined to the theory and methodology of museum work.

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Interdisciplines in the art museum

Engaging with interdisciplinary interpretations in exhibitions in art museums is dependent upon developing intimate experiences for viewers within all of the arts. A museum staff should be in working possession of reliable criteria of interpretation processes. Effective museum programs in art occur when competencies for interdisciplinary interpretation in art museums are the results of knowledge which staff and viewer possess.

It is the events or public interpretations within the museum, developed by a considerate art educator, that brings about an interdisciplinary format for interpretation and judgement of art objects in the museum. The audience must be able to understand the nature of the art experiences they are having in the museum and in order to do so must recognize that the art objects being considered have high levels of quality which exist also in the interdisciplinary events that they are experiencing in the museum's program. The more vivid the experience for the audience, the more extensive will be the manner in which cross disciplines or interdisciplinary approaches will enrich the museum experience. In order for such museum programs to happen, the museum must conduct experiences for audiences and visitors which provide for the realization of the aesthetic value of art, its related disciplines and of the museum which acquires, preserves and exhibits these art objects.

Approaches to interdisciplinary interpretation

Providing for interdisciplinary interpretation in museums demands a basic understanding of the various philosophies of interpretation and criticism in the arts. Most universal viewpoints about art contain elements, which, when put into practice, elicit directions toward understanding but are limited toward designing interdisciplinary approaches which could exist in a museum program. Stephen Pepper is one philosopher of art who identifies viewpoints toward interpreting art and calls them world views. Pepper categorizes these world hypotheses by calling them mechanistic criticism, organismic criticism, formistic criticism and contextualistic criticism (Pepper, 1965). The basic understanding of these viewpoints, which will usually become eclectic in their actual practice, assist a museum staff in providing visitors with programs which help to determine the nature of the aesthetic judgements of the audience and are fundamental to providing for interdisciplinary knowledge in the art museum.

Mechanistic criticism

The world view of mechanism suggests that value is within the individual for whom pleasure and pain are generated. The viewer in this type of fundamental approach to museum programs is considered an unautonomous individual, with his own feelings and values. Mechanistic viewpoints place emphasis upon individuals and little emphasis upon group situations. Everything that a museum would do in its programs using this world view will usually also be devoted to a particular situation dealing with a local habitation, a place and a time. Museum programs, based upon mechanistic viewpoints, are therefore conceived as group activities but will emphasize the separateness of individuals within the group. Feelings within any group of individuals are so radically different that perceptions of art in mechanistic programs begin with sensory responses to art or with the elements of beauty and proceed from this source alone.

The sensory stimulus within a work of art will launch individuals and their associations in interdisciplinary programs in museums. Emphasis in this mechanistic approach will start with the perception of the art but will emphasize total use of the senses in moving, feeling, touching and reflecting upon past experiences within the individuals of the group participating. This approach will be aimed at developing a fineness of sensuous discrimination for judging the value of the art on exhibit. The success of the mechanistic approach, calling upon all the arts as well as the senses of the individual, will be realized when the feelings of pleasure obtained by individuals during the museum program is communicated. It is usually the amount of immediate pleasure held by audiences that art objects give individuals in mechanistic approaches that determines the amount of the aesthetic «worth» of the art in collections in museums.

Contextualistic criticism

The human body and its feelings and associations are only one form of consideration in the museum program which bases its activities on the contextualistic world view. Con-
textualism will, therefore, emphasize the situation in the museum in contrast to the mechanistic viewpoint which stresses the sensations and images within individuals. Values in the contextualistic approach to a museum program do not find limits in individuals but are related to the entire situation. The contextualistic approach is concerned with the context of the activity or the total situation in the museum. The uniqueness of the part or the elemental qualities of the museum program or experiences is utmost in the consideration for conducting this type of museum program. Sense materials are ranked last in a contextual's explanation rather than first as in the mechanistic world view. The aesthetic character of a situation in a museum consists in the perception of its quality and the results are blended into one harmonious total quality which serves to determine the character or mood of the museum event as well as its interdisciplinary effectiveness. It is not enough to hear the music of the period, to see art of a period, or to move in dance forms or even to feel and renew the associations possible by listening to literature and poetry. The disciplines of the arts are interrelated in a contextualist's viewpoint through a total vivid emotional reaction to the museum experience. The artist and the museum becomes responsible for the revelation of everyday culture and judgements as well as the understandings made upon the intensity and reach of the experience as related to its social conditions, its structure and its details. In accomplishing this, the museum provides an interdisciplinary approach in which the art on exhibit becomes a series of perceptual sensations culminating in a fully realized quality of the total aesthetic experience possible in a museum. The effectiveness of the museum experience for the audience or viewers becomes dependent upon the effectiveness that the museum instigates in connecting the contexts within art forms and the identical qualities running through art, music, architecture, dance and theatre which will become the appropriate interpretation directions. As long as a fusion exists between the art which is related to the audience, the interdisciplinary nature of the museum experience will be effective, particularly if it connects with a part of life rather than as some form of luxury or entertainment. The shared responses of the group participating in such an interdisciplinary museum experience is an important part of the contextualistic point of view in the museum activity.

Organistic criticism

Otherwise known as objective idealism, organismism emphasizes the unified relationships of things and also has connections and possibilities for interdisciplinary programs in the museum. It focuses upon the internal relatedness of museum events by supporting the belief that there is value in knowledge, in ethics, and in art. Organicism is, therefore, concerned with the integration of judgements, acts, and feelings. Like the contextualistic viewpoint in museum programs, the organist will not be just concerned with the sensations of the individual alone but will focus upon the total context of the event. The organistic museum program will, however, take the perceptions of the museum event further than contextualism by attempting to make larger integrations through considering all fragments as an integral part of the whole. Rather than dwell upon the quality of the experience in the museum, the organist developing a museum program, will define the unity of the museum situation.

The degree of integration or the thoroughness and the amount of materials integrated are very essential to this viewpoint. High points in cultural history, art and science are worthy material for the organist. Great novels, not short stories; great epics and dramas, not sonnets; major paintings, not minor art works; tombs, temples and cathedrals, not domestic houses, impress the staff member who develops organistic programs from the organistic viewpoint. The organic wholeness of an event and its objects in the museum are primary considerations. The value of this viewpoint, therefore, lies in its degree of integration and the quantity of information that is collaborated through mutual needs. The organistic viewpoint in museum program which are interdisciplinary in nature supports the possibility that everything can be integrated into an aesthetic cultural whole including such areas as religion, medicine, and sports.

Formistic criticism

As the most familiar viewpoint in museums, formism has been around the longest. Aristotle championed it in his Poetics, Santayana in his Sense of Beauty and Ruskin through fundamentalism. At its foundations lies the belief in similarity, depending of these into types or classes. Similarity in this approach depends upon what is considered enduring and, hence, worthy. The norms become what is ideal, the essential and the universal, as opposed to the creative and often the unpredictable that exists in other possibilities for interdisciplinary approaches in museums.

Formism suggests that there is a sense of conformity which should take place within the viewer or in the museum audience in the museum and that objects of art in the museum have the potentiality of bringing about perfection in society. The effectiveness of the museum experience becomes based upon the museum staff's abilities at disclosing qualities within objects in the museum collection that conforms or is a perfect example of the expression of an artistic culture. Because we are most familiar with this approach for audiences in the museum, the lecture or lecture tour approach has become standard in this type of museum program, as information about the qualities of perfection within the museum collections is found to be best transmitted through lectures or printed materials. In this approach, objects are often considered for themselves but when an interdisciplinary approach in the museum is utilized perfection is transmitted in each of the arts. The audience is left to make connections on their own and there is not an attempt to deal with human emotions, sensations, associations, or shared situations within the museum. When art objects are treated as documents and their values lie in their perfect qualities, a museum is able to bring to those who have had insight enough to listen and to absorb delineations, programs typifying enduring artistic qualities.

Integrating the viewpoints

The mechanistic, contextualistic, organismic and formistic have possibilities of integration utilizing the Pepper basis for world views. When applied to an interdisciplinary arts activity in the museum, these viewpoints, usually eclectic when put to actual practice, form wholistic or total interdisciplinary meaning in museum programs. The staff members of museums planning interdisciplinary programs can find this approach realistic by forming programs into two stages which are called Thought-Watching and Image-Watching. These two stages contain a series of steps which also permit unified interdisciplinary experiences in the museum.

Thought-Watching is a preparatory stage for viewing art while Image-Watching is composed of description, analysis, interpretation and information in the actual encounter with the art on exhibition. Both stages lead to aesthetic judgements about art by combining all of the world views concerning art.

Preparing individuals to view particular works of art permits the museum staff to draw upon the performing arts as readiness for looking at art in the museum. In drawing upon creative drama, music, dance, and literature, a wealth of related content that has no need to be imposed upon a
work of art on exhibit in the museum can serve to develop an attitude or condition in the minds and emotions of the viewers for more sensitive judgements of art. By recalling the warm-up exercises in the backstage areas of performance halls in the arts, staff members will soon realize that processes within the performing arts can also help prepare individuals for performances and readiness for viewing in the galleries. Sensation and emotional preparation constitutes a mechanistic approach to museum programs under the heading of Thought-Watching through considering the sensations of individuals within the group and therefore adds assistance to the museum staff in directing and focusing the audience toward a total aesthetic experience in the museum. Thought-Watching is interdisciplinary in nature because it relates to the visual arts that are about to be encountered in the Image-Watching stage using processes within the other arts that are brought into action with the museum viewers.

Image-Watching begins by the staff member acting as a catalyst before the art work and with the audience. The experience is contextual in nature and begins about a process of striving for a quality situation in which both art, people, museum staff and the museum environment are shared in discussion form through making a verbal list or inventory of what the group sees before them. Agreement, as well as a process of sensitizing the individuals in the group towards perception of details and parts of the art work, provides the museum staff member as well as the audience with a shared context while embracing the philosophy of contextualism and moving toward the second step on Image-Watching, which deals with analysis.

During the analysis step, the museum activity becomes focused upon the processes used to compose the art work. The elements of line, form, color, texture, and shape as well as the artist’s intent in creating the art work serve to further extend the contextualistic viewpoint through interest in the uniqueness of the parts and qualities of the art work within this shared situation. The interpretation step permits individual associations and feelings to be voiced among the group. Participants find that sharing their feelings about the art during analysis of striving for a quality situation in which both art, people, museum staff and the museum environment are shared in discussion form through making a verbal list or inventory of what the group sees before them. Agreement, as well as a process of sensitizing the individuals in the group towards perception of details and parts of the art work, provides the museum staff member as well as the audience with a shared context while embracing the philosophy of contextualism and moving toward the second step on Image-Watching, which deals with analysis.

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A unified interdisciplinary approach in the art museum is one that is meant to reach all levels of an audience. Its interphilosophical or eclectic nature serves to provide a flexibility for promoting an aesthetic experience to transpire in the art museum. It is exactly this aesthetic experience which is unique to the art museum as opposed to the function of other institutions in society. The aesthetic experience, with its foundations in the philosophy that is upheld in communicating or relating art to the viewer, is what makes museums meaningful. Through concern with philosophical foundations and through an awareness of the possibilities for blending these philosophies into a unified interdisciplinary experience, museums will continue to make the aesthetic contributions to society that are recognized, understood and appreciated.

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Multidisciplinary research in museology

The problem of the nature of museological research, its specificity and place in the general scientific process, and its correlation with the studies of adjacent and intersecting disciplines, has preoccupied specialists for a long time.

Surely it is no mere chance. The problem is that any effort to interpret museology as a scientific discipline inevitably brings up the necessity of determining the nature of museological research. Until now there has been considerable disagreement in the conception of the essence of this problem, which in turn adversely affects the elaboration of the general theoretical concepts of the science.

Therefore ICOM had good reason to set the task of bringing out specialists’ opinions on this problem in the collection published by the International Committee for Museology, MuWoP.

In the process of trying to find the essence of museology, and its relation to other sciences, there are, as it seems to me, several stages:
1) museology was not separated from specialized disciplines;  
2) museology was singled out as one of the documentary disciplines (alongside with archives and library science);  
3) museology was considered as a specific applied discipline with purely technical functions;  
4) museology was defined as an independent science, and efforts were made to find its place in the system of sciences and relations with a whole complex of scientific disciplines, not only documentary, but specialized sciences as well (history, study of art, history of literature, natural sciences, and others), and also with psychology, pedagogics, sociology, history of culture etc. In this case the definition of interdisciplinarity and multidisciplinarity of museology was gradually approached, and its relations with the whole complex of sciences were described by the notions “integration”; “integrated discipline”.

It seems to me that this very conception, connected with the names of Z. Z. Stránský, J. Beneš, J. Jahn et al., appears to be the most productive, and comprises the elements which once developed will finally lead us to taking tangible steps on the way to defining the basic concepts of modern museology, and its relation to other sciences in particular. Consequently, there arises the question of the character of museological research.

The world of museology has made every effort to elaborate the problem of “museum and research”. That was not an easy job to do, and its results can not be considered satisfactory enough to consider the problem as being solved. Still, in spite of existing vagueness and divergences of opinion, a certain community of comprehension on a number of essential problems has begun to show: the museum is defined nowadays by most museologists as a specific scientific-research institution, and research work as a compulsory component of the social vocation of a museum. The integrality of the research function of a museum is evaluated by the formula according to which research is the basis of all kinds of activity, since its main subjects are the museum pieces, collections representing an essential sign of the museum as a social institution, the sign which underlines its specificity. Finally, still greater recognition is given to the viewpoint that a museum can be interpreted only as an institution possessing a system of social functions, which includes research, protection, dissemination of knowledge (the educational function). Any effort to define the museum outside of this system, by means of an artificial division of separate functions, inevitably leads to distortion of the very essence of the museum. (1)

Thus research becomes an indissoluble component of the social destination of the museum.

But a fundamental definition of research in the system of museum, although it is very important, is only the first step in the development of the concept. It is necessary to determine the character and particularities of research work, the distinctive features of museological studies, and this is possible, I think, on the basis of general theory, that is by means of the simultaneous interpretation of the key notions of museology. (2) One of these problems is fundamental and applied multidisciplinary research in museology.

Speaking of research, we should first of all distinguish between:

a) general research in museums, and  
b) museological research proper. The latter covers, as it is known, just one of the many kinds of museum investigations being carried out not only in museums, but also in various museological centres — institutes, methodical centres, departments, etc.

For a long time all research carried out in museums was qualified exclusively as belonging to specialized disciplines — history, source sciences, study of art, zoology, botany.
etc. But everything of a specific character to the museum was attributed to technical operations. It was so generally accepted, that even scientific workers of museums wouldn’t qualify their work any differently. Such an attitude, though now shaken, still lingers on. This attitude has an especially strong position in those museums in which collections form the basic, main corpus of concrete specialized disciplines, particularly archaeological, numismatic, ethnographical, art and some other museums. This simplified interpretation of the character of research in fact left no place at all for museological research, or at best, reduced it to the problems of the techniques of museum work. All this indirectly reflected the weakness of museology, the lack of the development of its concepts.

It seems to me that for the last few decades, owing to considerable achievements in the forming of museology as a scientific discipline, this primitivism is being gradually overcome, and we are now at the turning point, when the obscure inseparability of the complicated phenomenon of the museum and its activity, research in particular, is being revealed in the system of scientific concepts. These concepts are manifested in connection with a great number of sciences, and are revealed also in those particularities which cannot be related to existing scientific disciplines, but acquire scientific interpretation only in the system of museology.

Nowadays the concept of the multidisciplinary character of museum research, and museological research proper, has become firmly established.

The multidisciplinarity and the interdisciplinarity of museological research logically arises from the subject matter and the subject of study of museology as a scientific discipline. Further, I proceed from the following conceptions:

The subject matter of museology — collections of museum pieces and museums as a social institution — is of a multidisciplinary character. Collections of museum pieces serve as a basis for the most varied sciences: museums depending on the nature of their collections are always definitely specialized, that is, they bear a relation to some science or even to a complex of sciences (for example, museums of local lore, organically connected with many social and natural sciences, kinds of art and production).

The subject of study of museology — specific regularities connected with:
a) the attitude of society to obtaining and disseminating knowledge through the phenomenon of a museum piece;  
b) the historic functioning of the museum as a social institution.

Both of these components of the subject of museology also possess an organic multidisciplinary characteristic. As Stránsky pointed out, one of the radical causes of multidisciplinarity consists in the polysemy of information contained in museum pieces, museology studying (in contrast to special disciplines) the general documentary code of the evidence provided by museum pieces.

Thus both the subject matter and the subject of study of museology organically lead it to the problems which intersect with a large complex of specialized social and natural sciences. At the same time, the presence of all of these multiple connections does not mean in any way that museology, museological investigations, make a simple sum of the elements of different disciplines. As an adjacent, intersecting science, we understand it as an independent whole, and the character of these connections with other sciences is interpreted as integration.

This concerns both general and special museology. As it is evident from the paper by Jahn, in relation to museums of natural history, multidisciplinarity represents the genetic unity of specialized scientific and museological study.

On the other hand, multidisciplinarity follows from the character of the research methods applied by museology, which belong as a rule to the general and particular scientific methods of the complex of social and natural sciences, and are adopted by museology either as they are, or in their transformed condition. For all this however, the system of methods distinguishes museology from other sciences.

As mentioned above, it is necessary to differentiate distinctly between research concerning special disciplines and museological research proper. Such an approach, in Stránsky’s opinion, reflects the up-to-date level of understanding of the problem of the interrelation between museums and science. On the other hand, the one-sided emphasis of the role of special disciplines, as if it were the only basis of museums, obviously reflects an outdated understanding of the question.

Specialized research as an integral component of the museum’s activity has been generally recognized for a long time. However, with the development of museology our notions about research have greatly widened.

Firstly, analysis discloses a specificity characteristic of museum specialized research, and nowadays we can often without reserve put the sign of equality between the disciplinary investigations in museums and the so-called “pure” science. These differences are an outgrowth of the source base, as it was stressed by J Neustupný, W Klausewitz and other museologists, and at the same time they are in line with the particularities of the aspects and the problems investigated in museums.

Secondly, a varied sphere of other (not specialized-scientific) research, qualified as museological, is disclosed. The exposure of their specificity, many-sided pithy characteristic, is one of the most important tasks of modern museology.

Not long ago museological research was connected, as a rule, only with theoretical aspects of museology and museum work. Thus, in the well known paper by Neustupný, museology itself was characterized as the methodology of museum work, the theory of the application of various disciplines in museums. At present the character of this research is interpreted more loosely, and we are speaking already about the reference to many kinds of investigations connected with the study of museum pieces — monuments as primary sources, and not only of such aspects as their attraction and expression, but also in a broader sense, these qualities are designated as specific features and aspects of museum pieces.

Such an approach though, on no account means the attempt to diminish the significance of specialized research, or to erect an impassable Chinese wall separating museological research and specialized sciences. One can hardly agree with Jensen, that the role of special disciplines is the main problem of museological theory, but he is surely right in stating the urgency of theoretical coordination between sciences intersecting in museums, and specific relations and requirements of museum work.

We also quite agree with Jahn, who in studying the condition of natural history museums, has arrived at the conclusion that “theoretical principles of museum procedures are closely connected with the existing theoretical and philosophical principles of those special disciplines which have museum objects as their subject matter”. We agree that there is a need of further elucidation of the essential structure of museology for research and for outlining the educational aspects of its activity, and of clarification of the relation of museology to the intersection of the scientific natural and social disciplines in museums.

As it is known by experience, in those cases when some specific aspect of museum activity receives the most concrete study, one manages to reveal scientifically all the complications and diversity of relations between adjacent disciplines and museology proper, between special and museological research.

