When it was realised that a major disaster had befallen all kinds of cultural property in Florence, it was immediately apparent that it was the duty of the International Conservation Centre in Rome to take part in the rescue operations. The contribution by such a small organisation would be certainly very limited in relation to the vast extent of the damage, but it was on the spot and it was clear that because of its peculiar structure it could help in two important ways.

First, being a small organisation it could move very rapidly and spend money immediately.

Second, being an international organisation it could act as a link between foreign help and the Italian local and central authorities.

The River Arno had burst its banks on 4th of November 1966 and flooded the town. It happened that a member of the staff was actually in Florence on the 3rd November and it can thus be claimed that the Centre has been represented there from the moment of the disaster.

In the first phase of the emergency, the policy has been largely to support the action of the Istituto Centrale del Restauro by providing some money for immediate expenses and
by searching in Italy and abroad for materials required for emergency conservation work, - blotting paper and fungicides for books and archival material; Japanese paper and acrylic resins for paintings.

News passed from Florence to Rome and from there to Milan, London and elsewhere and all steps were taken to speed up the passage of emergency material through the customs barriers. But, obviously, the Rome Centre was by no means the sole channel through which foreign aid came to Florence and Venice. National rescue committees were very soon organised in many countries; they started immediately to pump money, materials and experts straight into Florence in accordance with a series of direct contacts which these committees quickly established with the local Italian authorities.

It was fortunate indeed that such a mass of material did not pass entirely through the Rome Centre because it would have completely smothered it; a small portion only went through the Centre and this has been enough to keep the Florence section fully occupied. And so, by working in parallel the first emergency was gradually overcome.

In the second stage of the emergency period, the scene in Florence changed completely. A situation in which there was desperate shortage of experts, of workers and of materials evolved into one where initiatives by different parties became superimposed on each other. In some phases materials and equipment were overflowing while in others they were completely missing. And it was more likely in this phase to find an excess of expert advice rather than a shortage.

One could say that the immediate post-emergency phase was developing in apparently complete disorder. However, it is strongly believed to day that this was inevitable and on the whole beneficial at the time. After all, months might have been wasted in establishing a well organised system, in assessing the extent of the damage and in making rational plans for conservation. Whereas it was only too obvious that to be successful certain conservation procedures had to be applied within days. For example, oil marks on stones were oxidising rapidly and becoming less amenable to treatment every day and the danger of imminent disaster to wet paintings by the growth of fungi or bacterial attack was very real.
Since there was no time for making considered detailed plans or distributing resources with any degree of finality, everyone concerned took direct action as soon as there was obvious need. A large amount of overlapping occurred and there was certainly serious wastage both of materials and of export labour, but on the whole an enormous amount of surprisingly good conservation work was accomplished in an amazingly short space of time.

In such a situation the task of the Centre became clear: to try and control overlapping; to find out what gaps remained and to fill them in, as found possible, and to draw the attention of larger organisations to problems that were too big to be dealt with either in Florence itself or through the medium of the International Centre in Rome.

A good example of this kind of work is provided by the rescue operation at the Biblioteca Nazionale Centrale, the Central National Library of Florence. Here the Director of the Library was controlling an army of some 2,000 students and soldiers and was supported by a small group of experts from England and from the Istituto di Patologia del Libro, Rome. As everyone would agree, the Director of the Biblioteca was able to handle the situation with outstanding success: books and newspapers were being taken out of the flooded areas and shipped by trucks to industrial drying units (used, normally, for bricks, tobacco leaves and other agricultural products) in many locations in Tuscany, Umbria and even Rome. 500 trucks carried an estimated total of 3,000 tons of books and newspapers! The bibliographic material came back to Florence in dry condition and was received, sorted, classified and temporarily stored in the Forte del Belvedere. From here the material would be returned to the Library to be cleaned and disinfected. There were some gaps, however, in this scheme and the authorities were worrying about these when the Centre was called in on the 20th November. For example

a) vacuum sterilisation by ethylene oxide had been chosen by the experts as the best way to fight what has been described as a very real outbreak of mould infection in the books. But there was no equipment immediately suitable for this in Florence;

b) the environmental conditions were excessively damp in the Forte del Belvedere;
c) the catalogue of the Library had been flooded completely and had to be replaced. This was not an urgent problem, however, since the old catalogue though stained would keep for at least some months.

