

SVEND BUNDGAARD

On his 70th anniversary April 25, 1982

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“Mathematical Institute, Aarhus University” is an address known to mathematicians throughout the world. After the opening of the institute in the mid-fifties, it soon became an international meeting-place. Over the years it has been host for hundreds if not thousands—of mathematicians from all over the world. Some came to attend one or another of the Aarhus-seminars or workshops, some came to meet friends and colleagues—local people or guests, some came to spend their sabbatical, and some came to work and teach for even longer periods. This extraordinary activity has resulted in a steady output of mathematical research papers, and it has also had great impact on the scientific standards and the quality of mathematical education in Aarhus and the rest of Denmark.

Why and how did Aarhus—of all places—attain this unique position?

Some years ago, I had the opportunity to discuss this question with people from the research administration in Copenhagen. They claimed it was not intended that way; it just happened. I think they were wrong. It was intended, if not by the Department of Education. It was intended by one man. But one man was enough. The man was Svend Bundgaard.

When he was appointed the first, and only, professor of mathematics at the new division of science at Aarhus University on the 1st of August 1954, there was no mathematics institute, and hardly any plans to make one. The rationale for the new position seemed to be the teaching of mathematics as an auxiliary discipline for physics and the other sciences. However, Svend Bundgaard had other ideas.

On the opening meeting of the Faculty Council on the 20th of August 1954, he explained his views on the role of the mathematical sciences in the future, and the need for a mathematical institute in Aarhus. His most important demand concerned funds for a mathematical library—with an estimated minimum of D.kr. 250 000—together with an annual budget for working expenses to run the institute—as well as scientific and non-scientific assistance. At the same meeting he also suggested educational reforms aiming at greater flexibility and broader scope, extending beyond the traditional education of “gymnasium”-teachers.

I do not know how these plans were received. But it is safe to assume that the amount of money demanded for the library was considered astronomical by the standards of the day. At any rate, the amount granted to purchase mathematical literature turned out to be D.kr. 15 000 in 1955, and equal amounts were promised for each of the next five years, totalling D.kr. 90 000 for the period 1955–60 in which the library was supposed to be completed. At the same time the new professor of mathematics was provided working facilities in the anatomy building. One small room, previously used to store inflammable fluids, was to be his first office, and in a larger room at the end of a long corridor he was “allowed to place mathematical literature to the extent that there is free space on the shelves”.

However, to adjust this gloomy picture, I would like to recall my own memories from my first visit to Aarhus in the summer of 1956. Then the “institute office” was free of all inflammable fluids and was bursting with new activity. It provided working space for Svend Bundgaard himself, his first associate (Ebbe Thue Poulsen) and a half time secretary. The large room at the end of the corridor had also been transformed. It already had the unmistakable appearance of a mathematical library — with some anatomy books stored in a corner. Knowing of the insufficient library grants, I was never really able to understand where all the mathematical books had come from.

But what impressed me the most, were the bold plans for the future. There is no need to go into details since we know the outcome. However, it may be worth to recall that Svend Bundgaard had it all worked out at this early stage. Carefully, he explained the expected need for mathematicians in the future, the importance of linking advanced education closely with research, and the great problems caused by the insufficient supply of qualified research mathematicians to fill the posts in a rapidly expanding institute. Then he explained his recipe: “To bring in good mathematicians from abroad, not one by one, but in groups working together in the same field. This means to create a truly international institute of high standard from the outset. Then we have the kind of institute we want, and we can gradually increase the percentage of local people. But we will never stop having foreign guests altogether. Good international contacts are of outmost importance if we shall remain a really good institute.”

Making plans is one thing. Realizing them is another. Here, Svend Bundgaard was helped by the general improvements in the Danish economy and the increased interest in higher education in the late fifties. But it should also be remembered that he had foreseen the improvement in the economy, and helped to promote the renewed interest in mathematical education.

Already in 1958, the mathematical institute could move into its great new building. To day it is generally referred to as “the little old building”. But at the

time it was a marvel, which carried all the trade marks of Svend Bundgaard's careful planning saving no effort to make it a pleasant place to live and work.

This is hardly the place to try to give a complete and up to date historical account of the mathematical institute in Aarhus, which has continued to be the institution we all know for its hospitality and its friendly atmosphere, and which we always look forward to visit.

But there is another of Svend Bundgaard's achievements which should be mentioned. In the early fifties, when he was still a lecturer at the University of Copenhagen, he was the promotor and driving force in the establishment of the new journal *Mathematica Scandinavica* which was to replace various national journals of rather limited circulation. In those days, I happened to sit on the board of the Norwegian Mathematical Society — as a student representative — and I still remember the seemingly endless debates with conflicting views rooted in different national, institutional and economical interest, and the way in which Svend Bundgaard managed to arrive at a solution which was acceptable to all parts.

There is of course much more to say about Svend Bundgaard's achievements over the years. I have only intended to give a few glimpses of his activity as an initiator and driving force as seen from my own position on the sidelines.

In closing, there is a quotation from one of Svend Bundgaard's articles from the pioneering days of the mid-fifties which comes to mind: "It is in bad times that one should lay the foundations of the good." This sounds equally appropriate to day. Knowing that he is still as active as ever in the planning for the future of Danish mathematics, we all send him our best wishes. And we give our congratulations to Denmark which also in the present hard times has a man like Svend Bundgaard to help lay the foundations for the better times to come.

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