Museological literature has more than once raised the
question about basic (fundamental) and applied research in conformity with museums and museology. Neustupny was one of the first to analyse these questions, and it can be surely put down to his credit. However, Neustupný has not determined the principal difference between these two types of investigations and has put forward quite a formal sign for their differentiation: those published are fundamental research, and those unpublished are applied.\textsuperscript{(14)}

Fundamental and applied research in museology have been examined by Stránský, Schneider, and of late, Jahn.\textsuperscript{(15)}

In determining fundamental and applied research in museology it is necessary, in my mind, to be guided by the corresponding concepts of modern philosophy and study of science.

As it is well known, from the dialectical point of view, any theoretical knowledge is abstract, but only practice serves as a criterion for the correspondence of theoretical knowledge to reality. According to the definition given in \textit{Lenin’s Philosophical notes}, cognition makes its way “from direct contemplation to abstract thinking and from it to practice”.\textsuperscript{(16)}

In accordance with the concepts of the study of science, fundamental (basic) research is that which “pursues the object to discover the sought for regularity as such..., nevertheless the investigator himself should always have in sight the ultimate trend of any fundamental investigation: to give some useful results for practice”.\textsuperscript{(17)}

Applied sciences are meant to find ways and methods of utilization of the objective laws of nature and society discovered by fundamental science, in the interests of achieving the goals set by the people.\textsuperscript{(18)}

Therefore, “each fundamental science follows in line with some practical discipline, which exists either within common science or as detached from it,... correlation between fundamental and applied research varies depending on the character of sciences as they are”.\textsuperscript{(19)}

Study of science distinguishes one more type of investigation — elaboration, which presents practical research based on both fundamental, and, to begin with, applied research.

In our opinion, in museology we come across all three types of research: fundamental, applied, and elaborated.

Fundamental research in museology is aimed at discovering the principal regularities connected with the process of obtaining and disseminating knowledge by means of phenomena such as \textit{museum pieces}; with the logical and historical aspects of the social function of museums, — specific social institutions, their origin and development in different social and economic structures.

There is an urgent need of concrete analysis of all these aspects of museology as a scientific discipline, and it has already been done to a great extent in the papers by Stránský, Beneš, Jahn and others.

Any effort to ignore this necessity or to confine oneself to ironic remarks about museology as “grandmotherology” has no future, and objectively pushes museology into the realm of empiricism. This is one of the main obstacles on the way to the development of modern museum work and its place in future society.

\textbf{Notes}


(2) \textit{Radon, A. M. (1978), Le travail de recherche dans le musée, possibilités et limites/Research work in museum: its possibilities and limits, Possibilités et limites de la recherche scientifique typique pour les musées, Pologne 1978/ Possibilités et limites in scientific research typical for the museums, Poland 1978, Brno.}

(3) \textit{Stránský, Z.Z. (1971), Grundlagen der allgemeinen Museologie, Muzéologické序列, Supplementum 1, Brno.}


(6) \textit{Stránský, Z.Z. (1979), Porovnání muzeovedenský, cupboard text dokládá na německém jazyce, str 3, 15}


(8) Neustupný, J. (1968), Museum and research, Praha.


(10) \textit{Tolli Jensen, V. (1976), Der Begriff »Museologie«, Muzéologické序列, No 6, Brno.}


(14) Neustupný, J. (1968), Museum and research, Praha.


(16) \textit{Lenin, V.I., Oeuvres 38, 160/Collected works, 29, 152—153.}

(17) \textit{Kodrov, B.M. (1972), O nauchn fundamentnyh i praktichnyh, Vопросы философии, No 10, str 39.}

(18) \textit{Kodrov, B.M. (1972), Сопоставление фундаментальных и прикладных наук, Вопросы философии, No 10, str 45.}

(19) \textit{Kodrov, B.M. (1972), O nauchn fundamentnyh i praktichnyh, Voprosy filosofii, No 10, str 39—40.}
The dynamics of the role of interdisciplinarity in the museum institution

My intention in this study is to show:

- what, in the long history of museums, has been the destiny, in turn united, disunited and reunited, of those disciplines which condition museums in their action and in their outreach.

- what are, following the line of a pertinent interdisciplinarity, the results today?

The museum institution, at its outset, provided two major models, one of which exemplified unidisciplinarity and the second of which exemplified interdisciplinarity. Built in Athens in the fifth century before our era, the Propyleaum, the monumental entrance to the north wing of the Acropolis, housed a painting gallery, the first one which can be dated in the world. At the end of the fourth century before our era, Ptolemy founded the Mouseion in Alexandria: an Academy, a University, whose gardens were decorated with sculptures, and which had a zoological garden and a rich library for study.

The end of the Middle Ages and the Renaissance saw the multiplication of two types of establishments, founded, one by great noblemen, and the other by distinguished humanists. These were the "chambers of marvels" created by collectors of paintings, and the "cabinets of curiosities" by collectors of natural and ethnographical objects. These collections, foreshadowing museums, are the first signs of a virtual segregation between the artistic disciplines on the one hand, and the scientific ones on the other.

Founded in Rome in 1471 by an enlightened Pope, the Museo Capitolino is the first of a long line of sculpture museums. The development of other types of museums followed, unidisciplinary as well, not only in the field of art, but also in the sciences of man, of nature and of the universe, and eventually, of advanced techniques. All were the mirror of the development of scientific branches which were becoming more and more specialized, more and more subdivided.

Curiously, the Age of enlightenment did not reverse this tendency. Nor did, at least at the beginning, the passage of these collections progressively from a princely, royal or imperial statute, to coming under national control.

One must wait until the middle of the 19th century, a crucial moment in the history of the world, for a need for confrontation of, and reflection between, so many branches of learning to be felt in reply to the all-conquering progress of science and technology. With its repercussions on museums of all disciplines, this situation provoked a reassessment of unidisciplinarity, and the tendency for a rational interdisciplinarity entered full-blown.

Applied to art museums, interdisciplinarity presents the artist through the display of his work, and situates this work in its technical and social environment.

Applied to museums of prehistory, it changes the horizons and the name, and one will speak, as André Leroi-Gourhan taught and founded, of a museum of ethnoprehistory.

Applied to museums of history, it will broaden the scope beyond the event and the leaders of the day; it will reach society as a whole in its life of every day, in its contradictions; measure the positive and negative changes which result in the natural and cultural environment of our time, with a look to tomorrow.

Applied to museums of earth sciences, it will turn to a policy of more rigorous protection, of a more equitable exploitation, from North to South, and East to West, of the natural resources of our planet, the source of development of lesser developed countries.

Applied to museums of advanced technology, it will see that direct and indirect human components are brought to light: the ethics of the relationships between social groups within an enterprise, on the premises and during the work; ethics of the relationships between the enterprise and the personnel, from the view of their promotion, militancy, cultural activities, and private lives.

Far from limiting this combined action to the universe of the museum only, interdisciplinarity will try to incorporate these disciplines into another universe which has already evolved within natural parks, and into the youthful universe, of the new social and cultural system, the ecomuseum.

But, above all, in this great adventure of the contemporary museum, today's interdisciplinarity shall beware of falling into any form of domination and recuperation, of the
idea that it is a thing unto itself which can solve all problems. In return, it should play the dynamic role, which is its own, of comparing and integrating, face to face with its partner, unidisciplinarity, whose role is to till its own field.

Both roles are complementary, the systole and the diastole of the same heart.

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This text is a résumé of a short seminar held during the museological course at the Fundação Escola de Sociologia e Política in São Paulo, the youngest of four schools for museology already in existence in this country, and the first school to organize courses at a graduate level in Brazil.

Museology is a new science, in the process of assuming its own form. It already has a specific object, a special method, and is attempting to formulate its fundamental laws. The object of study of museology is the museum fact, or the museological fact. The museological fact is the profound relationship between man, the cognizant subject, and the object; that part of reality to which man belongs, and over which he has the power to act. This relationship comprises several levels of consciousness, and man can perceive an object with his senses: sight, hearing, touch, etc. This relationship first presupposes, in the etymological sense of the word, that man "admires" the object (ad + mirare). If one considers that the museum fact is a profound relationship between man and the object, one must take into consideration: a) the relationship itself, b) the cognizant person, c) the object to be known, d) the museum.

a) The relationship in itself concerns perception (emotion, reason), recording the perception (feeling, image, idea), and memory (systematizing ideas and images and the connections between them).

b) Man must also be considered in all aspects of his being (the philosophical, the ethical, and the psychological approach, and on the level of the theory of his knowledge). He must also be studied in his relationships with other human and social groups (his psychological, sociological and political behavior).

c) The object itself requires an identification, a classification within a system, as well as an integration within a species, genus or family. This also assumes the existence of conservation, a knowledge of the object's composition (chemical, physical, etc) and the environmental conditions necessary to lengthen its life. It is the witness of man, and is dependent on different scientific disciplines to be identified correctly, studied, classified and communicated.

d) Once in the museum area, the relationship between man and the object not only depends upon the communication of all the material evidence of the object, but also on its place within the museum as an agent of museological transfer. The observer is conscious of the object as part of the natural world and he transfers it into an image, a concept; that is to say he incorporates it into his intellectual world by "interiorizing" it in the sociological sense of the word. As we have seen, this process comprises several levels: first, the consciousness is grasped, then follows interiorization, conceptualization, assimilation with other information in the memory, and finally, an impetus to the critical sense which observes and compares. At the same time, the person becomes acquainted with the object (part of a reality in which it also participates and may even intervene) and proceeds from a passive behaviour of simple enjoyment to a potentially active and creative behaviour. He is not only able to judge, but also to transform. He is able to understand and to accept an innovation, the transformation of society in continuous evolution, in short, the scientific, historical and social process. This deep relationship between man and the object which at first was fostered with material objects, has now spread to abstract creations, in so far as they can be materially recorded.

This relationship between man and object (object, idea, creation) which is the museum fact, or the museological fact, is established within the museum area. This idea of an institution is useful because it covers not only the small museum but also the large traditional museum, including the ecomuseum, one of the greatest conquests and discoveries of contemporary museology.

What gives a museum its specific character is the intention with which it has been created and the public recognition that it is effectively a museum, that is to say, a true institution. The museum is the place where the museum fact is located, but for it to take on the full strength of its meaning in reality, the objects must be "museumized" — that is to say, the material objects become object-concepts. Objects which are only remains can also be the subject of a museum processing, as the material proof of the existence of man and of his environment, of his natural milieu or of one modified by man himself. This museum processing concerns objects which have a value as a witness, as a document, and are authentic in relation to man and nature.

It is also possible to treat an object museologically by withdrawing it from its context in the traditional museum or displaying it "in situ" or in its eco-context and its ecodynamics (ecomuseum).

The fact that an object is a document, an authentic witness arises in connection with the specialized discipline of the museum (anthropology, archaeology, chemistry, ethnology, mathematics, etc), that is to say, the scientifically oriented view through which man and his environment have
been studied. "Museumization" does not necessarily involve museological communication. Museological communication involves enhancement, an emphasis on certain objects. Incorporation into the museum world, on the other hand, is based on prior research, on the selection of the objects themselves, on the documentation, the management, the administration, the conservation and eventually the restoration of the objects. This incorporation involves many different operations which depend on extremely varied scientific fields.

The subject and the object of the museum are always man and his environment, man and his history, man and his ideas and his hopes. In fact, man and his life are always the basis of the museum itself, which means that the methods used in museology are essentially interdisciplinary since the study of man, of nature, and of life depends on a great variety of scientific fields. When museums and museology, in the broadest sense of the term, study the environment, man or life, they are obliged to bring together disciplines which today's over-specialization had completely separated until now. Interdisciplinarity must be a method for research and action in museology, and therefore the work method of museums and of training courses in museology for museum personnel.

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An outline for museology — its multidisciplinary aspects

The rapid development of human knowledge has led to an ever increasing differentiation in its various fields. This process of differentiation continues, and new scientific disciplines come into existence. At the same time, the fields of science become more and more integrated with each other, due to mutual and more profound relationships. The growing cooperation of scientific disciplines is an expression of this tendency towards the integration of knowledge. Theoretical knowledge, which is the essential element of science, is created by the orderly arrangement of known phenomena, relationships and cognitions, through abstractions and systematizing.

Science is an activity directed to the theoretical reflection of objectively observed connections, laws and structures of its particular subject of study, and at the same time it is the complex and composite of the cognizance resulting from scientific work.

The basic task of science is to find those laws resulting from the development of mutual relationships of phenomena, objects and facts, which are subject to examination. Above all, every scientific discipline examines a certain field of reality and its specific laws, and this in a manner that is universal in its application, socially stable and reproducible. Museumology examines the complex processes of the acquisition, the conservation, the identification and recording, the research, the exhibition and communication of selected movable original, authentic objects of nature and society which are its primary sources of knowledge. It creates the theoretical base for museum work and museum affairs, with the help of generalized and systematized practical experience.

The institution of the museum itself is neither a scientific discipline nor a part of it, but a necessary institutional base. Medical science is not the science of hospitals, neither is pedagogy the science of schools, so museology cannot be the science of museums. Museums are the institutional bases of a complex of different scientific disciplines, but not themselves essential parts of sciences. Museology comprises museum theory, museum methods, and the history of museum affairs.

Museum theory is a system of predominant ideas, statements and laws governing the field of museology. Museum methods form a system of rules used in museology, the various approaches and the methods of thinking or of practical museum activity which may lead to new knowledge.

The history of museum affairs examines the concrete course of the social development of museum affairs in the past. Museum affairs comprise the entire complex of all museum phenomena in theory as well as in practice. This means anything concerning museology, museums, museum work, museum organization, management and planning.

The close connection of museology to many other scientific disciplines leads to its interdisciplinary cooperation and integration with other sciences. Natural sciences, social sciences and other scientific disciplines enlarge the body of museology with important knowledge, each from its own field. Museology adapts into its own system of theories and methods those rules and laws of different natural and social sciences which are essential to the field of museology, and extracts from them those laws which operate in a purely museological context.

The increasing integration of various fields of knowledge means that the field of activity of one science includes the connections and reciprocal effects of other different fields of knowledge. Thus museology, too, as an independent scientific discipline with a specific subject of study possesses multidisciplinary components. Hence the following systematization of museology as a practical breakdown of the concept of museology, outlining its interdisciplinary aspects.

I Subjects and tasks of museology
1 Social requirements for a durable preservation of selected original witnesses of nature and society
2 Subject of museology and its place in the system of science
3 General concept of museology and its tasks

II Museums as institutional bases of a complex of different scientific disciplines
1 What is a museum?
2 Social functions of museums
   a) acquisition and conservation activities of museums
   b) research in museums
   c) cultural and educational work of museums
3 Categories of museums (by collection), types of museums (by administration, territory covered, types of premises
III Necessity of interdisciplinary cooperation and the integration of museology with other sciences
1 Relationship of museology to specific basic disciplines of science
2 Relationship of museology and archivistics, bibliology, information sciences, the study of historical sources, taxonomy and other component disciplines
3 General and specialized museology

IV Bases of museum theory and museum methods
1 Definition and significance of museum theory and museum methods
2 Theory and methods of selection and acquisition of museum objects
   a) significance and evaluation of museum objects and criteria of their selection of the collection
   b) basic categories, laws and methods of creating museum collections
   c) theory and practice of classifying museum objects
3 Theory and methods of the conservation of museum objects
   a) theoretical and methodological bases of chemical, physical, and technical conservation, preparation and restoration of museum objects within a museum context
   b) principles and methods of safe-keeping and security of museum objects
4 Theory and methods of identifying and documenting museum objects
   a) the nature of museum records
   b) basic categories, laws and methods of museum inventories and museum catalogues in a museum documentation system
5 Theory and methods of research on museum objects
   a) interdisciplinary character of research on museum objects
   b) museological principles and methods in research and selection of movable original objects of nature and of society
6 Theory and methods of exhibition, as well as other cultural and educational uses of museum objects
   a) principles, laws, structures and methods of establishing museum exhibitions
   b) basic categories, laws and methods of museum education within the framework of museum pedagogy (a specialized field of pedagogy)

V History of museum affairs
1 The term "museum affairs"
2 The historical development of museum affairs, from the collections of antiquity to the present
3 The history of international relationships, cooperation, and organizations concerned with museum affairs, including ICOM.

Notes
(2) Philosophisches Wörterbuch, (1975) 2, 1310, Leipzig
(5) "museum affairs" = "Museumswesen" in the original German. This concept covers the whole area of museums, as well as all governing bodies, affiliated societies and scientific institutions related to them, in all aspects of their functioning and all spheres of their work. Defined in: Kleines Wörterbuch des Museumswesens (1975), 52, Schriftenreihe 6, Institut für Museumswesen, Berlin. Editor’s note
Interdisciplinary cooperation — a step towards the integrated museum

Never before have museums proliferated in such abundance, all over the world, as in the past few years. In cities and towns, on historic and natural sites, wherever there is a collection of objects, and even where there is not, there is a tendency to create a museum. In the case of small establishments it is often a one-man-enterprise, not of a trained museologist, of course, but of a collector or somebody who "knows all about it" and who reluctantly accepts the cooperation of a museographer or other staff members for the technical work, but never somebody with influence on the guidelines of the organization and the layout of the exhibition gallery. Hence many of these museums present a purposeless exhibition, displaying a mass of incoherent objects endlessly repeated, unrelated to any context in life, environment, or history, and crammed into oldfashioned, inadequate showcases.

The situation is slightly different in the medium-sized and large museums, especially in those which deal with a series of subject matters, holding objects from different fields, with various specialists, presenting a pluridisciplinary exhibition. In these museums the pluridisciplinary approach imposes at least an "interdisciplinary tolerance". In a regional or national museum, for instance, which has departments of archaeology, ethnography, history, natural history, and fine arts, the interdisciplinary consultation of specialists imposes itself in a number of cases although, most of the time, the personal ideas of the specialist and the fear of intrusion into his field by an "outsider" create a "professional jealousy" which forms an impediment to any real cooperation.

Only a few modern museums have managed to overcome this difficulty, especially where the museum exhibition is not a pluridisciplinary but an interdisciplinary display. In this kind of exhibition different unidisciplinary displays are not laid side by side individually, but materials of different disciplines are interwoven into a coherent text, telling one single story. The most frequent examples of this kind of display are the dioramas presenting a reconstructed dwelling within a definite landscape, with animals and people around. In this case only the full cooperation of the ethnologist, the historian, the architect, the naturalist, and others, according to the subject, can avoid misrepresentations and ensure the success of the diorama in all its dimensions.

In speaking of interdisciplinary cooperation we have exhibition work particularly in mind because in the reserves the different treatment of different kinds of material, as well as the divided responsibilities, will obviously keep the collections separate.

Increasing cases of interdisciplinary cooperation will lead to the possibility of creating museum displays based on full creative cooperation between the museologist and all the specialists of museum disciplines. This will result in a new kind of display — the integrated display.

As a matter of fact, any kind of separation of subject matters, any kind of isolation of one area of life from the others is an artificially imposed one, existing neither in life, nor on the mind of the visitor, but only in the imagination of the specialist trained for such an isolated viewpoint and carefully maintained in his professional ivory tower.

The archaeological museum usually shows the stone and other relics of a vanished culture but omits to give any information other than the name of the place where the object was found. Not a single word about its creator or its user, or about the environmental and historic circumstances responsible for the rise and fall of that particular culture. A similar situation arises in an ethnographic museum displaying costumes, weapons, and other objects used by man, but omitting man himself, let alone his natural surroundings and other important circumstances which all contributed to the production of the object on display. And this situation is valid for the majority of existing museums.

Such isolation not only impoverishes the display but it is also misleading and results in the presentation of an incomprehensible and incoherent series of objects, instead of an exhibition related to people's lives. An illustration of error is the fallacy of presenting a collection of "African art" based exclusively on the aesthetic aspect of the objects. The person planning the display does not take into consideration the fact that each piece is a product of the most intimate thought and feeling of a man — that it was used for communication with natural, or supernatural, forces. He also forgets the environment which provided the material for its creation, and the social and historical forces which played their parts in its coming into existence and functioning.

