

On the History of the Archives of the International Mathematical Union

Address given by Olli Lehto at the Inauguration of the IMU Archive at the IMU Secretariat,
Markgrafenstr. 32, 10117 Berlin, Germany on November 10, 2011

In telling you about the history of the IMU archives, I will speak a lot of my own work, for the simple reason that it is the part of the history I know best. My starting point is the meeting of the IMU Executive Committee that was held in April 1990 in Cambridge, England. At this meeting it was decided that the unorganized papers of the Union should be properly arranged and that a history of the IMU should be written.

I was then the Secretary and had proposed that these issues be discussed at the Cambridge meeting. In the execution of these projects I did not have in mind any personal role. At that time, the papers were stored in Zürich, at the Eidgenössische Technische Hochschule, ETH, and I saw no reason why they could not remain there. The IMU had then good contacts with the ETH, Jürgen Moser and the IMU veteran Chandrasekharan, both former Presidents of the IMU.

A few days before the Cambridge meeting Chandrasekharan had sent a copy of his handwritten article "The prehistory of the International Mathematical Union" to Henri Cartan and me. In my opinion it was a good beginning for a comprehensive history. I was authorized to discuss the archives with Jürgen Moser and the history with Chandrasekharan.

I did not make progress in either direction. Moser soon made it clear that the IMU material could not be arranged by people at the ETH. I then thought that the work could be done by Tuulikki Mäkeläinen, who had been the Office Secretary of the IMU for eight years. She had a preliminary look at the material in Zürich and noticed that the amount of work required was too great to be accomplished in a few short visits from Helsinki. It appeared that the work on the IMU papers would not progress in Zürich.

Chandrasekharan seemed to be interested in writing a history of the IMU. But he did not give any clear answer to my request, and his Prehistory did not receive a continuation. Years passed, and nothing happened.

By coincidence, under construction at this time was a new storage area for the archives of the University of Helsinki. The rooms represented such a substantial increase in storage capacity that vast stretches of empty shelves beckoned. In view of the deadlock in Zürich, the improved facilities in Helsinki, and green light from Eero Vallisaari, the Chief Archivist of the University of Helsinki, I told about the Helsinki option to Jacob Palis, who was my successor as Secretary of the IMU. In April 1994, Palis told me that the IMU Executive Committee at its meeting in Budapest decided to move the IMU material from Zürich to Helsinki. In September of the same year fourteen mail sacks of twenty kilograms each, arrived in Helsinki. The papers of the eight-year period 1983-1990 were already there. Without delay, Tuulikki Mäkeläinen and I began organizing the material and soon realized that there was much more to do than we had estimated.

In April 1994, Palis had also asked me to write the history of the IMU. Unlike the move of the archives which had been discussed before, the request to write the history was quite unexpected to me. I replied that I could not make up my mind immediately. First of all, I felt that I needed the permission from Chandrasekharan. Palis and I agreed to discuss the history project in August during the International Congress in Zürich, when Chandrasekharan and Jacques-Louis Lions, the President of IMU, would also be present.

I was then Vice-President of the International Association of Universities, IAU, and it was likely that I would become the next President in the coming February for a five-year period. But before the Congress in Zürich opened, I had made up my mind: I found the history project so tempting that if Chandrasekharan would give his consent to me, I would inform the IAU that I was not available for the presidency. I understood that the archives, once organized, would greatly facilitate the writing of the history. But at that time I did not realize yet that in the other direction also, studying the history would be beneficial for the archives.

In Zürich I met Chandrasekharan three times at his home without obtaining an answer to my key question: "Are you willing or not to write the history of the IMU?" Lions and Palis advised me not to care about Chandrasekharan, but I did not know what to do, until Chandrasekharan phoned one morning and gave me permission to write the history.

I described this episode in detail, because thanks to writing the Union's history, I saw more clearly the gaps in the collection of the IMU papers. The IMU was founded in 1920 in the aftermath of the Versailles peace treaty. All countries were not allowed to join it, among the excluded ones was, in particular, the mathematical superpower Germany. Even though the discrimination policy was discarded in the mid-1920's, Germany declined to join the IMU. It was gradually felt that the Union had failed in its task to promote mathematics in the world. Its activities were suspended in the ICM 1932 in Zürich, and the Union was finally terminated in the ICM 1936 in Oslo. The new IMU was officially established in September 1951.