It was found that the Centro was able to take action on these points. The sterilisation unit first of all. It, of necessity would have to be very large, otherwise years of work would be required to pass through it over a million books! It was soon discovered that a food company in Verona (Knorr) had just received a very large vacuum steriliser to be used for the preservation of powdered soups; its capacity was 18 cu.m. no less! This would be ideal because it could take over 2,000 books in one operation. The only way of getting it was to buy it outright from Knorr who graciously agreed to the transaction and would accept a later replacement from the original manufacturer. The money ($12,000) was not available but it was decided to buy just the same and eventually the American Fund CRIA came to the rescue and footed the bill. The steriliser was dismantled and dispatched from Verona to Florence by Knorr where it was reassembled in the courtyard of the Library on the 5th of December i.e. less than one month after the Arno flood. To everyone's relief it transpired that the outbreak of mould that had been anticipated did not immediately affect the books although it did attack the grounds and gesso of paintings. Thus, at the Biblioteca it was possible to have time to carry out accurate experiments in order to determine the best conditions for operating the steriliser so that it could provide the maximum efficiency in killing moulds and bacteria with maximum safety against explosion hazards.

At the request of the Centre, two smaller units, a 5 cu.m. and a 2.8 cu.m. equipment were sent from France on a loan arranged through UNESCO and by this arrangement it was possible for sterilisation operations to proceed on different scales as found necessary.

Secondly, as regards the Forte del Belvedere problem, an application to the parent organisation UNESCO resulted in the donation of 17 dehumidifiers working on the principle of absorption of water by lithium fluoride. This special model can operate even at very low temperatures, an important matter because no heating systems were working in Florence in those early days and therefore apparatus based on the conventional freezing systems
would have been useless. Ten of the lithium fluoride machines were fitted at the Forte del Belvedere while the rest were distributed for the protection of flooded archival material which had been decentralised and stored in Rome, Perugia and Florence (Archivio Notarile).

Thirdly, the reproduction of the Library catalogue, this consisted of 6 million cards and was a gigantic enterprise far surpassing the possibilities of the limited budget of the Centre. Again the attention of UNESCO was called to the problem; 2 missions of the Head of the UNESCO Libraries Dept. were carried out and resulted in a project which is now reaching the stage of detailed planning. The estimated budget for the whole operation may be as high as $ 200,000. Minnesota University and CRIA have shown interest and might cover a share of the project in the future.

About the 15th of December 1966 the Rome Centre was designated independently by the Italian Government and by UNESCO as the official channel for foreign aid given for the conservation of works of art for Florence and Venice.

In order to finance its activities an agreement was signed with UNESCO involving a grant of $ 18,000 to be made available within 1967.

To meet this new obligation without excessive interference to the normal programme, it was necessary to develop an organisation which would rely only in part upon the Centre's staff. 2 members were directed to devote a substantial part of their time to Florence/Venice Campaign. A new part-time assistant was engaged and a net-work of technical consultants established from which specialists could be selected to carry out technical missions to Florence or Venice at appropriate times and report to the Director.

In general the action of our experts has been directed by two basic principles:

a) to give scientific or technical advice only in cases where this is actually requested by local authorities.
b) to exert a general influence in favour of the planning and organisation of all conservation and restoration work.
The main requirement of UNESCO was to receive a general plan for the conservation of cultural property in Florence and Venice. A complete assessment of needs concerning money, equipment, materials, and specialised work was absolutely necessary in order to allow the launching of a big campaign to find the money necessary to pay for the long range conservation work when individual national funds became exhausted.

This plan was prepared and it was presented by the Italian Government to UNESCO on February 15th 1967. It is a bulky document containing long lists of damaged items (buildings, paintings, books, etc.) together with estimations of conservation repair costs.

The overall plan includes the particular plans that have been elaborated and developed as the result of cooperation between the local authorities in Florence/Venice and the various experts sent there by the Rome Centre.

Examples are: a) a plan for establishing damp proof courses in walls carrying mural paintings and b) a project for a conservation laboratory in the Archaeological Museum, c) developments that will lead to the provision of working accommodation for the restorers of easel paintings and objects of minor art.

Another important part of the present action of the Rome Centre in the Florence/Venice Campaign is its information service. To say that the present situation is fluid is rather an understatement; progress is often so fast that any action undertaken by UNESCO risks becoming obsolete if not supported by a continuous flow of information from the work areas. The general plan must be kept continuously up to date or else it will be useless in a few months.

Such information is not easy to obtain, not because it is in any way concealed but because of the complexity of the picture, the large number of Italian and foreign agencies involved, etc. A good information service would require the almost continuous presence in Florence and Venice of experts who possess a comprehensive idea of the whole set-up of the conservation work, from both the organisational and technical points of view. The Rome Centre is doing its best to carry out this service in the meantime and in the confident hope that with time a definite liaison office will be established by UNESCO herself to deal with this work both in Florence and Venice.
It will have been observed that not much has been said of Venice up to the present. The reason for this is that the Venice problem presents quite a different aspect from that of Florence, the latter being the more catastrophic.