As we see it, museums of the future must be more realistic, more complete, more informative, and therefore more educative. It is necessary to reintegrate the object within the context from which it was taken; to reinvest it with all the
qualities of which we have deprived it. If we re-create the
human context of the object, giving the necessary information about its creation and its function. If the exhibition helps the visitors to understand the social implications as well as the natural environment, putting all this in its proper historical context, then we can call it an integrated exhibition. And the museum whose staff attains a fully interdisciplinary creative cooperation in producing such exhibitions, can be considered an integrated museum.

To avoid any misunderstanding, let us clearly state that by speaking of so many facets which have to be expressed by a display, we do not think the answer lies in labels with endless inscriptions: written texts are the means of expression used by books. The museum has its own specific language. The language of objects, photographs, and tridimensional re-creation of settings — dioramas — are irreplaceable of expression in an integrated display.

But, of course, these means are not the purpose of an integrated exhibition. They remain our way of expressing ideas. It must be understood that the integrated exhibition is not a display of objects, but a display of ideas. The integrated exhibition can be compared with a book. Just like a book, the exhibition conveys a comprehensive idea to the onlooker. Every unit of the display explains a coherent part of the idea, just as each chapter of a book does. The objects displayed can be compared with written words, which, put together in convenient groups, make the sentences: each one of them is connected with the next by invisible ties. Everything has its own function. Nothing is superfluous, nothing is repeated.

We agree that it is easier to put on a “traditional” exhibition than an integrated one, and that the non-professional museum leader will always prefer to line up a series of objects, with limited responsibility. But we hope that, in the not too distant future, highly professional museologists — trained in this discipline and taking care of the museological aspects of the museum — along with their “integrated” staff, will take over the job of creating or remodeling the museums of the world.
Jerzy Świecimski

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The problem of interdisciplinarity in museology arises in connection with the discussion about the basic character of museology. It depends upon solving the initial problem concerning the scientific nature of museology. Possible solutions are:

1. Museology is exclusively a science
2. Museology is a domain which combines scientific and non-scientific elements
3. Museology is not a science at all.

If we agree with the first statement and if we recognize museology exclusively as a science (many authors who expressed their ideas in Museological Working Papers No 1 are of this opinion, and I share this point of view), in other words, if we differentiate museology from the area of practical museum work and consider it not as aimed at creating museum facts, but exclusively at understanding them, then the field of museology, although restricted, still preserves a great variety of trends, of types of scientific questions, and consequently provides a multitude of branches for research.

If we agree with the second statement, the field of museology will be much larger of course, as it will include the whole field of museum design, programming and organization, practice in museum technologies, etc. The diversity of branches of museum activity becomes much larger.

The third statement leads to a limitation of the field again. Although the character of this field is different from that of the first, it is equally as restricted. The contents in this case are exclusively the creative, administrative and technological activities relating to museums.

Each of these statements leaves open two questions:

1. How does interdisciplinarity apply to each of these definitions?
2. What is the relation between museology and other fields of science or of non-scientific areas of human activity, such as art, engineering, etc?

For each description of museology the answer to these two questions will be different.

Some of the authors of MuWoP No 1 seek to outline the specific character of museology. This problem, of great significance in the initial phase of the discussion, becomes essential when introducing interdisciplinarity. If museology is an interdisciplinary field — and everything shows that it is exactly so — how is it possible that in spite of this intersection of disciplines museology can preserve its own unique character as one specific field? What makes it a field different from others? Or it may be that the idea of the uniqueness of museology is entirely false and results merely from some traditional “standards of thinking”, without any factual ground. It is not to be excluded that the field which is traditionally called “museology” represents only a “loose” conglomerate of different branches, connected by nothing more than a common name. This is a valid question if we accept the first statement about the basic character of museology, that is, if we recognize it exclusively as a science. It is not to be excluded that even with this restriction, if the particular trends and branches of museology were analysed in detail, it would appear as nothing more than a conglomerate of different sciences having in fact nothing in common save the name. If the second of the three definitions of museology were accepted, rather than considering museology as one internally diversified field, the problem of interdisciplinarity in museology would lead to a different concept: it would enable us to speak about “museum sciences” or “museum activities”. In my opinion the thesis about the specific character of museology can be considered as a correct one, but exclusively in so far as the field of cognition which is discussed in museological dissertations is concerned, or, if the second or third definition of museology were accepted, in so far as the object of museology is the range of museum activities in the larger sense. The reason for this statement is that although this field embraces extremely diversified activities, including the defining of museology itself in the first case, the total sum of facts or phenomena which belong to it and which are discussed in museological dissertations presents one common “milieu”. Most of the so-called museum facts are developed within this milieu — the “museum world”, or “museum reality” — and the other facts, although originating beyond it, are still in close connection with it. There is no other branch of knowledge, of art, engineering, etc which draws on so many fields as does museology: it does not even occur in those branches which partly overlap the field of museology.

On the other hand, if we consider museology from the aspect of methodology — or rather methodologies, there are so many of them! — the thesis about the specific character of museology would appear to be wrong. It becomes especially clear if we consider museology exclusively as a science: in this case we can easily notice that museology did not develop any autonomous methodology of research, valid for it exclusively, and essentially distinguishable from
the methods known in other fields of knowledge. The reason for this lies in the variety of objects within the field of museological research and in the variety of scientific approaches towards them. Besides, if we examine the methodological aspect of museum science, we can find that particular methods which are applied to it are “borrowed” from other fields of science. In some cases museological methodologies present conglomerates of such “borrowed” methods, and therefore seem to us genuine or specific. In fact, the problem of specificity of these methods becomes limited to the question of “adjusting” some “alien” method which was constituted outside of the field of museological research, and was primarily intended for examining facts having nothing in common with museology. Or else, this specificity is a combination of such “alien” methods into one conglomerate adaptable to a new function and new operations. In other words, museology examined from this aspect appears to be a secondary field, related to various other fields of research.

The dependence of museology on other domains for the methodology it applies to its own ends is very diversified. The methods are determined here by the kind of object of cognition that has been delimited, as well as by the aims; that is to say, by the aim of the particular scientific research. In one of my papers in which I discuss the problems of museum exhibitions (1979) I have made an attempt to classify the methods usually applied in this field. For the whole domain of museology, even if we consider it exclusively within the first definition, as a science, the methods must be examined on a broader scale.

The main trends which can be found here may be classified according to types of publications and to the programmes of research involved in them. Museological literature suggests the following classifications:

1 Technological publications:
The point of departure for this group is the conception of the museum in a purely constructional or technical sense. The papers here involve elements of sciences such as physics, chemistry, engineering, theory of architecture, etc, and have a predominantly technological character. Papers on the conservation of museum specimens can be listed here too. The predominance of elements of chemistry and physics in this type of dissertation is a distinct characteristic.

2 Factographic publications:
Publications on solutions to museum problems, that is, on museum architecture, on museum installations such as exhibitions, libraries, laboratories etc, are included here. These papers are devoted either to individual cases when they constitute some novelty, or to groups of solutions. Apart from technical constructions, stylistic features of museums are also described here. In this group of works, the methods of descriptive sciences are applied: one can trace here some relation between these publications and the publications on the history of are, especially of architecture. Similar criteria of description rule in both cases, and descriptions of art monuments become, for museological works of this group, a kind of “model” after which museological descriptions are made.

3 Normative publications:
The character of the papers of this group is that of programmes based mainly on an empirical, experimental approach. Different kinds of sciences may “lend” their elements here: theory of architecture, psychology, and engineering should be counted among the most important. Papers which belong here constitute a very important element for museum practice, in particular for museum design. They are applied as theoretical “parametres of design”.  

4 Reviews:
In a certain sense reviews are linked to descriptive papers, for they too are descriptions of museums and their installations, with descriptions of museum exhibitions as the most numerous within this group. The difference lies, however, in the attempt to evaluate. This evaluation is always based on some system of judgement, appraisal in particular, which is accepted as superior, or simply on the individual and even subjective point of view of the author in question, such as his aesthetic taste, his preference for definite types of solutions, and so forth. Irrespective of their own function, reviews, like “ideological” programmes in museology, are important material for factographic papers. Methodologically, reviews present a complex background: they are based on the methods of such fields as aesthetics, such as the aesthetic theory of evaluation, and on the theory and history of art, which “lends” some standard judgements about architectural styles. They are also based on descriptive sciences and on psychology, an example being the evaluation of museum methods in respect to the visitor’s ability to perceive, and the analysis of visitors’ behaviour based on what they are judged to have perceived. In formulating judgements in reviews, intuitive factors play a significant role. For this reason reviews should be considered as works on the border-line of scientific and non-scientific activity.

5 Typological-comparative and typological-intrinsic publications:
These papers are developed on the basis of both direct analyses of observational data and on the basis of information obtained indirectly, e.g. from factographic and historical papers, even from reviews. In typological research it is no longer a question of describing particular museum methods, for example an exhibition, or even some accidental groups of methods, but describing types of solutions to museum problems which have to be differentiated as a result of appropriate analyses of particular cases. To say that such typology has a comparative character means that the research involves establishing links between individual types, for example, affinities in their structure, style, programmes, etc. Since the character of these links derives from the same source, analysis leads to the discovery of the genesis of particular types and the mechanisms governing their development. This way one can explain the reasons for the development and transformation, or for the disappearance of particular design tendencies, formal structures, functions or programmes of museum activity. This makes it possible to follow the changes occurring in museums in a very broad context: museums are determined here by the programmes of place, that is, of cultural region, and of historical time. Methodologically the development of this group is based on the fundamentals of descriptive and classifying sciences — even the methods applied in natural sciences are used here as a kind of “model” — as well as on the grounds of history, in particular history of art, of architecture, or of the general history of culture.

6 Philosophical papers:
The starting point is the treatment of the museum as an object of “formal” construction, that is to say, of “formal” structure. In this group of works, museum exhibitions become an object of special importance: they are analysed from the point of view of their internal structure, as well as their role as conveyors of content. Philosophical research into museum problems can be divided into two groups:
a) aesthetic research, which is closely linked to ontological research, and
b) semiological research, which deals mainly with “formal” structures, that is, the meanings which are conveyed, by museum exhibitions in particular.

Methodologically, philosophical research in museology is based on fundamental philosophical works dealing with objects the elements of which are comparable to the elements of museums and museum exhibitions, for instance, with works of architecture, of fine arts, even with literary
and theatrical works. There are, however, different methodologies applied here and in many cases the choice of the method, or more generally speaking, of the philosophical trend which is used as a “model”, corresponds to the scientific background, ideology, or preference of each individual author. Some of the authors link their studies to phenomenology, others prefer structuralism as the basis of their research, and some authors build their research on the principles of Marxism. Besides these, one can also find works based mainly in empirical studies, and dissertations which are more “abstract” in character and which link to rationalistic ways of thinking. In nearly every country where such works are carried out, the research develops in a different way.

7 Psychological papers: Psychological research is different from those mentioned above in that it does not deal with the museum as such, but exclusively with the so-called “human zone”: mostly with the museum visitor, the recipient of the exhibitions. The object of the study here is the visitor’s feelings, his behaviour, the sensations he experiences in contact with the “museum milieu”, with the aesthetic “diction” of museum exhibitions. Methodologically this research is based on different trends in psychology.

To sum up the above discussion, it can be seen that the range of museological research is very wide. There is, however, a considerable disproportion between individual trends concerning their degree of development. Areas with an older tradition, such as factography, or those which have a practical purpose, such as technology and psycho-sociology are the most represented in museum literature. Others, such as the philosophical trend or typology (museum “taxonomy”) are fields which are just developing: there are relatively few papers on these subjects and they are often scattered in journals which sometimes have nothing to do with museology — they may be found in natural science publications or in philosophical literature. A certain number of publications have the character of provisional texts (rotaprints) and are practically inaccessible to wider circles of specialists.

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The Museums Association of Australia, Annual Conference Sydney, Australia, September 9—15, 1980
ICOFOM Symposium 1980
Systematics and systems in museology

Vinoš Sofka
Stockholm, Sweden

ICOFOM Symposium 1980
Background, proceedings, results

"Every branch of professional activity needs to be studied, developed and adapted to changing contemporary conditions — and not least that of museology. To pursue the aims of distributing knowledge of modern museological ideas and to help in different fields of museological development, this will be the programme of the ICOM International Committee for Museology."

Thus far the Advisory Committee of ICOM, in its document "The establishment of a new international committee on museology", no. 76/AD 15 of June 1976, presenting "a rough idea about the Committee's attributes" with an appeal for "comments, ideas and critical remarks".

1 ICOFOM 1977—1980

The new museological committee was officially formed in May 1977, at the 12th General Assembly of ICOM in Moscow in the Soviet Union. At the same time, a three-year programme for the ICOM International Committee for Museology (ICOFOM) was adopted within the framework of the ICOM Triennial Programme for 1977—1980.

How has this newcomer among the committees — though no longer the youngest of them — coped with its first programme period? How far has it lived up to expectations? Has it accomplished all the tasks set in the programme, and if so, with what results?

- ICOFOM has attached great importance to the stipulation that it should "not study the practical methods...but (study) the theoretical side of problems" (Doc. no. 76/AD 15).

On the occasion of ICOFOM's Annual Meeting in Poland in 1978, a symposium was held on Possibilities and limits in scientific research typical for the museums. The results were very promptly published under the same title (1978) by the ICOFOM Secretariat in Brno, Czechoslovakia.

The programme of the ICOFOM Annual Meeting in Italy the following year, 1979, included a symposium on the subject of Sociological and Ecological Aspects in Modern Museum Activities in the Light of Co-operation with Other Related Institutions. Once again the Chairman and Secretariat acted very promptly, and the publication (1979) appeared in the same year.

The third symposium in the series took place in connection with the 1980 Annual Meeting of ICOFOM, during the 12th General Conference and 13th General Assembly of ICOM in Mexico City. The subject this time was Systematics and systems in museology, and the results are published in this issue of MuWoP. More about this later.

- In response to "a strong and acknowledged need for a vigorous and continuous discussion of the major problems facing museums in our time, a need for useful and stimulating exchange of views between museum people across national and continental boundaries" (MuWoP 1980), ICOFOM decided in 1979 to begin publication of an international debate journal, Museological Working Papers, which you now have in your hand. There is no need to describe the progress of the journal since then, because this has been done elsewhere, both in the first issue and in the present one.

- ICOFOM has attached great importance to its task of helping to prepare the Treatise on Museology. ICOFOM's permanent representatives have taken part in the work of the ICOM Planning Committee for the Treatise on Museology and await with growing impatience the allocation of funds for this great pilot project.

- Today the demand for close co-operation with other ICOM International Committees appears axiomatic, but undoubtedly a great deal remains to be done before co-ordinated planning of important projects involving the participation of experts from various committees becomes an accepted working method. The boundaries between the spheres of responsibility and action of the committees are particularly hard to define where ICOFOM's duties are concerned. Those duties can easily be interpreted as of a general nature and as constituting encroachment on somebody else's domain, no matter how heavily one emphasizes their purely theoretical and methodological focus.

Here too, however, ICOFOM has made an effort to get started and has taken a number of measures. First of all, ICOFOM decided to send participants to the annual meetings of those ICOM International Committees mentioned in the 1977—1980 ICOM Triennial Programme, namely the Committee for Training of Personnel, the Committee for Education and Cultural Action and the Committee for Documentation. Contact has been made with them in order to discuss the collaboration. The representatives of ICOFOM attended some of the annual meetings and reported on ICOFOM's work. This co-operation is to be increased in future; there is a strong determination to this end, and the main obstacles to development in the desired direction are of a financial nature.

- In 1981 ICOFOM started an information bulletin, Museological News, aimed at improving the deficient flow of information within the committee. This will make it possible...
for contact between ICOFOM’s members to be activated and for the co-ordination of ICOFOM’s internal work to be improved on the practical plane as well.

2 The 1980 ICOFOM Symposium

In connection with its Annual Meeting in 1980, and on the occasion of the ICOM General Conference in Mexico, ICOFOM held the third symposium in its history. The theoretical problem of “Systematics and systems in museology” was adopted as the subject of these spiritual exercises.

ICOFOM’s Chairman, Jan Jelínek, had originally proposed that the following topics on the theme Systematics in museology be dealt with at the symposium by invited lecturers:

- The core of museology
- Systematics of museology
- The relation between museology and other scientific branches
- The systematics of museology and its application to the system of ICOM International Committees
- ICOFOM and its relationship to other International Committees of ICOM.

This well-reasoned approach, with its built-in transition from general theoretical problems to an application of the conclusions to ICOM’s work, unfortunately could not be realized according to plan. The venue for the General Conference and the symposium was not readily accessible for all the lecturers invited, with the result that some of them declined. The packed programme of the General Conference, the meetings of the International Committees and the close involvement in these activities of some of the invited lecturers who were then in Mexico made it impossible for some of them to keep their own lecture appointments at the symposium. The intrinsically sage principle of choosing lecturers across the committee boundaries proved on this occasion to be disastrous.

A fragmentary symposium resulted, with only two of the scheduled lectures actually taking place (G. Lewis, V. Sofka). In addition the Chairman having seen this symposium in danger procured, acting on his own initiative, a replacement for the lost theoretical lectures. This replacement proved to be of high quality, thanks to the willingness of Z. Z. Stránský to prepare a symposium paper on the theory of systems and dispatch it to Mexico by the Chairman. In this new situation the Chairman felt that the problems surrounding “systematics and systems” should be elucidated and himself prepared an introductory lecture on this theme.

In this way the theme principal of the symposium became Systematics and systems in museology and the programme came to be amended as follows:

- Systematics and systems in museology — an introduction by Jan Jelínek
  (A summary was transmitted to MuWoP after the symposium.)
- The theory of systems and museology by Zbynek Z. Stránský
  (Paper and full text available at the symposium.)
- The systematics of museology and its application to ICOM International Committees and the role of ICOFOM by Geoffrey D. Lewis
  (A summary was transmitted to MuWoP after the symposium.)
- The ICOM International Committee for Museology and its relationship to other International Committees of ICOM by Vinoš Sofka
  (Paper and full text available at the symposium.)

Is there any point in publishing the results of such an improvised meeting? Definitely! The work has been done, the symposium in its amended form has taken place and ideas have been presented and discussed. Some of them, above all those with a close bearing on reality, are closely related to ICOM’s efforts to achieve interaction, co-operation, co-ordination and efficiency. Questions concerning a wider field than ICOFOM’s alone have been broached and discussed at a time when ICOM too is seeking new ways and methods for its work. The lectures given can therefore be regarded as ICOFOM’s contribution to the efforts which are being made within ICOM. To defer publication until the symposium has been concluded on the next occasion, in 1982, would be a waste of the work done by the lecturers. Their lectures are relevant now; later on they would only constitute a contribution to historiography.

The presentation of a symposium by MuWoP is a new departure, but it transpired that there was no possibility in 1981, and would be none in the future either, of continuing to present ICOFOM symposia in a separate series of publications. For this once, in view of the circumstances, MuWoP is therefore taking over the material as it is, but next time ICOFOM will have to ensure that the symposia and their programmes are sensibly co-ordinated with MuWoP’s editing plan.

3 Some critical points of view

The saying goes that we learn by our mistakes, and ICOFOM is no exception. Certainly not everybody attending the ICOFOM Annual Meeting and symposium was pleased with the makeshift patchwork presented to them. These events must be studied so as to avoid a repetition.