Among the papers of the IMU that came to Helsinki in 1994, there were very few authentic documents concerning the old IMU or the foundation of the new one. Some information was contained in the reports in the Proceedings of the International Congresses, but this was not enough for describing the history of the Union. I was forced to use a lot of time in the search of old material.

The first Secretary General of the Union was the Frenchman Gabriel Koenigs. He held this position from 1920 until his death in 1931 and was the only Secretary General of the old IMU. All his life he represented the extreme anti-German policy, and when the scientific community got rid of the atmosphere of the Versailles treaty, the frustrated Koenigs gradually ceased to do any work for the IMU. In the Koenigs' dossier in the French Academy of Science, there is not a single paper concerning the IMU.

Fortunately, there were other places where I found quite a lot of material about organized international cooperation in mathematics. The oldest documents were from the 19th century, and they extended through the rise and fall of the old IMU until the year 1952, when the first General Assembly of the new Union took place in

Rome. From then on, the documents that were sent from Zürich to Helsinki were fairly complete.

The library of the Royal Society in London turned out to possess a particularly good collection, and the friendly professional help I received there facilitated greatly my work. To the archives of Académie des Sciences in Paris I had a letter of recommendation from Lions, then Vice-President of the Academy and past president of the IMU. My visit was not useless, but I had hoped more. In contrast, I was more successful than I had expected in Berlin. I was just considering how to get a contact with the Academy there, when I received an invitation to be present, when the Academy celebrated its new name Berlin-Brandenburgische Akademie der Wissenschaften.

An opportune occasion to visit also the archives, where I received valuable help. I found papers of the years 1919-1951 that shed light to Germany's stand to the international scientific unions.

It was obvious to look for the IMU documents in London, Paris and Berlin, but important material was in other places also. As I expected, one of them was the Mittag-Leffler Institute in Djursholm, near Stockholm. I knew that a well-organized collection of the vast correspondence of Gösta Mittag-Leffler was there. He was an active, outspoken opponent of the international science policy prevailing after World War I.

I spread word about my work with the history and archives of the IMU, and in England it produced a nice result. I was told that a sizable amount of the papers of W. H. Young, the last president of the old IMU, were deposited in the archives of the University of Liverpool. There copies were made for the IMU of Young's correspondence. These letters provide much information of what happened in the old IMU during the last years preceding its suspension.

In 1936 the International Congress of Mathematicians had chosen the United States to host the 1940 Congress. Thus it was clear that it was up to the U.S. to reawaken organized international cooperation in mathematics after World War II. The Americans began preparations for the first post-war ICM to be held in 1950. At the

same time, they also started work aiming at the foundation of a new Mathematical Union. I knew that Marshall Stone, professor of the University of Chicago, was the leader of this work. Therefore, it was important to find his papers. After many complications I succeeded in locating them in the library of Brown University. Even then, it was not easy to have a look at them, but all is well that ends well: Finally, copies of "Marshall Stone papers pertaining to the International Mathematical Union" were in Helsinki. One of the many persons in America who had helped me to reach the happy end was the President of the IMU, David Mumford. Stone's papers of 1949 and 1950 tell how the new IMU came into existence. The Union's non-political character was emphasized, and among the ten first member countries was Japan, and soon also Germany joined the Union.

My work divided between the archives and the history did not go as I had planned. Arranging the IMU papers so as to be useful for the historian took more time than I had estimated. This delayed the study of the history, and I did not realize early enough what new IMU material was still needed. For this talk I consulted the notes in my old calendars and read that after 157 working mornings with the papers of the IMU, I declared to myself "Mission completed" in June 1996. This was a premature statement: some old material was discovered still later.

An important part of the work with the IMU archives is to see that new material comes in regularly. That requires being in contact with the responsible senders if need be. In Helsinki, the IMU formed only a small part of the archives, and after I retired, the personnel, often overworking, was more isolated from the IMU than before.

Here in Berlin a new chapter will begin in the history of the IMU archives. Now the IMU has the archives permanently in close contact with it and it has an archivist of its own. That is why there is all reason to believe that the new chapter will be a happy one.