While the Florence disaster is characterised by an enormous number of individual emergencies all resulting from one single extraordinary incident namely, the flood of the Arno River, the Venice problem is simpler by comparison though of vast dimensions. It could be stated that here it is a question of the gradual decay of the whole city caused by the long term effects of its particular environment upon structures and constituent materials from buildings to sculpture and single objects of art. The agents causing the gradual deterioration are humidity, soluble salts transported by water, and air pollution caused by the proximity of Porto Marghera and Mestre and the industrial atmospheres there generated. As if this were not enough, there is a major hydro-geological problem, the gradual sinking of the city into the lagoon, and this throws its menacing shadow upon the whole picture. The flood of the 4th November was just another stage of a process that had started many years ago.

In Venice rescue actions are getting under way more slowly but will last much longer and in the long run will be more costly.

To give an idea of the order of magnitude of the intervention that has been requested by the local authorities it may be stated that the general plan before us for Venice contains an estimate expenditure of over 200 million dollars. This sum is calculated to cover urgent works of conservation on all historical buildings of the city and of the surroundings.

Contacts with the local Soprintendenti have shown, however, that there are many points where an immediate action by the Rome Centre can be useful. Examples are giving advice on stone preservation, on the protection of mural paintings against the rising humidity in walls and on the creation of scientific laboratories concerned with conservation problems.

To summarise in a paragraph it may be stated that the emergency in Florence is regarded as being over and with certain exceptions the work of conservation is almost completed; however, an immense task lies ahead in the restoration of damaged objects. The emergency in Venice is a recurrent condition though seemingly immensely more serious and urgent on this
occasion than ever before. Now, as regards the ways and means of exploiting the very generous offers of foreign aid, one method clearly is to send objects away for treatment by specialists in the leading museums laboratories in the world.

There is a limit to what can reasonably be arranged in this way, but official approval has already been received in regard to the temporary exports of certain valuable old books, arms and tapestries for treatment. Corroding bronzes will be sent abroad to institutions specialised in their restoration. In such cases the Rome Centre will act as an intermediary between the Italian authorities and the foreign laboratories.

Probably all the damaged paintings will have to be restored at home, either in Florence or Venice. In Florence several large laboratories have been planned by the Italian authorities for such restoration work and these are now in an advanced phase of development. Others will cover the requirements of books and manuscripts and the minor arts as well.

First there is the Fortezza da Basso (Florence) of the ancient military barracks, an area comprising over 3,000 m². This has been completely rearranged with new floors, ceilings, water and lighting systems, air-conditioning etc. It has been divided into series of sections by the construction of partition walls and will be used for the restoration of paintings. Indeed, this might well be the largest painting restoration atelier in the world. Some 80 restorers will work here, 30 of them to be chosen from the offers received from abroad. This operation will commence in June or July 1967.

In the Palazzo Davanzati (Florence) a restoration centre has been established for sculpture and the minor arts. This is an international venture supported by British, American and Italian funds. It will have a micro-chemical laboratory as well as some fine scientific equipment so that scientific testing and research can be carried out here as well as the most delicate forms of museum restoration work. Plans are well ahead and the immediate staff problem seems to be limited to the search for an expert for the restoration of musical instruments.

The new conservation laboratory of the Museo Archeologico (Florence) is beginning operations on a limited scale at the present time. By January 1968 it is planned to absorb over 20 specialists in the conservation of archaeological objects. Among them, 12 should come from foreign countries, 8 experts
for the repair of ceramics and 4 for metal conservation. Scholarships preferably of 2 to 3 years duration are needed to provide scientific support in the initial phase of this work.

At present the restoration unit of the Biblioteca Nazionale (Florence) absorbs some 100 workers mostly unspecialised under the direction of a small team of experts including English and American bookbinders. It is planned to increase the personnel up to 200 workers. Since the laboratory is going to take over also the restoration work of all minor libraries in Florence, it is estimated that, even at full capacity, it will take 20 years to complete the task. The running cost per year might be as high as 1 million dollars.

Finally, as regards Florence there is the Sala Palatina of the Archivio di Stato behind the Uffizi. This will be transformed into a conservation laboratory which will undertake the treatment of the collections in all the State and private archives in Florence. Staff will be provided by the Italian Government. British and American funds will provide some equipment and expert advice. There is no estimate yet of the running cost or of the duration of this enterprise.

Attention has been made of the micro-chemical laboratory which has been set up in the Palazzo Davanzati for testing purposes. Venice, equally, requires such a facility, and a new restoration laboratory for paintings will be set up inside the mediaeval church of San Gregorio in Venice which will have a scientific annex. This annex donated by the British Fund will be able to supply all the expert advice that is required in connexion with the Venetian problems of consolidation and repair.

But what of the future? All these new laboratories if they are to be of permanent value to Italy and the world of learning will require to have continuous support as time goes on in regard to finance, staffing, equipment, materials, technical advice etc. Here is a long range task which UNESCO has undertaken to see through by launching an International Florence/Venice Campaign and in its realisation the International Conservation Centre in Rome will have an important part to play as intermediary and in a technical advisory capacity in accordance with the principles that have inspired its actions from the outset.