Let us now listen to one of the delegates, Judith K. Spielbauer of Miami University in Oxford, Ohio, USA, who has formulated some critical points of view in a letter of 17th December 1980 to ICOFOM’s Chairman and has proposed measures to be taken in future. Part of her letter reads as follows:

“On a purely practical matter...I must express the disappointment of myself and others in the apparent lack of interest in or responsibility for the committee’s work on the part of the absent members and their respective missing papers.” Therefore, J.K. Spielbauer would like to request of the Executive Board of ICOFOM that they formulate a process for obtaining promised papers so that the circumstances that prevent an individual’s agreement upon participation in the meeting do not, in turn, prevent the progress of the committee’s work”. She continues: “Your suggestions of a submission date prior the meeting for finished papers and the substitution of other papers for those not received has great merit. Submission of abstracts or a full disclosure of unmet commitments would perhaps add pressure to acknowledged participants if a formal structure cannot be agreed upon. The Executive Board should consider the problem and potential solutions and perhaps would be able to present a plan to the committee at its next meeting. They should also consider ways to distribute any additional work involved in their proposal...In addition to improving the potential substance of the meetings, if time and funding permit, the papers could be ready for the members’ consideration prior to formal discussions, which would allow for a fruitful debate.”

Thus one delegate’s opinion concerning necessary improvements. We hasten to add that Judith K. Spielbauer has also expressed her appreciation of the matters presented at the symposium and has formulated viewpoints on the two papers — those by Z. Z. Stránský and V. Sofka — presented to the symposium delegates in Mexico. More about this in a separate article.

4 ICOFOM’s plans for the future

It is not the purpose of this essay to present a report on
Systematics and systems in museology — an introduction

Summary

The ICOM International Committee for Museology met during the 12th General Conference of ICOM in Mexico City in 1980. The subject of our discussions was systematics and systems in museology.

This is a theoretical as well as a practical subject for the rapidly developing discipline of museology. Certainly our profession counts many colleagues who have had no formal education in museology and whose museological knowledge is based on their practical experience — profound or superficial as it may be. On entering the museum profession they were qualified — if at all — as historians, archaeologists, zoologists, or art historians, but without knowing how their specific field was applied to museum activities nor in what way their work within the museum differed from that of their colleagues in universities or research institutions. It is not surprising therefore that this situation is mirrored in their attitude towards museology, which — in statu nascendi — promises to develop into the theoretical basis of our practical activities.

As any other scientific discipline, museology has its own structure and relationship to other neighbouring disciplines; its own subject of study and methods of research. The study and correct definition of all this is certainly a question for future years and of further development in the museological field. New scientific disciplines do not come into existence by proclamation or statement; they develop through their activities, which are reactions to the needs of our developing society.

The practical side of museological systematics is reflected in the majority of museological courses in university programmes and, of course, in the structure of ICOM’s International Committees. As the number of University Chairs in Museology is rapidly increasing all over the world (again in response to the needs of corresponding populations) the structure and the development of museology become increasingly important. Within ICOM, the organization representing museums and museum professionals, the structure and systematics of museology should be reflected on its Advisory Committee. Its International Committees should cover the principal fields of museology and museography. But unfortunately this is not the case, because these committees were established for various reasons and needs and they reflect widely differing situations and interests. So we face a situation where the international structure of museums is not fully reflected within ICOM. For example, until this year (1980) there was no International Committee for Museums of Art (only an International Committee for Modern Art existed) although art museums form the majority of museum institutions throughout the world. This one example sufficiently demonstrates the need for us to study museological systematics and their practical application.

The other subject of our discussions was systems in museology. This term has several meanings, which need to be defined for our common understanding. In different disciplines the meaning can vary according to the subject and to its theoretical structure. Therefore system theory is quite different, both in nature and in degree, from systematics. In museology both encounter similar situations and difficulties as they do in other social sciences or humanities, when compared with, for example, the natural history disciplines. We study the product of human activity, of our professional ac-
It would be naive to expect that our discussions can make more than a modest contribution to these complex subjects. But it is only by initiating such discussions and considerations that we can contribute to the theoretical ground of our activities, and can know our own place, importance and role in our societies.

Zbyněk Z Stránský
Brno, Czechoslovakia

The theory of systems and museology

System and system order are paradigms of our contemporary approach to reality.

In this sense we endeavour to proceed towards knowledge of nature and society in their totality, and also of their individual elements. The application of system approach in modern technology leads to the production of complicated systems, gradually creating the necessary conditions for communicating with and eventually for integrating with living systems. The system order is continuously being applied in a more and more clean-cut way in the development of civilization and culture and it is thus becoming the hope of mankind.

The foundations of the theory of systems — or more precisely of the general theory of systems — were laid down in the nineteen-forties by Ludwig von Bertalanffy, a well-known theoretician in the sphere of biology. His followers concentrated on working out a system approach, by forming the theory of systems, and working out the general theory of systems.

V N Sadovsky was correct when he wrote in 1974 "Today we can say with certainty, that the transition of contemporary science and technology to analysing objects as systems means in fact a very important change in scientific study and in the way we understand the world. Together with the rapidly developing differentiation and integration of knowledge and with the massive penetration of mathematical and logical methods into the natural and social sciences the system approach belongs among the basic specific features of the science and technology of the second half of the twentieth century".

If we try to focus contemporary science on the sphere of museums, and we are actively working on laying the foundations for museology as a special and independent science, all facts constituting modern science must have their specific impact here too.

Before we start analysing their impact on museology, we shall characterize this approach in brief.

System approach is characterized by a complex view of natural and social objects and of the phenomena taking place within and between them. It has no proper object of study and it lacks special methods. However, it is a marked antithesis of the mechanical approach to the world, based on primitive presumptions that we are able to understand any object, provided that we reduce it to its basic elements and to their properties.

The system theories are scientific explanations of certain categories of objects. The general theory of systems, respectively system science, is an independent scientific branch having its own object and methods and its task is to explain the laws of the structure, behaviour, functioning and development of systems.

And what is system? It is a rather intricate question employing a host of authors and scientific teams. In our case it will perhaps suffice to say that we understand the system as an arranged set of elements, whose properties and relations are aimed at a joint objective.

The important thing is to realize that it is a set of interrelated elements. The properties of the system thus do not form an aggregate of properties of the element, but of their integration as a whole. This aggregate does not exist in isolation and we must therefore take into account its environment and its relations to the latter. In the system as a whole there is a certain organization, structure and hierarchy. The system is not a static affair, but it has certain behaviour. It is functioning or developing, it can be open or closed.

If we want to consider museology from this system viewpoint, the best thing would be to concentrate on the way we approach and study museum realities.

It is generally known from the history of museums, I assume, that A Quiccheberg tried to apply system approach on documenting various natural and social realities with his collections, as early as 1565. These efforts were lifted to a higher level by Carolus Linnaeus laying the foundations of natural historical systematics and soon becoming the system basis of museum collections.

No personality of Linnaeus' calibre appeared in the sphere of social sciences. However, towards the end of the 18th century we can see certain attempts at system approach here too, including classification attempts in various collections of a social science character.

In spite of certain positive characters of this development the system side of our collections — the basic manifestation of our museum approach to reality — is more and more problematic, as became evident with the recent introduction of computers, or at the attempts to apply ecological viewpoints during collecting activities.

The main brunt of museology's study effort is focused on the museum sphere. In spite of this concentration, system views have penetrated into the museum relatively recently. The interesting thing is that this penetration was motivated by other spheres, namely economy, theory of organization and management, or informatics. The only exception was the work by V Toft Jensen and E Schneider.

Even more striking is the absence of the system approach as regards the relations of the network of museums. Museums are still conceived too isolately, without taking into account their links and relations with the environment. Traces of system approach can only be found in the works of some architects, both in their relation to the museum as an institution, and from the viewpoint of the museum's role in the higher systems of the city, region, or country. We have come across theoretical and practical attempts to reorganize...
the network of museums on the basis of system aspects, e.g. in the German Democratic Republic and in Czechoslovakia. However, in these cases too the system approach deals with the organizational-management level, without affecting the entire system hierarchy.

In the sphere of museum presentation—a matter of primordial museum-theory and methodical attention—system approaches have penetrated relatively recently, mostly in connection with the application of the latest achievements of the theory of communications, aesthetics or semantics. This situation has been influenced to a great extent by the view that museum presentation is in the first place a matter of arts and artistic expression that cannot and should not be confined to the limits of a closed or open system.

More successful were, on the other hand, the system views in explaining the method of creating museum exhibitions and exhibitions. So far these works are not limited to merely practical recommendations and instructions—as in the otherwise very useful works of A. Neal. This approach has positive results, both from the theoretical and practical points of view.

In the present approach of studying museum realities, we can see certain trends leading to system approach, respectively we can see applications of certain moments of the systems theory, although, up till now impulses and stimuli from other branches have mostly been used. We lack our own purposeful system approach.

This conclusion is fully confirmed by an analysis of the methodological aspects of this approach. In most cases it is limited to the description of the system and its elements, eventually of its behaviour, and the system is not grasped more generally and theoretically.

2

Equally important is the checking of the system order of the museum study process. On discussing whether museology is, or can become, an independent scientific branch, the most decisive thing is whether museology has, or can have, the characters of a science. And one of the determining characters of each science is its system order.

Let us recall one of the definitions of science, saying that science as a product of the process of gathering knowledge by man is ‘das aus der Praxis erwachsende, sich ständig entwickelnde System’—der Erkenntnisse über die Gesetze der Natur, der Gesellschaft und des Denkens, welches in Form von Begriffen, Aussagen, Hypothesen und Theorien fixiert wird und seiner sozialen Funktion nach als Produktivität der Gesellschaft und Grundlage der Leitung gesellschaftlicher Prozesse eine wachsende Beherrschung der natürlichen und sozialen Umwelt ermöglicht’

If we want to assess from this viewpoint the standard museology has achieved, we shall have to pay attention first of all to works which try to grasp museum reality as a whole, e.g. O. Homburger, Museumskunde, Breslau, 1924; N. L. Burns, Field manual for museums, Washington DC, 1940; S. Komornicki & T. Dobrowolski, Muzealnictwo, Kraków, 1947; J. Neustupný, Otázky dnešního muzejníctví, Praha, 1950; Osnovy sovetskogo muzevedenija, Moskva, 1955; C. E. Guthie, The management of small history museums, Nashville, 1959; The organisation of museums, Paris, 1959; L. Benoist, Musées et muséologie, Paris, 1960 and, G. E. Burcaw, Introduction to museum work, Nashville, 1975.

If we neglect that the structure of these works had been subordinated first of all to the purpose of their publication, we shall find in their content certain indications of systematization of the museological knowledge. This system order, however, reflects a predominantly empirical approach to museum reality, i.e. it deals usually with the classification of museum phenomena only.

Among the works we have quoted there is one of much higher aspirations. Its author G. Ellis Burcaw writes: “It is first of all a textbook on museology, the first one ever attempted to my knowledge.” The first version of the work was published under the title “Introduction to Museology”. It should best reflect the level museological knowledge has achieved.

Certainly the main aims of the publication are pedagogical; it was written as a museology textbook for university students in the USA. On penetrating into its system, we face in this case too, empiric level and matter-of-fact classification. However, in spite of this, Burcaw manages to go further than other authors, particularly where he tries to explain theoretically the so-called collecting activity.

In this context we would like to recall an important project of ICOM, i.e. publication of a Treatise on Museology. I think we are right to suppose that the efforts of all authors follow an optimum objective, i.e. to present museological knowledge on the highest possible level. If we take into account the published structure of contents, we can see that the work has been programmed so as to embrace the totality of museum activities with adequate division. The project is without doubt the culmination of former efforts to issue a compendium of museum work, but once again it has been unable to rise above the empirical-descriptive and classification level. Whether or not the authors of the individual chapters will be able to rise above this level remains to be seen when the work is completed.

It follows that the systematization of museological knowledge prevails in the empiric sphere, and is thus directly linked with reality being discovered.

In my view this fact has several causes. First, most authors see the object of museological studies in the museum proper. This fact has also been stressed by the definition of museology issued by ICOM. This concentration of museological knowledge regarding the museum, its functioning, and internal and external relations, is motivated mainly by practical reasons. Museology has to serve as a methodological tool, to teach us “how to make a museum”.

Due to these close links between museology and the museum we are inclined to think that an empirical approach would suffice for dealing with the problem. Some authors fear that transition from the empirical to the theoretical plane would separate museological theory from the reality of the museum. We must add, however, that it is just this kind of approach which reveals a lack of understanding of the relation between theory and practice and the role of the individual planes of knowledge. The empirical level of museological theory proves, according to some museum workers, that museology is not a science, but only the methodologies and techniques of museum practice. They presume that only traditionally engageable scientific branches have a scientific character, whilst the so-called museology has only an ancillary role to play with regard to its practical application in the museum.

I would remind you of a well known fact from the history of sciences, with special regard to this “empirical situation in museology”.

It can be historically shown that all sciences underwent, and are still undergoing certain development stages depending on the concrete level of the approach to knowledge. The first, or initial stage is usually characterized as an empirical-descriptive one, the second as theoretical-systematic and the third stage harmonically combines quality and quantity. As a rule, the first period is of the longest duration.

Confronted with the general rules of the development of science museology is, in my opinion, in its first stage of development, although theorizing and systematization trends are quite evident and mark the transition, step by step, to the second stage of development.

The empirical plane is not a typical feature of museology,
and the purpose of museology is not limited to methodical and technical instruction. It is evidently outgrowing its initial phase and will constitute itself as a new scientific branch.

Here, once again, the philosophical-methodological thesis holds, proved by the development of knowledge, whereby knowledge of each subject, if it is to be really adequate to its subject and if it is to reveal its real substance, must be theoretically well developed and systematized in the form of theory.

We realized this for the first time more than fifteen years ago when drafting the museology curriculum at the University of J E Purkyně in Brno. We concentrated our efforts on solving all the gnoseological, methodological, and systemic conditions for detaching museology and constituting it as a new scientific branch. I would also refer you to the work *Uvod do muzeologie* (An introduction to museology), Brno 1971 and 1972, to the published curriculum *Education in Museology*, Brno 1974, and finally to my latest work *Uvod do studia muzeologie* (Introduction to the study of museology), Brno 1980. We also publicized the Brno approach to museology through an exhibition called "Cesta muzei" (The way of museums); see *Museum* (1977) No 4, by F Schneider.

But the Brno efforts have not remained isolated. They can be documented by an important inaugural dissertation *Die Museologie als Lehr- und Forschungsfach* defended by Ilse Jahn in 1978, at the Humboldt University, Berlin, or the thesis "U podstaw museologii" presented by Wojciech Gluzinski in 1977, to be published this year in Warsaw.

Our deliberate concentration on the meta-theoretical basis of museology is one of the most topical tasks of the day and present efforts to develop science on science create very favourable conditions for it. In my view it was no accident that the ICOM International Committee for Museology was constituted in the late nineteen-seventies. The plans to publish the *Museological Working Papers — MuWoP* are also of great importance.

3

On studying the system of museology we must also pay due attention to the adjoining spheres.

The problems involved in scientific work in museums have brought to light the question of the relation of the different scientific branches to museum work, and eventually to museology itself, whether comprehended as a true science, or only as museographical methods and techniques.

G H Riviere provided an original conception of application but so far, J Neustupný, in *Museum and research*, Praha 1968, has supplied the most systematic analysis of relations between branch disciplines on the one hand and museum work on the other. In his view museology is a discipline consisting of methodological approaches to the various scientific branches; it has no object of study proper.

An even more important factor in the relations between museology and other scientific disciplines is the penetration of certain non-traditional scientific branches into museology.

I have in mind above all the application of pedagogy and didactics in explaining the educational impact of museums. This has some positive effects but the penetration of pedagogy has nevertheless affected the very sphere of museology. There have already been attempts to constitute museum pedagogy as a scientific discipline. There is wide scope for theoretical and methodical production of museum pedagogy at present, especially in the Federal Republic of Germany and in the German Democratic Republic.

The application of sociology, especially of socio-psychology has a similar impact, namely with regard to the evaluation of museum presentation techniques. Most of the studies carried out in the past ten to fifteen years were methodologically based on sociology. Many museums have put together research teams dominated by sociologists. As an example we could mention the team of sociologists at the National Museum in Warsaw. The methodological aspects are well documented in the work of C G Screven.

Of course these examples are not limited to the use of sociology in solving special research tasks. There are also attempts to use a sociological approach in museology itself.

Some authors from the German Democratic Republic are especially inclined towards this approach.

The introduction of computers had an even more radical impact on museological thinking. It revealed the vagueness of approach towards the collection objects and obliged us to face problems of terminology regarding their description and their systematization.

As predicted by Sokal and Sneath back in 1966, automatic data processing in museums has changed museum science profoundly.

But "museum science" was not prepared for the use of these new processes and the teams eager to solve these problems had to first concentrate on tasks not dealing with informatics but with museology. This is well documented in the preparation of programmes for the Museum Computer Network in the Museum Data Bank Committee, or in IRGMA (the present Museum Documentation Association).

Museum work must absorb everything that can contribute to its quantitative and qualitative development. The application of other scientific branches must not lead to the conclusion that we do not need museology, since there are other branches able to solve the problems that are pressing us so badly.

What it means in practice is illustrated by the publication of Jürgen Rohmeder, *Methoden und Medien der Museums­arbeit*, Köln, 1977. The author makes use of all progressive scientific branches of the present epoch, but museology is completely missing. The fact that it is not mentioned is not very important.

The point is that he is applying the achievements of other branches to the museum sphere, without confronting them with the scientific objective of this sphere. And since he lacks this museological basis he is unable to apply and develop the impulses offered by the applied branches gnoseologically and methodologically.

This is by no means an isolated case. In works applying the achievements of pedagogy, sociology, informatics, or the theory of communication it occurs that in solving some museum problem these branches lack their theoretical counterpart in the form of museological theory. Due to this situation museology has been unable to reach the necessary theoretical level to become a partner of other scientific disciplines, i.e. to arrive at real integration and at bilaterally useful links.

The difficulty in conceiving the object of museology has resulted in confusion as regards the place and function of museology, as a possible scientific branch in the system of sciences.

I had tried to show possible ways of solving the position of museology in the system of sciences in my above-mentioned work *Uvod do studia muzeologie* (Introduction to the study of museology), Brno 1980, and in the paper *Postaveni a úloha muzeologie v systému věd* (The position and role of museology in the system of sciences), *Muzeologické štěstí*, 1979(7). I gave there concrete examples showing that the position of museology in the system of sciences and mutual relations between museology and other branches can indeed be useful, namely if museology is able to absorb and modify the impulses coming from other branches through its own conclusions and methodological approach and to take part in the solution of interdisciplinary problems, at the same time contributing through its own theoretical system to the
development of the system of science as a whole. Only under these conditions can the sub-system of museology be actively integrated into the system of sciences.

4

Finally we must not neglect museological training. From the system point of view we must distinguish between training system and the system of museology. Training system, however, is only one side of the coin — the other being the system of museology. The linking of these two systems, however, is of great importance for museological education.

Let us take, for example, the curricula published by museology training centres at various universities in the USA, Canada, South America, Australia, the United Kingdom, Portugal, Yugoslavia, Poland, or Czechoslovakia and let us also take into account a relatively old summary work Training of museum personnel, London 1970.

On comparing the individual curricula we can see considerable progress in deepening the standard of this education. From lectures of a generally informative nature on museums and museum work and lectures of an occasional character, museological training has grown into a true educational system. This has all depended on the speed with which museological training has been brought up to date in the individual countries, and on the position this discipline has been able to occupy within the framework of university studies. This comparison shows us the relative differentiation of curricula, even in cases of courses of several years' duration. We could compare for example the curricula of the universities of Torun, Zagreb, and Leicester, or the curriculum worked out by the American Association of Museums. These differences in content, i.e. in museological problems, have led the ICOM International Committee for Training of Personnel to work out a basic syllabus, trying thus to contribute not only to the unification, but also to the systematization of museological education. We are badly in need of this unification and the Committee has achieved a number of positive results in this respect. Certain monographic works are also of great significance, such as the publication by Kazimierz Malinowski, a renowned Polish museologist, Kształcenie muzeologów, konserwatorów i re­stauratorów, Poznań 1976, and Professional directions for museum work in Canada by Lynne Teather, Ottawa 1978, a work of pioneering character indeed.

However, we must realize that the problem of curricula cannot be solved without connection with the museological system. The fact is that the heterogeneity, differences of the curricula, and even frequent antagonisms between them, are caused by the very problem we are dealing with, by the theoretical level of museology. All efforts to prepare uniform curricula will remain formal, as long as they do not reflect the proper theoretical system of museology.

Some could object that overemphasizing the importance of the theoretical basis of museological education would distract students from the concrete tasks of museum practice and that the very mission of this education is to provide students with knowledge they will be able to use in practice. Here once again we touch upon the problem of theory and practice. We realize that if we place the museology curriculum on the level of empirical knowledge, we can flood the students with a mass of concrete information that can be mastered more or less, but we shall not train them to be able to penetrate to the very substance of the phenomena we are describing, briefly they will not be able to understand museum realities. Equipped with a certain amount of empirical knowledge and experience they will be able to realize successfully a number of specific museum tasks, and without doubt they will be more successful in practice than colleagues lacking such education. But that is all. If they have to face new realities which they have not been informed about in their course, they will be as puzzled as their colleagues without a museum degree.

It is up to the theoretical plane to teach students to face and solve successfully completely new problems that may crop up. It is not enough, in my opinion, to teach museum workers a certain amount of knowledge and skills, we must also teach them to think museologically quite independently.

Only thus can museology become a real tool of changing museum practice; only thus shall we be able to educate museologists in the proper sense of the word. Only graduates theoretically equipped in this way can contribute to the further development of museology as an independent scientific discipline.

The proper theoretical system of museology is therefore of the utmost importance for lecturing in museology. In our view the ICOM International Committee for Museology should work in close co-operation with the Committee for Training of Personnel.

It would be very useful if they collaborated in preparing and publishing museology textbooks, thus creating the necessary basis for confrontation, co-operation, and integration in museological training spanning the whole world.

5

Judging museology from the system viewpoint — I was only able to present the main outlines here — brings us to the conclusion that present-day museology is not yet up to the system requirements, in line with the current requirements of the science, and namely with the general theory of systems. A museological approach to the reality, however, requires the application of system approach, as is done in some partial museological attempts.

This analysis has shown that the application of a system approach, or more precisely of the principles of the theory of scientific systems, is of basic importance for the constitution and existence of museology as a science.

This, however, requires the shifting of museology from the methodological viewpoint to the theoretical plane, because only in this way it can fulfil its mission both with regard to museum practice, and in the system of the science proper. This theoretical basis is also the main condition necessary for museology to become a specific training branch in universities.

By emphasizing the role of the system and theory in relation to museology, I do not want to advocate some sort of narrowly oriented science. I think, nevertheless, that it is our task to further the constitution of museology as a science precisely in the interest of museum practice and development and of those aspects of museum activities which are of a primarily artistic nature.

By preferring museology as a science I do not want do deprive museum work of its specific creative features, just as science within art does not deform artistic creation proper. The important thing is to obtain the correct tool for creating a new museum reality.

This unique mission of science towards the creative abilities of man has been well expressed by F Drucker: "No science is capable of making human arms longer. It can however extend their reach by elevating man upon the shoulders of his ancestors. Systematic knowledge is very useful to those of average talent: it brings them a higher degree of performance. To a really gifted individual it gives incomparably more: it adds brilliance to his endeavours."
The systematics of museology, its application to ICOM's International Committees and the role of ICOFOM

Summary

The title which the Chairman has asked me to speak to divides itself usefully into three sections and I shall address you on this basis.

1 The systematics of museology

We are faced here immediately with the current debate on the true nature of museology, initiated by ICOFOM and to which the first volume of the Museological Working Papers will be dedicated. Is museum work in reality just the sum of a plurality of professions contributing together to provide service under the aegis of a museum, or is it based on an organised body of knowledge which would justify the independent existence of museology as a discipline? I have no doubt that the latter is — or should be — the case. Without it museums lack cohesion and objectivity and the raison d'être of their contribution to society must be open to question.

But the first part of the title refers to the systematics of museology: the organization of museological knowledge to facilitate the development and operation of the subject. Superficial analysis of museology has produced the tripartite division of the subject into:

(a) General museology — the theory on which museum practice is based;
(b) Special museology — the particular theory developed for the application of different disciplines within the museum context;
(c) Applied museology — the application of this theory to museum practice; in other words, museography.

For examples of more detailed analyses of the components of museology and museography, we do not need to look further than the classification systems adopted in the Unesco-Icom Documentation Centre or the annual ICOM Museological Bibliography and the ICOM basic syllabus for professional museum training. These generally facilitate the organization of the bibliographic and training operations.

This is not the place to comment on the merits or demerits of these classifications but a word is necessary on hierarchical systems generally, of which these are examples. Such systems commence with very general concepts at the highest level which become increasingly specialized as each succeeding level is used. Thus any inter-relationships that exist between two or more specialized concepts become separated structurally necessitating the establishment of extra-structural relationships, e.g. cross-references. Applying the hierarchical model to museology would mean that general museology, i.e. those matters concerned with the activities that generally make up museum work, would take precedence over the more specialized aspects of the application of those activities in the different subject areas.

2 ICOM's International Committees

Superficially ICOM's organizational structure might appear to be based on a logical hierarchy. At the head comes the General Assembly, supported by an Advisory Committee and with an Executive Council — all generalized bodies — to effect their decisions. When we come to the next level, however, we find a hybrid situation with twenty-five international committees of both a general and a specialized nature; no precedence is given, as might be expected in a body primarily concerned with museums, to those committees dealing with aspects of the museum function generally and there is no structural relationship whereby formal communication might be established between them or the subject-based committees except at a higher level. In recent years an ad hoc committee of International Committee Chairmen has attempted to achieve some co-ordination of their work.

Now ICOM is concerned with both the theory and practice of museums and its international committees are intended to assist it in all aspects of this work. What then would be the implications if these committees were based solely on the museological aspects of the work? I believe ICOM would be the poorer because a body of collective specialist opinion in the various subject areas, in museography as well as museology, is still important to its work at the present time. The application of the systematics of museology to the international committee structure should then be considered on practical rather than solely theoretical grounds. Our prime concern should be for the most effective and efficient way in which ICOM's International Committees and the world community of museums generally can be served. Clearly as ICOM develops (and the multi-disciplinary aspects of its contract work are good examples of this) and the museum profession moves forward, so ICOM should respond accordingly. But to consider a purely museological structure for ICOM when we are still grappling with the fundamental theory of this subject seems to be premature.

3 The role of the International Committee for Museology

It is on the need to promote and develop the fundamental bases of museology that ICOFOM can and should play a leading role in ICOM's future. The execution of such a programme will need much tact and diplomacy, for to achieve it the closest collaboration with its sister committees will be necessary. Nor should ICOFOM necessarily consider itself the most appropriate body to undertake the detailed work necessary. Indeed the International Committee for Documentation has already undertaken a detailed theoretical study of the requirements underlying the documentation of museum collections as a necessary pre-requisite to the computerization of such records.

ICOFOM's role at minimum then should be to promote the need to establish a theoretical framework for museology and hopefully to contribute museological theoreticians to assist in this work. For this is essentially team work involving not only the abstract testing of hypotheses but a detailed examination of existing practices to establish their theoretical foundations. It should also actively promote the fact that much museum work is intuitively based and therefore without any generally accepted body of theory to support it as a whole; in short we cannot yet regard museology as a fully coherent discipline. In these ICOFOM can contribute much to the development of museums and therefore of the museum profession.
The ICOM International Committee for Museology and its relationship to other International Committees of ICOM

The final topic of the symposium Systematics of museology concerns reflections about the ICOM International Committee for Museology (ICOFOM) and its relationship to other International Committees of ICOM. As a part of a symposium this is not exactly a scientific spiritual exercise — it is rather a discussion of policy and method, strategy and tactics. Nevertheless, with a slight stretch of imagination it can be termed a fruitful combination of theory and practice applied by ICOFOM in the course of its daily work.

1 Arrangement of the lecture
To penetrate this problem might seem to be an easy assignment at the first sight. One might even feel like asking whether it is worth talking about, with slogans like collaboration, co-operation, co-ordination, participation and all the rest of it careering about in one’s mind. Slogans which in the world of today are heard far too often to be ascribed any major importance any longer, slogans which have become almost eviscerated in certain connections. Slogans, then, are nothing much to talk about or bank on; but what else?

These, frankly speaking, were also the first thoughts that sprang to my mind when I looked at the programme for the ICOFOM Annual Meeting in 1980 and read the Chairman’s invitation to me to deliver a paper on the theme to be presented in Mexico.

But the conviction that this was an easy assignment gradually diminished as I began giving thought to the subject. The question has been made to come last in a symposium dealing primarily with the “systematics of museology”, and no doubt this was not by accident. In closer inspection, the programme for the symposium displays a distinct gradation and a logical line of development, from core of museology via systematics of museology to the relation of museology to other scientific branches. Finally, two very concrete questions are raised, namely the application of systematics of museology to the organizational system of committees of ICOM and ICOFOM’s relation to other International Committees of ICOM. The clear indication thus provided in the symposium programme naturally also provides a distinct angle of approach to the last mentioned question.

There are of course other angles from which the issue can be dissected. One of them, for example, is an analysis of those portions of ICOM’s Statutes relating to ICOM committees — especially the international ones — and their mutual relations, together with a study of the instructions which ICOM bodies have issued in past years concerning the interpretation of Statutes. This analysis would of course be combined with an examination of the Rules of ICOFOM and the rules of other International Committees, together with a comparison of the way in which these rules accord with the ICOM Statutes and with each other. If the results of such studies were then to be viewed in relation to actual present-day conditions, this would be a logical conclusion to deliberations of this kind.

Another rewarding task would be to study the innumerable reports which are supplied year after year to the ICOM Secretariat by all National and International Com-
119 countries and 22 ICs. To this must be added 7 international organizations affiliated to ICOM and having the character of subject-oriented international committees.

But these figures are merely a statistical statement of registered ICOM committees. How many of them are genuinely living and working ICOM bodies is another question of more than statistical concern. It is common knowledge that about 4 of the ICs, the international organizations affiliated to ICOM included, exist on paper only. It is hard to say how many NCs are similarly mere formal associations without life in them. Let me give you a recent example. As part of the preparations for the appearance of the international debate journal Museological Working Papers — MuWoP, a circular letter was sent by the MuWoP Editorial Board early this year to all of ICOM’s NCs and ICs, affiliated organizations included. Altogether 176 letters were sent. Answers were received from 10 NCs and 5 ICs, no more. Why? It would be useful and it is essential for the situation to be checked some time and for an analysis to be undertaken of the reasons for the evaporation of the great interest which always accompanies the formation of committees and for the ultimate demise of the committees themselves in certain cases. An analysis of this kind would assuredly yield a number of viewpoints with an important bearing on the discussion of the organizational structure of ICOM, the provisions of its Statutes, and the guidelines of the Executive Council when exercising its power under the Statutes to approve the setting up of ICs, to initiate the same or to approve requests for affiliation.

3 System of International Committees

But to return to our subject, namely ICOM’s ICs and their relationship. On closer inspection, these bodies, numbering, as I said, 29 altogether, affiliated organizations included, can be found to comprise two groups:

a) subject-oriented committees, such as the IC for Museums and Collections of Archaeology and History, that for Museums and Collections of Glass and the IC for Museums and Collections of Musical Instruments, and, secondly,

b) functionally oriented committees such as the IC for Conservation, the IC for Documentation, the IC for Museum Security and the IC for Museum Public Relations.

There are 17 committees of the first mentioned category and 9 of the second.

There are also 3 committees which to a certain extent combine both aspects, namely those for Regional Museums, Specialized Museums and Open-Air Museums.

What then are the relationships between these groups and within them? Unfortunately no factual survey has been undertaken on this subject, and we are therefore thrown back on theoretical conjecture.

The committees in the subject or discipline-oriented group cannot have any great need for active mutual contacts as long as the distribution of subjects and the boundaries between them are strictly maintained and are not based on shades of meaning within the framework of a subject field or on some other form of overlap. On the other hand contact between these committees and committees in the functionally oriented group — as well as those forming the “mixed” group — should be a matter of course.

The committees in the functionally oriented group are not segregated from each other by any given subject-based boundaries. On the other hand there exist boundaries of a different kind. The various functional fields on which the committees concentrate — i.e. their sphere of activity — help to decide such boundaries. But in addition to these differences there is a greater factor which serves to unite, a common denominator of the work done by all these committees — museum and museum activities, museum policy, museum philosophy; in a word, museology. The denominator assuring that the committees all work towards the same objectives is sensibly designed and leads towards a cohesive result. There is a great need for contact and co-operation between the committees in the functionally oriented group, and I would venture to say that this contact and cooperation are absolutely vital.

This brings us on to the very interesting question of systematics of museology which occupied the symposium at this Annual Meeting. Following the theoretical section, the preceding lecture (by G. Lewis) focused on the application of museological systematics to ICOM’s system of ICs.

For obvious reasons, the results of the symposium and above all, the viewpoints emerging concerning the application of systematics of museology to the organization of ICs were unknown to me when I was framing these reflections concerning the relationship between ICOM and the ICs. But all the same, and without indulging in too much theory, it seems self-evident and possible for me to go on to say that the organization of ICOM bodies, and above all of ICOM’s ICs, should be supported by and based upon a well thought out, theoretically developed and scientifically constructed foundation. Systematics of museology seems to me to be the most natural recourse here.

But how much progress has museological research actually made, and what practical use can be made of a field which in many people’s opinion is still embryonic? Discussions concerning the main issue — the raison d’être of museology, its nature and character (a science, discipline or practical work) — are vigorous and unlikely to be concluded within the near future. The same goes for questions concerning the systematics of museology and other subordinate problems.

One comfort, however, is that despite all doubts and uncertainty concerning museology there are official documents dealing with systematics of museology — or rather, to avoid confusing two different things, of museum studies programmes or outlines of museum handbooks — which have been compiled or approved by ICOM. I refer to “A common basic syllabus for professional museum training adopted during the ICOM General Assembly in Grenoble 1971” and “Revised Outline on the Treatise on Museology”, adopted by the Planning Committee for the Treatise on Museology 1978, and not least the Museum Classification Scheme used by the Unesco/ICOM Document Centre. These three comprehensive documents, and the discussions which accompanied their materialization and have continued subsequently offer a unique and excellent foundation for considering what would be beneficial to the organization of ICOM ICs, their network, structure, spheres of responsibility and so on. Besides these official documents — and there may be several others — there are a host of ideas and thoughts incorporated in the hundreds of different museum study programmes which are in operation all over the world, an idea bank which ought to be comprehensively utilized, for example, in connection with discussions such as our own. A glance at the list of ICOM committees and the documents mentioned is enough to show that some fields are more than adequately covered while others are inadequately covered if at all. This is something the Executive Council should bear in mind when, pursuant to the Statutes, it approves a proposal to set up an IC (of at least 10 members of ICOM!!) or when it takes the initiative in securing such a step.

In my opinion the network of ICs, affiliated organizations included, should cover the whole field of museology. A network of this kind should be based on a properly worked out systematics of museology (Museumskunde, Museumlehre, Museumswissenschaft, museikunskap, musei­vetenskap and so forth or secondarily, pending the general acceptance/acknowledgement/existence of such a system, of museum studies or whatever other names are given to the training of museum personnel in different parts of the
world). Systematics could do more than this. It should furnish criteria for the definition of boundaries between committees and also a foundation for rules concerning the relationship between different committees.

All in all, my deliberations in this section concerning the organization of ICs and the relationship between them lead me to propose:

- that an inventory be made of the present situation, partly in order to ascertain which ICs are genuinely living bodies and also to note existing spheres of responsibility and list problems,
- that a review be made of the network of committees,
- that a committee system be drafted which, on the basis of approved and adopted systematics of museology, will cover the entire field of museum work, and
- that once it has been approved, this committee system constitute a foundation of the Executive Council's guidelines pursuant to the Statutes.

4 Type of relations between International Committees

What type of relationship occurs between ICs? How are these relations governed? What tendencies do they exhibit? What ought they to be like?

The ICOM Statutes provide for only one type of ICs, which means that all ICs occupy the same position within ICOM, being equal in their mutual relations and in relation to governing bodies of ICOM.

According to the Statutes of 1974, the Rules of ICOM of 1975 (Règlements de l'ICOM) and Rules of procedure for the international specialized bodies of ICOM of 1975 (Règlement des organismes internationaux spécialisés de l'ICOM), ICs are — it has already been quoted, but I have to repeat it again in this connection — the principal instruments for the work of ICOM and for the realization of its programmes of activities (Article 20). It is the duty of every IC to deliver to the ICOM Secretariat “at least three days before the General Assembly the next of its activity programme for the forthcoming triennial period” and “to send activity report to the ICOM Secretariat by 1st June each year” for distribution “at least” to the members of the Advisory Committee and the Executive Council, these activity reports being submitted to these bodies for approval (Article 33). “All or part of the triennial programme” of each international specialized body, i.e. ICs is then “incorporated in the official triennial programme of ICOM”, adopted by the General Assembly (Article 36), which even controls the implementation of the ICOM programme. The implementation of ICOM annual programme is ensured by Executive Council, which even controls the functioning of all bodies of ICOM, i.e. even ICs being advised in its work by the Advisory Committee.

Now you may object that this is all well known and that anybody could have read it for himself, so that it requires no quotation here. Quite right, but a critical review of the Statutes from the viewpoint with which this lecture is concerned can give food for thought on more than one score. If we continue thinking along these lines, these official documents do not contain many provisions presupposing and regulating relations, i.e. co-operation between different ICs. While the vertical hierarchical line of responsibilities is clearly indicated, the horizontal equality line is lacking. Questions of co-operation or concerning the need for co-ordination and the elimination of collisions or overlapping are not touched on in the documents.

The instructions for the ICOM triennial programme and the description of how it materializes, especially with the short amount of time allotted for adapting ICs activity programmes for incorporation in it — you will remember: Every IC has to deliver, I quote, “at least three days before the General Assembly the text of its activity programme for the forthcoming triennial period” — also give the impression of there having been no thought of any mutual co-operation or of major projects involving the participation of several ICs.

Now we must not forget that everything, ICOM Statutes included, is a product of history. The situation in 1974 was different from the situation today, with the increasing activities characteristic of ICOM and the museums. We should also add that the phrasing of the Statutes, especially that part dealing with the Executive Council and the Advisory Committee, provides adequate scope for the operative actions of both these bodies, and so it did before. Finally, developments themselves have taken a hand in things — as they usually do — and have necessitated one or two adjustments in this field as well.

In his report to the 12th General Assembly 1977 the Secretary General stated that there is a tendency within ICs “to splinter structures and activities by the formation of working groups” and “also a tendency towards regionalization and nationalization of activities” of ICs. In this connection he asked for counterbalance “by the application of appropriate methods of co-ordination”. Further he stressed that “the need for closer working relations between the different ICs has become clearly apparent”. The Secretary General meant that such working relations “could be achieved by means of a system of reciprocal representation organized by the Advisory Committee”.

It is in this spirit that we can read the following among the various main lines of action proposed in the ICOM Triennial Programme for 1977—1980: “Co-ordination of the work of ICs within the framework of certain activities of common professional interest (studies, publications, norms etc.) as well as in specialized fields that require bilateral or multilateral action”, further “strengthening of regional activities by increased co-operation with the existing regional structures” and finally “rationalization of the specialized activities to be carried out by ICs”.

Consequently the ICOM Triennial Programme 1977—1980 states under General Principles in point 8 a) that the continuity in ICOM’s general policy “should be accompanied by certain changes”, as to the ICs by “coordination of their respective programme activities and of those of their working groups, in order to avoid duplication and to ensure the necessary communication in the fields that require bilateral or multi-lateral action” and under Specialized activities, point 25, that the structure of ICs should be reviewed and if necessary transformed according to their evolution both in membership and programme activities.

Turning from the documents to practical life, ICOFORM has, of course, met the same problems in its work — perhaps more than other ICs, owing to its special character; we shall return to this point presently.

At its Annual Meeting in 1979, ICOFORM noted that “a systematic planning of the work and activities of ICs and the use of effective methods in co-ordinating the implementation of their programme are of great importance for ICOM”.

ICOFORM declared the committee’s determination to work towards this end. Means and methods, discussed on that occasion and supplemented today within the framework of this lecture, can be summed up in a proposal to the effect that efficient work can be achieved by ICOM with practical interaction between its bodies, above all ICs,

- by publishing annual and triennium programmes of ICs and short reports about the results gained in fulfilling these programmes in ICOM-News or other regular publications of ICOM or by transmitting information about the programmes and the results reached by the ICs in another way to all ICs.
5 ICOFOM and its relations to other International Committees

ICOFOM is one of the very youngest ICs. It is subject to the same rules as all other ICs, so that everything I have so far said concerning ICs is also pre-eminently applicable to ICOFOM. Its sphere of activities — museology — has occasionally given rise to certain problems, confusion and even irritation during the time it has existed. Considering the all-embracing character of museology, this is not to be wondered at, and there would be more cause for astonishment if it had not happened.

There are two problems in particular that should be studied in connection with the situation I have described:
(a) What are ICOFOM's duties?
(b) Of what type are ICOFOM's relations to other ICs?

Concerning duties, we have to go back to 1976. In June that year the Advisory Committee recommended the establishment of ICOFOM (76/Ad 15). Under the heading "Need for the Committee ICOFOM", the Advisory Committee observed that "every branch of professional activity needs to be studied, developed and adapted to changing contemporary conditions", and that this applied not least to "the field of museology". Accordingly, the programme of ICOFOM should be "to pursue the aims of distributing knowledge of modern museological ideas and to help in different fields of museological development".

Concerning ICOFOM's relations with other ICs, we can also take the Advisory Committee's recommendations as our starting point. ICOFOM, we read, should "have close contact with other ICs, especially for Education, Documentation, Training of Personnel etc." Its work should not "duplicate or interfere with other IC's activities". ICOFOM should devote itself to the thematic side of museological problems, methods, criteria etc.

On the basis of this programme, ICOFOM has endeavoured to develop a profile during the years that have passed. What important measures have been taken in pursuit of the aims mentioned?

(a) Two symposia have been arranged, one in 1978 on the theme "Possibilities and limits in scientific research typical for the museums", which also dealt with museology as a science of the museum, and the second in 1979 on the theme "Sociological and ecological aspects in modern museum activities in the light of co-operation with other related institutions". Both these symposia were attended by experts from outside ICOFOM, and papers from both symposia have also been published and distributed externally.

The third symposium, "Systematics of museology", it will be recalled, is in progress at this very moment.

(b) The idea of publishing working papers on fundamental museological problems has been broached and discussed and, in contact with all the NCs and ICs of ICOM, put into effect with the presentation of Museological Working Papers — MuWoP No 1 to ICOFOM the other day.

(c) Representatives have been appointed to take part in the work of the ICOM Planning Committee for the Treatise on Museology, an important ICOM project.

(d) Contact has been established with a number of ICs as a result of ICOFOM representatives being invited to attend their annual meetings (IC for Training of Personnel, IC for Regional Museums) and deliver addresses.

(e) Questions concerning the relations between ICOFOM bodies have been discussed, and proposals have been framed with a view to improving the planning and co-ordination of ICOM activities.

ICOFOM has no cause for discontent, but as regards the programme for 1977—1980 one has to observe that regular collaboration with the IC for Documentation has not yet been established and that a list of emergency needs and priorities as a basis for ICOM editorial plans has not materialized.

In my opinion this account serves to show that ICOFOM is heading in the right direction. ICOFOM must now see to it that the projects which have been started can be further prosecuted in relation to its resources — annual symposia with the publication of results in a separate volume and the editing of MuWoP — Museological Working Papers — and that the programme adopted for the next three-year period is put into effect.

Within its own field, ICOFOM should support all research and other activities leading to the elucidation and definition of the objects, systems methods and aims of museology and to the further development of museology as a discipline. In this connection ICOFOM's field of operations and its relationship to other ICs should also be defined. Continued publication of MuWoP is the platform best calculated to guarantee the realization of this important aim and the best foundation on which to promote ICOFOM's co-operation with all committees and members of ICOM.

As regards the questions raised in this lecture, ICOFOM ought, by virtue of the fact that museology, with its clearly interdisciplinary character and its consequently continuous need for co-operation and co-ordination, is in the focus of its interest, be the prime mover in the presentation and implementation of ideas.

• concerning the deeper and well-co-ordinated planning by ICOM of its activities, both at central and at committee level, based on an agreed policy and long-term plan discussed by all ICOM bodies in the form of proposals put forward well in advance of the General Assembly,
• concerning the implementation of ICOM activity programmes with the efficient bilateral or multilateral co-operation of the ICOM bodies which according to their field of work are best capable of contributing to the implementation of the various programmes,

• concerning the establishment, where this is judged appropriate, of direct links between ICs in order to initiate and pursue joint projects and to co-ordinate activities in a sensible, efficient and rational manner, so that a coherent result can be achieved which is based on the policy and philosophy adopted by ICOM,

• concerning an uninterrupted flow of information between all ICOM bodies concerning what has been done, what is being done and what is going to be done, and also concerning the results thus achieved — with a view to streamlining ICOM's work and deriving benefit from all that has been achieved within ICOM and its bodies. Within the framework of this objective, ICOFOM should continue publishing its Annual Volumes.

And last but not least,

• concerning a review of the ICOM system of ICs in order to create an organizational network of committees whose duties cover the entire field of museology and which have clear fields of responsibility, points of contact and rules of co-operation.

These thoughts are in my opinion expressions of the concrete needs existing in the museum community and its professional organizations. They should be discussed and put into effect as soon as possible if ICOM is to keep abreast of the times.

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Some points of view to the papers presented at the ICOFOM Symposium 1980
Excerpt from a letter to the Chairman of ICOFOM of December 17, 1980

I would like to address briefly a few general points in our understanding of the relationships implied in our use of systems in museology. Initially with reference to Z. Z. Stránský's paper, we must come to a common understanding as to the exact implications embodied in the use of technical terminology. Unfortunately, the term system has a multitude of both denotative and connotative meanings. Each of these definitions arises from the various disciplines where the term, with appropriate modifiers, has been incorporated into the jargon and given specific meaning based on an underlying theoretical structure. If we are to incorporate this term, with its multiple references into our analysis and understanding of museology, we are forced to accept the theoretical substructure for its respective definitions. Here, as an example, I emphasize the distinction that Stránský makes in passing with regard to the concept of systems in System Theory and systems in Systematics. The underlying operational principles and theoretical structures for each are different and while both are understood by many of us and are applicable to distinctive aspects of museology, the easy interplay of both concepts without full explanation may well be confusing to museum people who have not worked directly with these concepts. These differences are differences in kind and not in degree, and their clarification, therefore, will be of great importance in these initial steps towards agreement on a science of museology.

As a related and perhaps more significant aspect, we must become aware of an additional dimension in the difficulties we already face in applying the variously defined concepts of system to museology. Any of these system orientations is an attempt to order, understand and explain a class of phenomena or body of data. The perception of what constitutes data, the methodology for determining the significant units for study within the totality of this data, and the relevant relationships within and between these units is determined by the theoretical basis of the specific discipline. In our discipline, the body of data consists of a wide variety of human-made, human-influenced and human-directed phenomena, and therefore, we lack an external, independent and uninfluenced phenomenological base from which essential systems and system relationships are to be deduced. We, in doing and thinking museology, are part of the phenomena we are studying. We are at one and the same time both subject and scientist. While this is not an insurmountable problem and is one that many social sciences face, lack of awareness of our own role in the formation of and subsequent perception of relevance in data may begin to lead us in circles. This dimension to our work may in fact be the basis for some of the confusion between museological theory and perceived common sense. These potential problems in the development of a formally stated theoretical base for museology will be resolved only when we begin the actual analysis of museological data from these perspectives. If, in the end, the results do not meet the hoped for scientific rigor, our efforts will have at least added insight to our field.

With regard to V. Sofka's paper, my comments are addressed more to the implications of the committee's response than to the specific substance of his proposals. The application of Systematics analysis in suggesting effective structure for ICOM and its committees and the surprisingly negative reaction of some members raises an interesting question beyond that of efficient organization. The question, to be blunt, is just what is the real purpose of ICOM structure. Does ICOM exist to serve its members and the museum world or do the members serve the perpetuation of ICOM as an institution? Sufficient time has elapsed since the formation of ICOM to expect and to want a reconsideration of its purpose and its form as well as, its response to the changing circumstances in the museum world. This point has already been made by the Secretary General of ICOM in 1977. Such evaluation may well result in the decision that the current structure is adequate to its task, but dismissal out of hand, as happened at our meeting, of any consideration of the potential advantages and disadvantages of change, adaptation or evolution in the organization towards full representation of all aspects of museology, appears to me to be, minimally, unmuseological. If we as museologists have learned anything at all from our collections, it is the inevitability of change.
I hope that my comments may be useful to the committee's future work. I do feel that the topic and the efforts of V Sofka and Z Z Stránský deserve careful consideration, especially in light of the lack of the other anticipated papers.

If I may indulge in one additional comment, I must support completely S Tsuruta's statement that the topic of this meeting has not been adequately resolved. An additional forum must be found to consider systematics, system theory, etc., in depth before its methodology and theory can be incorporated into museology.
On 9th December 1975, the U.N. General Assembly adopted Resolution No 3447, "The United Nations Declaration on the Rights of Disabled Persons". Six years later, 1981 was proclaimed the International Year of Disabled Persons, with the aim of reminding all of us of "the necessity of preventing physical and mental disabilities and of assisting disabled persons to develop their abilities in the most varied fields of activities and of promoting their integration as far as possible in normal life", and to emphasize "the necessity of protecting the rights and assuring the welfare and rehabilitation of the physically and mentally disadvantaged" (the Preamble to the Declaration). This was to provide food for thought and an incentive for investigating what had been achieved as well as generating new efforts in this direction.

"All cultural resources of societies have a role to play in improving the quality of life of disabled people and there is no limit to ingenuity and striving" (Jablensky 1981). This is also supremely applicable to museums, which for a long time, and more recently on a progressively larger scale, have been making these ideas an integral part of their work.

The right to "participate in all social, creative and recreative activities" (Article 9 of the Declaration), the fulfilment of this right and of the corresponding moral duty to welcome disabled persons as fully fledged visitors in the museums implies "the exercise of several responsibilities: a search for fuller understanding of disabilities and of their causes and corollaries; the adaptation of the museum environment, particularly of its means of communication; the elimination of its physical barriers; the harnessing of all the resources of common sense, ingenuity, patience, enthusiasm and friendship" (Museum, 1980).

The demands which have to be met are formidable and extensive. Every new idea, every new invention is therefore a welcome contribution to efforts in pursuit of the predefined objective. But news does not reach everybody in the world simultaneously, and technical news is no exception to this rule.

One novelty which reached Scandinavia in the closing stages of the International Year for Disabled Persons is very gratifying in the present context and deserves to be passed on. It "revolutionizes the life of the blind", who "can now see pictures and graphs", to quote Japanese news media commenting on the new invention. How has this been achieved? By realizing "a dream that pictures, maps and graphs and the like could easily be raised so that the blind would be able to feel them with their fingers". This is now possible by means of "a stereo copying system" which represents "a great advancement in the dissemination of information to the blind and to people with weak sight". So much for the Japanese company Matsumoto Yushi Seiyaku K K, which developed the system.

The stereo copying system differs in one essential respect from other methods of copying print, drawings etc.: instead of ordinary copies, black and white and flat, it gives black and white and raised, three dimensional "stereo" copies.

How does this new system work? We can consult the descriptive folder which has been prepared by F J Tieman BV of the Netherlands, the European representative of the product.

1 The stereo copying system has three components:
(a) Capsule paper — special paper into which hundreds of millions of thermally foamed microcapsules have been uniformly coated. These microcapsules, which have the appearance of wheat flour, will instantly expand when they absorb the energy of light or heat.

The expansion, to something a hundred times the original volume, and the evolution of a method for controlling it, are the secrets behind the end result: a three-dimensional, raised "stereo copy".

The capsule paper is produced in sheets, size A4 (about 21 x 29 cm); its colour and thickness are similar to those of Braille paper.
In order to facilitate the preparation of the black ink originals of Braille texts required for stereo copying, a special Braille writing capsule paper sheet has been developed. The Braille composing dots are printed all over the writing paper. By marking over the dots necessary for composing Braille symbols, using a special pen, a Braille original for stereo copying can be prepared quite easily.

(b) The stereo copier developed for the stereo copying system resembles an ordinary office copier. It produces black and white copies on the capsule paper. Nevertheless, it is also capable of copying with ordinary copying paper and can thus be made to serve two different purposes economically and rationally.

The size of the stereo copier is 47 cm in width, 48 cm in depth and 31 cm height, and its weight is 55 kg. Its electric power requirement is 1,2 KVA.

(c) The stereo copy developing machine produces stereo images by thermally treating the copy on the capsule paper. This machine is 41 cm wide, 46 cm deep and 38 cm high, and it weighs 25 kg. Its electric power requirement is 1,2 KVA.

2 The copying procedure is very simple. Anyone who can make copies with an office copier can operate the new stereo copying system easily.

Manuscripts, printed books or a form/item are placed on the base in the stereo copier (1b).

A capsule paper (1a) is inserted in the copier via the manual feeding table. The black and white copy comes out of the copier like any other copy.

To give a "stereo copy" it has to be put into the developing machine (1c). In this machine the ordinary copy is converted into a stereo copy in 15 seconds. The black portions of the copy on the capsule paper, which is irradiated with light energy at a special wavelength, absorb the energy and swell outward to the stereo form. The stereo copy obtained thus has a blown-raised surface. The height of the raised parts ranges from 0.2 to 1 mm and is adjustable by the degree of contrast in the original. The difference between a bold and a thin line can also be expressed very distinctly.

3 Uses of the stereo copying system.
Practically everything which can be copied in the normal way can also be stereo copied. The stereo effect actually confers a wider range of applications, e.g. when copying Braille texts. Thus handwritten or printed texts, graphs, drawings, maps, various figures, sheet music, paintings, photographs etc. can all be stereo copied.

Assessment of the stereo copying system is made easier when you are able to see the results for yourself. In this issue of MuWoP you will find a sample of a stereo copy produced for us by the European representative of the system. If you wish more information about it you can write to us or call us. We will tell you what we know or give you the address of the representative in the Netherlands or of the company in Japan.

Has your museum already used this system or another one like it? If so, we would be glad to receive your viewpoints and any information concerning pro’s and con’s and practical experience which may be of use to others. This is the sort of thing which MuWoP exists for passing on.

Your Editor is glad to have been able to launch this news section of MuWoP with information concerning an invention which is of great potential use to museums and which is closely bound up with the International Year for Disabled Persons, the year whose aim was to make us all realize that at least 400 million of our fellow beings are disabled and want to join us and participate in our activities. The stereo copying system can help one such group, the blind, to achieve contact and communication more easily with museums and museum workers and to actively participate in museum work.
This is a stereo copy!

Stereo copy — a technical innovation in the service of the visually disabled

Read all about it in MuWoP No 2
G Ellis Burcaw
Comments on MuWoP No 1

Though perhaps not ready to contribute importantly to an international discussion revolving around museology as a science, I am happy to accept the kind, personal invitation of Dr Vinaš Sofka, editor of *Museological Working Papers*, to comment on the first issue of the new journal.

I agree with Jan Jelinek that the journal has an important mission. No other international publication is dedicated to museum theory, and throughout the world we have arrived at a time when we need to consider seriously what our museums are and where they are going. The new journal’s editor, its editorial board, the ICOM International Committee for Museology, and the Swedish governmental and private organizations which launched *Museological Working Papers* merit the gratitude of the entire museum profession. The journal may well prove to be one of the most effective agencies of the International Council of Museums.

I was mildly shocked, however, by the acronym MuWoP, as my students invariably are when I reluctantly acquaint them with it. I wish someone had informed the editorial board that MuWoP has an ugly and comical sound to speakers of English, hardly in keeping with the journal’s scholarly purpose. Noting that the ICOM International Committee for Museology refers to itself as ICOFOM, I wonder if “MuWoP” is a result of the committee’s liking for acronyms. The Museum Training Committee does not call itself MuTraC. Perhaps it should. The name *Museological Working Papers* is interesting since, in a way, the journal is the offspring of the Czech journal *Museological Papers*. The word “Working” was added to create a new title, and the new journal is now reaching for a wider — a world-wide — audience; but one wonders if from a restricted theoretical basis, *Museological Papers* (Museologické sešity in Czech, its principal language) is a deservedly influential publication in eastern Europe, speaking strongly for the philosophical point of view that museology is a true science. The relatively new ICOM International Committee for Museology, the sponsor of *Museological Working Papers* seems to be largely made up from central and eastern Europe, and to subscribe to the philosophical position which is represented and promoted by *Museologické sešity*, the Moravian Museum, and the museum training program at J E Purkyně University in Brno.

It is significant, I think, that of the twenty contributors to the first issue of *Museological Working Papers* (1980), half are from central and eastern Europe and half of these are Czechs. Furthermore, after posing the theme of the first issue, “Museology — science or just practical museum work?”, the editor unequivocally stated his own position (1980, 13), “…museology...is an independent scientific discipline...”. I am suggesting that the journal may have begun with an editorial bias. While this is not necessarily bad, I think it may be a weakness for the editorial board to select themes for contributions to the journal without explaining what the themes mean. The projected themes for the next several issues of *Museological Working Papers* were listed in the first issue. I confess I do not understand any of them. Promoting a museological dialogue will not amount to much if only a few of the contributors understand what they are asked to write about. It is a little like inviting opponents to play a game with you but not explaining the rules.

In the first issue of *Museological Working Papers*, half the contributors were comfortable with the notion that museology is a scientific discipline in its own right and half were not, Central and Eastern Europeans taking the extreme positions. This polarization, in my view, is the most significant aspect of *Museological Working Papers* No 1, not the predictable comments made by the authors. The representatives of socialist countries had no trouble coming to grips with the theme, in fact they seemed to revel in it; while the contributors from western countries tended to ramble, avoid the question, or answer it at a superficial level. Most, I suspect, did not really understand it, not being acquainted with the Brno lexicon. Some of the contributors from the West seemed to think the theme was, “Is there a body of knowledge and attitudes common to all museum work (that is, is there such a thing as museology, or mu-
useum science, as commonly taught in western countries?"; but as Stránský (1979) has explained, museum science is but the precursor, not at all the equivalent, of the science of museology, as the terms are understood in the East.

This is not to say that the point of view in eastern Europe is mysterious or radically different (though some of its terms, "museumality, museistica, musealium, thesaurus of objects, etc." are not common in the West). It has to do, basically, with a highly systematic and selective attitude toward collecting and with an organized and purposeful method in the use of collections for public education. Eastern museology, as exemplified in Brno, is founded more on philosophy than on pragmatism. In my opinion, the Western approach is likely to be more productive in the short run, but for efficiency and worth in the long run the Eastern approach is needed. I must say, too, that in museum training, in the explorations of museum theory, we are not widely separated. Museum Studies at the University of Idaho (Burcaw 1975) could be accommodated comfortably at J E Purkyně University in Brno.

At this point, a word concerning the selection of authors for the first issue might be in order. Except for some imbalance, referred to above, the editors did manage to get articles from a dozen countries. A question remains as to how representative of the best of contemporary museum thought the articles were, but it is gratifying that among the contributors were highly respected, long-time museologists - Stránský, Swauger, Tsuruta, and others. A weak point in the selection procedure may have been the relying too much on ICOM National Committees for recommendations, especially in large countries, like the United States, where most museum professionals do not belong to the national organization (the American Association of Museums), much less ICOM; but for an initial attempt the editors are certainly to be complimented.

What of those who have created and are guiding Museological Working Papers? The chairman of the ICOM International Committee for Museology and the editorial board, the people who propose to further theoretical knowledge and professional orientation for the entire museum world, consist of three Germans, two Czechs, and a citizen of the Soviet Union. Vast regions, populations, nations, and cultures are not represented. (Let us remember that the International National Committee for Museology is engaged also in producing the definitive and encyclopedic Treatise on Museology for ICOM.) If half the museums and museum workers of the world are in North America, can museology be completely and accurately dealt with by the International Committee for Museology and its editorial branch as now constituted? Quite possibly. We must remember that a museum worker is not necessarily a museologist, and what concerns museum professionals in one country may be different from what concerns their colleagues elsewhere. I have been attending museum association conventions at the national, regional, and local levels for thirty years. I do not recall ever attending a meeting or a session or even hearing one important address dealing directly with museology. The interests of American museum people are largely not in the philosophical basis of collection (the relation of man to three-dimensional reality) and in the efficient use of the collections in purposeful education (applied museography). Their concerns are techniques: how to make friends, how to get money, how to serve the handicapped, how to create beautiful environments, how to raise the morale of minority groups, how to teach children the facts of nature, how to preserve the collections, how trustees can avoid being sued in a court of law, and so on. It was only in 1980 that was proposed in a major address at a national convention that advocacy might be attempted by American museums (that is, taking a particular stand in a controversial matter) - but, of course, in something safe, like the protection of the natural environment; and it was only in 1981 that collecting in (of) the present was the theme of part of a national meeting (of the American Association for State and Local History). Even though some of us (Burcaw 1967) have been recommending this for many years.

If my assessment is correct, the museum profession needs the advanced and exploratory thinking that is coming from the ICOM International Committee for Museology, in spite of the fact that most museum workers may not completely understand it or agree with it. This may sound odd coming from one who has half-facetiously advocated the abolition of that committee on the grounds that the ICOM International Committee for the Training of Personnel ought to embrace all interests and activities of the Committee for Museology. My reasoning, and that of others in the Committee for Training of Personnel, is that those of us who are engaged in teaching museology to university students must necessarily be deeply involved in museological theory. Why should another committee tell us what to teach? I realize that this is an arguable point, and that this is not the place to pursue it.

I am glad that museology now has a forum at last. Dr Sofka and the International Committee for Museology have done us a great service and deserve our hearty support. I would ask them to make a special effort to interpret theoretical matters into terms understandable to a worldwide, general museum audience, and to broaden the scope of their interests and their approach.

With Dr Swauger and others I agree that in western countries, at least, museology is not a science; but with eastern Europeans I agree that where it is not yet a science it ought to be and will be someday. The one point I think Dr Stránský and I might differ on has to do with the nature of museum reality. The Brno school seems to believe it lies in tangible objects (a materialistic point of view). Studies I have made (Burcaw 1980) suggest that this may be characteristic of museology in all of Europe. With other Americans (and with many people from all parts of the world, of course) I feel that museum reality, that is, the basis and orientation of collecting and all activity, lies in behavior, in ideas, in sensations, in relationships, in "mentifacts;" the objects - like library collections - being the fixtures of reality, to borrow Stránský's term (1974), not reality itself. But that is another topic. The editor did not ask me to launch out in that direction.

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Comments on comments by the Editor

It is nice to know that there are other people too who give MuWoP a few thoughts, follow its progress and are interested in its success. The appreciative letters which have landed on the Editor's table from various parts of the world have strengthened us by confirming that our work on the journal is useful and necessary. The few reviews we have managed to obtain from various specialized journals have given us some ideas to chew over, but we have not received any comprehensive appraisal of viewpoints concerning MuWoP addressed directly to ourselves. A letter stating both likes and dislikes, presenting new ideas and suggesting improvements to our journal. Contact with readers is what we have felt the lack of hitherto.

But now the first swallow has arrived, and we are happy to be able to open up MuWoP's new section: Contacts — Opinions — Confrontations. Thank you, G Ellis Burcarw, for accepting the invitation of taking MuWoP to task!

To be honest, I was slightly shocked the first time I read your comments. For Heaven's sake, I thought, haven't we managed with all our information activities to convey a better idea of our intentions regarding MuWoP and how it had all come about? Naturally, my main attention then was riveted on all your critical points of view. A second reading revealed to me their various nuances and contexts and the third opened my eyes to all your positive observations and, first of all, your appreciation of our work. Nevertheless, I feel that it would be useful to counter some of your comments, objections, remarks or suggestions as I understand them, and I will therefore now take the opportunity of improving on our information drive by explaining, elucidating or rectifying.

Purely generally speaking, your comments are all dominated to a greater or lesser extent by your opinion that the museological helm has been taken over by a group from a region with a certain view of museology and that this group has set the course which is now being followed. I may have misunderstood you, but assuming I have not, I would like to stress the openness and independence characterizing the establishment of MuWoP and its work. All decisions concerning the journal and its Editorial Board represent a free expression of the will of all of those who took part in the various meetings of ICOFOM. I would like to assure you too, that MuWoP has no commitments of the type referred to above, and MuWoP Nos 1 and 2 should be the best evidence with which to substantiate this point. Our aim is an open exchange of ideas in order, if possible, to arrive at a jointly evolved synthesis.

You touch on this important question in your inquiry as to who the people are who have created and are guiding MuWoP". Your answer is: "The Chairman of the ICOM International Committee for Museology and the editorial board, the people who propose to further theoretical knowledge and professional orientation for the entire museum work, consist of three Germans, two Czechs, and a citizen of the Soviet Union." And you add: "Vast regions, populations, nations and cultures are not represented." Let us look at this problem.

Firstly there is no question of such momentous influence as your phrasing might suggest. Certainly the Editorial Board puts forward proposals. But these primarily concern the journal and are then discussed throughout ICOFOM. Even ICOFOM is too small a forum for questions of the kind you mention. These questions have to be settled within the whole of ICOM or at least its Supreme Bodies.

Secondly, the small group responsible for MuWoP, the Editorial Board, has received guidelines for its work laid down by resolution of ICOFOM, and it reports on its activities and puts forward its proposals at the annual ICOFOM meetings. If urgent measures are required between annual meetings, any important questions have to be discussed with ICOFOM's Executive Board via the Chairman of ICOFOM.

Thirdly, the Editorial Board is elected by ICOFOM's members at the annual meetings. The body you describe was elected in 1978 as a drafting group and was enlarged in 1979 to form an Editorial Board comprising 2 representatives from the Federal Republic of Germany, 1 from the German Democratic Republic, 1 from Sweden and 1 from the Soviet Union. A different situation applies following the 1980 election. The Editorial Board now comprises — if we may content ourselves with the representatives' citizenship — 1 representative from Czechoslovakia, 1 from France and 1 from Sweden.

Now, I am not trying to play down your question. On the contrary, this is a matter of principle, and perfectly justified. The problem of territorial representation in MuWoP has in fact been discussed — the most recent occasion being in 1980 — but my proposal in favour of a broader Editorial Council parallel to a working Editorial Board for MuWoP was defeated. Instead the task of monitoring and deciding major issues concerning MuWoP was vested in ICOFOM's Chairman and Executive Board, mainly on the grounds that the proposed solution would be a dead letter since nobody could furnish financial guarantees for the implementation of this proposal.

What conclusion can be drawn from this review? Quite a simple one, in my opinion. Everything of importance is discussed and decided by a plenary session of ICOFOM, through which all influence can be exerted. More active participation in ICOFOM's work by its members and a wider basis of membership for this ICOM committee is the guarantee for a wide interchange of opinions which you — and we too — desire. Nobody has excluded "vast regions, populations, nations and cultures"! Unfortunately the response, reaction and interest concerning ICOFOM's work and participation in the same have not been what we would like them to be, and perhaps this is the trouble. A point to be borne in mind, not least, with the approach of the 1983 election!

One small correction before we leave this topic. The Treatise on Museology project, which you mention in this connection, is the responsibility of a special ICOM committee on which ICOFOM, among other bodies, has two representatives. The ICOM International Committee on Training of Personnel is also involved. So far, unfortunately, lack of resources has made the great plans for the Treatise more a matter of contemplation than action!

Another problem you raise concerns the selection of contributors to MuWoP. You ask "how representative of the best of contemporary museum thought the articles were" and you take the view that "a weak point in the selection procedure may have been the relying too much on ICOFOM National Committees for recommendations". I agree with what you say, or rather with what is behind your argument, namely that there are many members of the museum profession who do not belong to ICOM. But tell me,
how could we dig them out, and who could decide which people and organizations were to be included and which excluded? Wasn't it right to start a journal published under the editorship of ICOFOM through contact with ICOM and the whole of its network of organizations? We felt so at the time, just as we hoped that the open attitude shown by the journal would in future result in interested museum people — not only ICOM members, and not only museum employees, but also researchers, collectors and all manner of specialists — who would come automatically, so to speak, to participate in MuWoP's discussions, in response to the attraction, relevance and high quality of the debate.

One important question in this context is who should be published in MuWoP. You touch on this problem in another connection, when you note that "of the twenty contributors to the first issue of Museological Working Papers half are from central and eastern Europe and half of these are Czechs". The expression "central and eastern Europe" is rather vague, but taking Europe as a whole we find that out of 20 contributors to MuWoP No 1 — including the Editor and the Chairman of ICOFOM — 13 come from this part of the world, among them 7 from the area commonly known as eastern Europe, 4 of whom are from Czechoslovakia. The American continent provides 4 representatives, Australia 1 and Asia 2. The figures for MuWoP No 2 are as follows: of a total of 24 authors, 17 come from Europe (including 10 from eastern Europe) while 6 are from America and 1 from Asia.

This statistical correction, however, is of minor importance. The answer to the above question of principle matters more. MuWoP is open to everybody and therefore publishes all incoming contributions without restriction; no restrictions are imposed for the sake of territorial balance either. So far it has been technically feasible to print all the essays we have received. Should the number increase, we may have to publish them successively. At all events, I feel there can be no question of redressing the balance by leaving contributions unpublished for any reason, except when the contributor ignores the subject. On the other hand it may be a good idea to aim for a better geographic confrontation by encouraging and canvassing potential writers. Otherwise, however, geographic and other representation is completely in the museum community's own hands: anybody writing for MuWoP will be published.

Finally, in reply to your introductory question as to "how representative of the best of contemporary museum thought the articles were", I would like to ask a counter-question: who on earth can unhesitatingly give the names of 10—20 writers guaranteed to present the best and most representative of contemporary museum thought? How objective is the selection and how objective can "the best" be? Our aim is a living discussion with everybody feeling willing and able to contribute. I think this is as far as we should go. If our journal is to function well, the best must crystallize out in the course of discussion.

The policy of the journal and the philosophy behind it is another delicate subject in your comments. I would like to say that a draft editorial plan was presented for open discussion in the ICOFOM and ICOM Executive Council and even in the national and international committees of ICOM before it was taken as final. I must add that no changes were made during this process. The draft was accepted without any elucidations being demanded — what more could we do?

If you maintain that "it may be a weakness for the editorial board to select themes for contributions to the journal without explaining what the themes mean", I am hard put to contradict you. We are working together to elucidate and unravel various museological problems, and therefore we cannot dig our heels in. Variability of opinion must be an accepted premise. On the other hand, we cannot prevent people from misinterpreting the theme or misunderstanding it or not understanding it at all. Remember also that we have not yet worked out a common terminology. All this, however, is not necessarily a disadvantage, because it will result in our differing views being brought into the open, as well as spotlighting problems of terminology and stimulating our discussion. But to avoid the confusion which can result from differently formulated thematic headings (albeit in different contexts and not always in the guise of headings), we have already taken steps in this issue which partly accord with your observation. On this point and concerning the whole problem of thematic arrangement, I refer you to the What next? section.

Finally we come to the matter which "mildly shocked" you, namely the acronym MuWoP. After having used it in various discussions, negotiations and documents on international occasions, and in the presence of English-speaking experts without anybody warning us, we had no idea that it sounded "ugly and colloquial". We have now reacted quickly to your observation, as you will see in the What next? section, under the heading "A new name for MuWoP?". Would you care to suggest one or more new names?

In one respect, though, "You do us too much honour, Sir". ICOFOM's "liking for acronyms" is no idiosyncrasy, and there are greater stars in ICOM in this particular firmament. As a quid pro quo for your warning about MuWoP, I take this opportunity of cautioning you against reading different ICOM documents. Or, what do you think about CIMUSE, ICME, ICMAH, ICAMH, ICAMT, CIMCIM, ICFA, IAMAH, SIBMAS, AIMA, CIDOC, CECA, ICMS and MPR?

I began by thanking you for "lacing into" MuWoP, and after all these explanations, additions and corrections I would like to conclude on the same note. Your remarks and objections will be a salutary influence on us and our future work. But you are not only critical. In your comments you also have a great many positive and appreciative things to say about MuWoP and the people behind it which we find very encouraging. You also state your expectations, and this inspires confidence. Let us join forces in living up to them.
What next?
Directions from the Editor

Museological Working Papers — which, less than a year ago, at the end of 1980, was merely a prototype awaiting the decision of its future in Mexico — has now got seriously under way as a theoretical and methodological journal for museum staff. Work is progressing in accordance with the essential lines indicated by the Editor and approved by the Editorial Board, ICOFOM and, as regards the main principles, by ICOM and its supreme bodies. The big principles, the main outlines and the long-term perspectives are one thing. Everyday realities are another. How is MuWoP faring on this front? What is its short-term plan? In a word: what next?

What next? A checklist

Most of the answer has already been given in various parts of this issue. The various appeals, challenges, desiderata, instructions and directions can be summed up as follows:
- a list of what MuWoP expects of its readers and museum people generally, and at the same time
- a list of practical measures for those wishing to help and actively participate in MuWoP and support the journal.

The most active form of participation is writing for MuWoP. For No 3 you can:
- Send a contribution to the discussion of theme 1: Museology — science or just practical museum work? Basic papers on these themes will be found in MuWoP No 1, and contributions to the discussion in MuWoP No 2.
- Write down your views on the ideas presented in MuWoP No 2 in the basic papers on theme 2: Interdisciplinarity in museology.
- Write a basic paper of your own for MuWoP No 3 on theme 3: The object of museology.
- Review or report new museological publications, essays in periodicals and theses.
- Report the latest symposia, conferences and meetings dealing with museological themes and with published proceedings.
- Report new findings in science and technology with a bearing on museum work and applicable to or already being tested in this work.
- Give us your views on MuWoP, new ideas for the journal and suggestions regarding its content and form.

You are certainly wondering when we wish to receive your contributions, basic papers, reviews or reports. We suppose you have noticed that we must first arrange for the financing of the future issues of MuWoP. We do not want you to write for this journal without knowing that what you have done will be published.

Therefore we will now just ask you to inform us if you are willing to write for MuWoP No 3 and about what. You can let us know by filling out the form joined to this issue and sending it to us. As soon as we have confirmation of the future sources of funding, you will immediately be contacted and we will give you the date for receiving your papers.

You can also support MuWoP without writing anything, for example by:
- Reading it, testing theories and methods in your work and discussing them with your colleagues.
- Putting us onto potential contributors.
- Telling people about the journal — including people outside your museum, for example at universities, libraries and institutions which provide training in the traditional museum-oriented subjects, but also at other institutions which we ought to be co-operating with, e.g. institutions for scientific theory, informations techniques, pedagogics, sociology, psychology, management, marketing and futures studies.
- Making sure that MuWoP is available at your museum, at libraries in your city, at universities.
Theme 3 — The object of museology

Each issue of MuWoP has a main theme, dealt with in the published basic papers.

Themes for several issues ahead were adopted in Mexico in 1980 in the form of the following topics: Interdisciplinarity in museology, The object of museology, The system of museology, Museum items — the theory, methods and criteria for museum collecting activities, The museum — an information bank? The museum — a research institute? The museum — a mass medium!

This editing plan is of course changeable, and plans for the next issue, therefore, will always be defined more exactly in the section headed "What next?" It is the question as formulated there which should be dealt with in basic papers for the next issue of MuWoP. The Editor wishes to stress this point so as to avoid misunderstandings.

There may be one or two difficulties involved in sticking to the theme. The theme adopted may not be as clear and distinct as the Editor or the Editorial Board supposed, possibly because of the formulation of topics, or because the question is connected with preceding and succeeding topics and should be interpreted in this context — which may have eluded a new contributor — or again for lack of a uniform museological terminology and the varying interpretation of terms. And so there the author sits, tearing his hair out and wondering what on earth we are asking him to write about.

This is not very surprising, since we are breaking new museological ground. There are a great many things to be sorted out. But this is what MuWoP is for, and there is nothing wrong if several different interpretations crop up. On the contrary! This has happened with theme 2. In addition to interdisciplinarity, the concepts of uni-, multi- and pluridisciplinarity have also been discussed, and this can happen again.

The theme for MuWoP No 3 is The object of museology. The Editor and the Editorial Board feel that this is a topical theme at the moment, given the thematic lines laid down for the journal.

What problem does the Editor expect the experts to deal with? Here are some guiding thoughts.

• The heading comprises two concepts: "the object" and "museology": Each of them has its own content, but here they are interrelated to some extent.
• The word "the object", related to "of museology", was used in the heading in the sense "that which is in the focus of museology".

Thus the Editor hopes that analyses will be presented of the content of the sphere of interest and operations of museology.

The Editor hopes that there will also be an opportunity here of tackling and solving a number of terminological problems in the course of the analysis. For example, the very word "object" is not altogether self-explanatory in this context. Some writers refers to "the subject" when dealing with questions whose content corresponds to theme 3.

• The second half of the heading, "of museology", delimits the field of analysis. Thus the question is one of museology — museology as viewed by the contributor.

The Editor has not envisaged basic papers giving in this context a description, for example of museum studies, the museum as an institution or of museum activities. Nor has he envisaged contributions taking the words to mean "museum objects" and dealing with collecting activities.

• But: the Editor and the Editorial Board may have become too set in their attitudes and other interesting approaches may crop up. Once again, therefore, the field is essentially clear for contributors, and we look forward to receiving many basic papers with fresh new ideas.

Our co-operation — some rules

In order to be able to do our own job, we must ask our contributors to abide by certain rules.

1 Always stick to the given theme, and try to accommodate your ideas within the recommended number of pages, which is eight A4 pages for basic papers.
2 When replying to other people's viewpoints and quoting them, please do so accurately, and state your sources. Give us complete and accurate data for References and Notes, as shown in the MuWoP pattern. Unfortunately we are not always in a position to supply what is missing.
3 Send us everything you write for MuWoP in both ICOM languages — English and French — if possible. This will give you an opportunity of co-operating with the translator and making sure that all your ideas are correctly reproduced.

It quite often happens that the English and French versions do not tally completely, and adjustments by consultation with the authors are time consuming.

Checking and translation are in fact a major problem to the Editorial Board Office, both financially and in terms of work input.

4 If you have not contributed to MuWoP before, please send us your curriculum vitae, modelled on the specimen in MuWoP No 1, p 54, together with a photograph of the same style and format as the photographs of contributors published in MuWoP. Here again we need complete data: your name, titles and job or post.
5 Our policy is to publish contributions without making any alterations, insofar as they can be avoided. If we have to make alterations — and so far we have only done so for language reasons — we will let you know. Please send us a short reply or confirmation without delay.
6 We cannot afford to pay contributors. All we can promise to do is to send each writer two copies of the issue of MuWoP carrying his or her contribution.

With these words of advice and instruction we come to the end of the "What next?" section for this time. We hope we have covered everything, so that this part of the next issue can be kept far shorter.
A new name for MuWoP?

Some time in 1978 or 1979, when the launching of a museological journal was being discussed in ICOFOM, the future publication was described as "working papers". The word "museological" was added later, the idea being that the journal would be of modest appearance but of highly prestigious content — a "working" debate forum of museology. At the same time an abbreviation — MuWoP — began to be used in various quarters simultaneously, and so the working name Museological Working Papers (MuWoP) came into being.

When plans for the journal were approved by ICOFOM in the autumn of 1979, the working name became official. The new journal was presented to ICOM a year later. Since ICOM is bilingual, the name Museological Working Papers (MuWoP) has been translated into French as Documents de travail sur la museologie (DoTraM), and the first issue was published as MuWoP — Museological Working Papers/DoTraM — Documents de travail sur la museologie.

During discussions within the ICOM Executive Council in the autumn of 1980, however, it was felt that one name should suffice, and Museological Working Papers was preferred. Therefore, in spite of our bilingualism, this second issue is being published with one name only: MuWoP - Museological Working Papers.

The creation of the journal was discussed over a long period and in many different contexts on an international basis. No objections have ever been made to the proposed name or its abbreviation. Daniel R Porter, one of the authors of MuWoP No 1, was the first to point out, in a letter, the associations which the abbreviation MuWoP could evoke in the United States, and in MuWoP No 2, G Ellis Burcaw does the same in his Comments on MuWoP No 1.

MuWoP is a journal of debate. Listening to readers' viewpoints is a matter of principle to the Editor and the Editorial Board, not least regarding such an important question as the name of the journal. The absence of a reaction from the Editor hitherto has been promoted by a feeling that it would be inappropriate and difficult to change names while the journal was still at the build-up stage. Besides, no suitable alternative names were forthcoming.

We therefore wish to consult our readers. Please let us know your views in the matter of names. Do you feel that we should stick to the old name or alter it? Can you suggest a new name? Something attuned to the modern profile, the focus and aims of the journal? Ideas and suggestions received will be published in subsequent issues. Until then, the name will continue to be MuWoP — Museological Working Papers.
MuWoP No 2
is the first regular issue of the MuWoP journal to appear since the prototype — MuWoP No 1 — was approved in the autumn of 1980 at the ICOM General Conference in Mexico City and the journal made part of ICOM's Triennial Programme 1981—1983 as ICOFOM's periodical publication.

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The ICOM International Committee for Museology and its relationship to other international committees of ICOM; Stereo copying — a new means of communicating with the visually disabled)

(b) Translations into French by

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MuWoP Chronicle

Document No 7
Museological Working Papers — a publication project of the ICOM International Committee for Museology (ICOFOM)
Material for the meeting of the ICOM Advisory Committee and Executive Council
October/November 1980

Document No 8
Report on the activities of the Editorial Board (EB) of the ICOM International Committee for Museology (ICOFOM) during the period October 1979—October 1980
October/November 1980, Mexico City — Mexico

Document No 9
Letter to the Chairmen and Secretaries of all National and International Committees of ICOM
April 15, 1981; Stockholm
The feeling that an activation of international co-operation in museological research and a deepening of the exchange of ideas and experiences from the museum sector between museums and the members of the museum profession are desperately needed led ICofoM in 1978 to commission the then recently formed Editorial Board "to work out a skeleton programme for working papers on fundamental museological problems, to concentrate such papers and to publish them."

The publishing of MuWoP - Museological Working Papers, according to the proposal suggested by the Editorial Board, was approved by ICofoM at its meeting in 1979.

The work which ensued at the Editorial Board's office in Stockholm following this decision resulted in MuWoP No. 1 being presented to the Advisory Committee and the Executive Council in connection with ICofoM 80. This debate publication was presented in the form of a prototype, thus giving the governing bodies of ICOM as well as other ICOM bodies and ICOM members an opportunity of discussing together with ICofoM and its Editorial Board the organization of the journal, its editing plan, objectives and role within the framework of the ICOM publishing programme, and other important questions on the subject of MuWoP before it began to be published regularly.

Information concerning the project had already been supplied to ICOM agencies previously: in June 1979 and in January and September 1980 to the ICOM Secretary General, in March 1980 to the Chairman of the ICOM Advisory Committee, and in May 1980 to the ICOM Executive Council. The exchange of ideas which thus occurred concerning the project had a beneficial influence on further work with MuWoP. Today's presentation of a prototype MuWoP comes as a result of those deliberations and shares the same purpose.

Documents concerning the above mentioned measures and contacts have been reproduced on pp. 55-67 of MuWoP No. 1 and are therefore not appended to the present account. Of those documents, Nos. 4 and 5 are particularly important, containing among other things essential basic information about the journal and the ideas behind its publication.

MuWoP No. 1 has been published in full agreement with the proposal accepted by ICofoM and with ICofoM's instructions. All of ICOM's NCs and ICs were contacted in January 1980 and have helped, through their replies and their nominations of authors, to make it possible for the first issue of MuWoP to present a broad spectrum of opinions which, both geographically and substantially, are globally representative.

MuWoP No. 1 contains contributions by no less than twenty writers. In keeping with the editing plan, their basic papers deal with MuWoP theme no. 1: "Museology - science or just practical museum work?" Discussions arising out of the ideas presented in the basic papers will be published in MuWoP No. 2, which will also include basic papers on theme 2 by writers nominated, once again, by ICOM Committees. All this is subject to the prototype issue being approved by the Advisory Committee and the Executive Council.

The editing plan is currently a subject of deliberations at the ICofoM annual meeting. The Editorial Board has proposed that the following topics be included in the plan: Interdisciplinarity within museology; Museums and museum activities - object of museological studies; Systems of museology; Museum exhibits - theoretical problems, methods and criteria for museum collecting activities; The museums as an information bank; The museum as a research institute; The museum - a mass medium?

The intention is for the editing plan to be operationally adaptable to social development and change and to the acute needs and demands presented by the modern world.
ICofoM hereby requests the viewpoints of the Executive Council and the Advisory Committee concerning the prototype issue of MuWoP which has now been presented and concerning the proposals submitted above.

The situation today pending a decision concerning the financing of MuWoP should not lead to the curtailment of work on MuWoP No. 2. The writers appointed for MuWoP No. 2 should be contacted without delay as planned and a discussion should be opened concerning the contributions to MuWoP No. 1. The deadline for discussions has been fixed at 1980-03-31 and that for contributions to theme no. 2 at 1980-05-31. By that time the financial question should have been solved.

ICofoM hereby requests the viewpoints of the Executive Council and the Advisory Committee concerning the prototype issue of MuWoP which has now been presented and concerning the proposals submitted above.

ICofoM and its Editorial Board hope that the MuWoP prototype will be approved and that ICOM's bodies will support further publication.

On behalf of ICofoM
Dr Jan Jelínek
Chairman

On behalf of the EB
Dr Vincíš Sofka
Project Co-ordinator, Editor
At its annual meeting in October 1979 in Torgiano, Italy, ICofoM approved the Report on the activities of the EB of ICofoM during the period October 1978 - October 1979.

At the same time, approval was given for the publication, proposed by EB, of a debate journal on fundamental problems of museology, entitled Museological Working Papers.

2. EB, comprising W. Klausewitz (BRD), A.M. Razgon (U.S.S.R.) and the Project Co-ordinator V. Sofka (Sweden), with A. Grote (BRD) and R. Kiau (DDR) co-opted for the present meeting, has in conjunction with the Annual Meeting discussed the performance of this task and has agreed that the work should be undertaken by the Editorial Board Office in Stockholm under the leadership of the Project Co-ordinator, V. Sofka, acting as Editor of the Journal.

3. Assisted by the Editorial Board Office, the Editor has completed this task in preparation for the 1980 Annual Meeting in keeping with the ICofoM resolution, and the result, MuWoP No. 1, is now presented to the Annual Meeting in printed form. The task has been accomplished in the following manner.

3.1 The chairmen and secretaries of all the national and international committees of ICOM were circularized in January 1980, informed of the project and urged to support it. They were asked to give the EB the names of suitable contributors on the first two discussion topics for MuWoP. Nominations were received from 10 NCs and 5 ICs.

3.2 The Editor of MuWoP wrote to the persons thus nominated - thirty in all - asking for their contributions to MuWoP, and 16 of the nominees agreed to participate, namely 1 from Australia, 2 from Asia, 9 from Europe and 4 from America.

3.3 The members of the EB have been informed, by post and by telephone, of the progress of the work, and the necessary consultations have taken place by telephone.

3.4 Several contacts have taken place between the Editor and the Chairman of ICofoM. The Chairman has been kept informed by letter and by telephone and at a personal meeting (in September 1980). Important questions such as the choice of authors, the arrangement of MuWoP, project finance etc. have been settled ad hoc.

3.5 Information concerning the project and the circular was sent in January 1980 to the ICOM Secretary General, L. Monreal, who was subsequently kept informed of progress by letter and telephone and at personal meetings in March and September 1980. Useful viewpoints emerged in these connections, particularly concerning the risk of overlapping (with the UNESCO journal Museum), finance and international representation on the EB.

The Chairman of the ICOM Advisory Committee, Professor G. Lewis, was contacted in March 1980, primarily concerning the role of MuWoP within the ICOM publishing programme. The idea of publishing MuWoP No. 1 in prototype form resulted from this meeting.

The ICOM Executive Council was informed of the project in a letter in April 1980. At its May meeting the EC resolved to study the first issue of MuWoP in Mexico "to ensure that there will be no overlapping between it or Museum or the planned Treatise on Museology".

3.6 MSS were collected during the summer of 1980. Editing was done by the Editor, assisted by the Editorial Board Office at the Museum of National Antiquities (SHM) in Stockholm. The layout was designed by B. Serenander of Stockholm. The MSS were linguistically checked by permission of the Secretary General and the Head of the UNESCO/ICCM Documentation Center, by B. de Chauliac and S. Pommelet. Necessary translations from one ICOM language to another were done by B. de Chauliac and S. Pommelet and by translators L. Rousseau and R. Tanner, Stockholm. The journal was typeset by Snitz & Still Reprosätteri, Stockholm, and offset printed by Departements Offsetcentral, Stockholm.

3.7 The prototype (No. 1) issue of MuWoP has been financed by the Swedish Museum of National Antiquities (SHM). The direct cost of an edition of 500 is estimated at approximately Skr 58 000, to which must be added indirect expenditures in the form of the salaries of the Editor and the Editorial Board Office staff, telephone charges, postage, stationery etc.

The direct costs have been covered by SHM, by a special grant from the Swedish Government and by a grant from the Sven and Dagmar Salén Foundation. The cost of language checks of contributions and also of certain items of translation work were borne by the ICOM Secretariat.
It is proposed that SHM be reimbursed for part of its expenses through the sale of MuWoP No. 1.

3.8 Work was completed on schedule. MuWoP No. 1 is now presented to the Advisory Committee and the Executive Council as agreed, so that a final decision can be made concerning future publication. The Editor has compiled a report to these ICOM bodies for the discussion of this question. The report is now available from the Editorial Board Office.

4 Continued publication will demand the solution of certain questions concerning ideas, organization and finance.

4.1 A subject plan should be drawn up for coming issues of MuWoP. The following subjects are proposed by the Editor: Interdisciplinarity and Museology (tying in with Museum No. 1/2 1980); Museum and Museum Activities - The Object of Museological Studies; The System of Museology; Museum Exhibits - The Theory and Methods of Museum Collecting Activities; The Museum as an Information Bank with Special Problems; The Museum - A Research Institute; The Museum - A Mass Medium?

The plan adopted by ICofoM should be operationally flexible to ensure swift response to social changes and the demands they entail on museums.

4.2 It is assumed that editorial work will be organized on the same lines as for MuWoP No. 1. In addition to the collection of essays on subject no. 2, this work will include organizing the discussion arising out of subject no. 1.

The timetable for no. 2 has had to be issued simultaneously with the publication of MuWoP No. 1. The deadline for the delivery of contributions to the discussion is 1981-03-31, while that for contributions on subject no. 2 is 1981-05-31. The adoption of a timetable for the ensuing period will hinge on the solution of questions concerning publication and finance.

A new Editorial Board is to be elected in conjunction with the 1980 Annual Meeting, and in this connection it is proposed:

that an Advisory Board (AB) of five or seven persons representing a wide range of countries be set up to resolve questions of principle relating to the journal. The AB should meet once yearly in conjunction with the ICofoM Annual Meeting, and its meetings should be attended by the EB and the Editor.

that an Editorial Board (EB) of three or five persons be elected to attend to the practical business of editing MuWoP. The EB must be an operational working body.

that an Editor be appointed to take charge of the publication of MuWoP, in collaboration with the EB, according to instructions issued by ICofoM and the AB. The Editor is to be the convener of the EB.

4.3 It is proposed that MuWoP be given the same layout as the prototype issue.

4.4 It is proposed that MuWoP be issued via a publishing house. One of the conditions laid down by ICofoM in this connection should be that the subject plan continue to be drawn up by ICofoM and that the Editor be appointed by ICofoM in consultation with the publishers. A financial agreement should assure contributors of reprints and fees, and the possibility of profit sharing should be made a topic of negotiation. Negotiations with publishers are to be conducted by the Editor, who is to keep the ICofoM Executive Board informed via the ICofoM Chairman.

The Editor is currently in touch with three international publishers, and replies are anticipated after these publishers have had an opportunity of studying MuWoP No. 1.

If it is not possible to secure publication of MuWoP via a publishing house, the possibility of publishing via a museum should be investigated. Publication funds should be procured in the form of ad hoc grants and through the sale of MuWoP.

The time taken to settle the question of finance should not be allowed to influence preparations for the appearance of MuWoP No. 2. Appointed writers can be contacted at the same time, and a discussion of MuWoP No. 1 can be initiated and organized. The question of the further publication of MuWoP No. 2 should, however, be settled before work begins on setting and printing No. 2.

5 The Editor now has the honour of presenting the result of the past year's work, MuWoP No. 1, together with proposals concerning the further publication of MuWoP. The report has been inspected and wholly approved by the Editorial Board.

Therefore, I request that the report be approved and that decisions be made concerning the questions and proposals outlined above.

Stockholm, 1980-10-20

Vinoz Sofka
Editor
INTERNATIONAL PROJECTS

Mr. J. Jelinek, Chairman of the ICOM International Committee for Museology, presented to Council the first issue of the Committee's bulletin MuWoP/DoTraM, published by an editorial committee under the direction of Mr. V. Sofka.

Mr. Jelinek felt that the existence of museology as a science would be disputed until a clear definition of what it is has been established. If the profession is to be recognized, it needs an extremely solid theoretical base. MuWoP/DoTraM would be able to serve as a forum for the indispensable discussions which should take place among museum professionals.

After giving the history of the publication, Mr. Sofka maintained that there would be no overlapping neither with Museum nor with the future Treatise on Museology.

Mr. G. Lewis also felt that this publication filled a gap, but feared the financial implications that might be brought about for ICOM. Mr. P. Perrot expressed doubts on the timeliness of such a publication and wondered why, if such a gap really exists, it could not be filled by international museological periodicals such as Museum or ICOM News.

After discussion, Council decided to entrust total responsibility for the publication to the International Committee for Museology.

The President felt that ICOM should adopt a coherent policy for publications and that special consideration should be given to this matter in the 1981-1983 Triennial Programme.
it is presented in the ICOM Triennial Programme for 1980-1983 as "a forum for discussion at the theoretical and methodological levels under the editorship of the International Committee for Museology". Needless to say, we are gratified by the confidence we have thus been shown, but we also realize that it gives us something to live up to.

Bringing the first issue into the world was no easy business, although the contributors showed heartening interest and the Editorial Board Office an extraordinary zest for the task in hand. As is usual, especially in the museum sector, our troubles were financial ones, and we are very grateful to Statens Historiska Museum/the Museum of National Antiquities, Stockholm, for providing both personnel and other resources, to the ICOM Secretariat in Paris for assisting us with translations and language checking, to the Swedish Government and to the Sven and Dagmar Salén Foundation, for making the impossible possible. MuWoP materialized!

The first step having been taken, it is time for the next one. This year, 1981, we plan to publish a further issue. MuWoP No. 2 will be partly devoted to a discussion of the topic presented in MuWoP No. 1 and partly to a presentation of basic papers on the next topic, Interdisciplinarity in Museology.

Our target for the years ahead is to publish two issues annually. The Editor and the Editorial Board Office at the Museum of National Antiquities in Stockholm will do everything in their power to make the journal appear regularly and to ensure that it contains interesting essays and ideas and maintains a high standard of quality. Negotiations are in progress with various publishers concerning a take-over of the technicalities of production and distribution, and it is to be hoped that a settlement will be reached shortly.

But this is not enough. MuWoP will not be a good journal unless it is the museum community's own journal, and in order for this to be possible we require further assistance from you. Here is a short recapitulation of what we need.

1 Essays on subjects specified in the publishing plan must be of a high standard and must reflect the various opinions existing on the subject of museums and museology in different continents, regions and countries. We want more and more prominent museum specialists and researchers from all over the world to write for MuWoP, and we appeal to you to give us hints and names and to call upon your own members to write for MuWoP.

2 The main purpose of the journal is the discussion of the viewpoints presented in basic papers. MuWoP is intended as a continuous symposium, a platform for the interchange of thoughts and ideas. We want more and more people to read MuWoP, and this is not all. We want them to put their viewpoints down on paper so that problems will be brought into the open and considered from every possible angle. Help us to keep the discussion on the boil in MuWoP! Tell people about our journal and encourage them to participate.

3 MuWoP is meant to be a forum for everybody concerned with museum activities; a high quality journal, but not an exclusive one. We want as many people as possible to read MuWoP, write for MuWoP and discuss things in MuWoP. This is what we want, and is also what we need. Without a large following of subscribers, we will not be able to make ends meet. According to the publishers' estimates, we ought to have about 5 000 subscribers to keep MuWoP afloat. Just think how many museums, museum workers, universities, libraries and so on there are in the world - not to mention other sectors where museums may eventually develop into an interesting field of endeavour. For a potential market this size, 5 000 copies of MuWoP must be a drop in the ocean.

What should be done now?

The first information about MuWoP was supplied to the delegates at the ICOM General Conference in Mexico. The second big PR campaign was conducted in association with the ICOM Secretariat in Paris. Seven thousand publicity leaflets were distributed at the same time as ICOM News and UNESCO's
Museum at the end of March 1981. Distribution was held up for technical reasons, with the result that the deadlines stated in our publicity leaflet could not be met. This will now have to be put right.

We ask you to inform all potential MuWoP subscribers about the journal, its aims, publication plans (2 issues annually) and price (8 US $ / issue). We are enclosing some of our PR texts, which you are kindly requested to publish in your national journals, bulletins etc.

We need to know:
(a) Which people and how many of them want to order MuWoP No. 12 Stocks of the first issue are almost exhausted, and if we are to produce a second impression, we need to know how many copies are wanted.

(b) Who wants to subscribe to MuWoP in future?

For planning purposes, we need these data by 31st August 1981 at the latest.

to canvass authors of basic papers for MuWoP. Next on our list is the topic Interdisciplinarity in Museology. Basic papers of up to 8 pages and written in English or French should deal with this topic and should follow the instructions supplied in MuWoP No. 1. The deadline for basic papers for MuWoP No. 2 is 31st August 1981. This is later than the original deadline, to make up for the delay in the distribution of the publicity leaflet.

to arouse interest in discussions in MuWoP and to encourage members to play an active part. Discussions this time will centre on the basic papers in MuWoP No. 1 dealing with the topic: Museology - science or just practical museum work? The deadline for written discussion entries is 31st August 1981. This is also an extension of the original period, owing to so few people having been able to study MuWoP No. 1 as yet.

This, dear colleagues, just about concludes the list of our desiderata. A journal of museological debate is here, waiting to serve the museum community. Can we count on your assistance in pursuing this aim? Please do not hesitate to write to us, send us cuttings from your bulletins about the journal, give us the names of recommended authors. Let's be hearing from you. We are counting on your support and co-operation!

For Museological Working Papers

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Editor

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