50th LNMB CONFERENCE

Personal Memories on Conferences and Network

It is good to pay attention to this important jubilee: the 50th LNMB Conference. However, this name is confusing. On the one hand, today is indeed the 50th conference on the Mathematics of Operations Research. On the other hand, the LNMB, the Dutch Network on the Mathematics of OR, is only 37.5 years old.

I thank the LNMB board for the opportunity to talk with you about the origin of both, and their relation.

First of all, I have a disclaimer. Seven years ago, at the 43rd conference, Jan Karel Lenstra gave a perfect description and analysis on the history of 30 years LNMB. And of the time before that. I cannot improve his talk and do not want to repeat it. I recommend that you read his text [1]. In a similar vein, I refer you to the interview of Richard Boucherie and Johann Hurink with Jan Karel and myself at the occasion of the 40-th jubilee of the conference 10 years ago [2]. It contains much more information than what I will share with you now. Today I will talk about the history of conferences and network as I experienced it.

It is an honour for me to speak to you on this special occasion. In particular, because I remember, that one of the rules of this conference, at least in het beginning, was *not* to invite Dutch speakers, in order to avoid feelings of jealousy between the various national groups of OR. Of course, it goes without saying that competition exists between these groups and also difference in expertise, and that is good. But the conference was meant to show the connection and the strength of the Dutch community of OR as a whole. So only established and promising scholars from abroad were invited.

So, today I will tell you something of the past of this 50 years. Probably, most of you were not yet born 50 years ago. And of course, institutions that exist already your whole life are taken for granted.

On the contrary, I know the world before this conference very well: my age is 80 years, about the same age as OPERATIONSRESEARCH itself. We both started our lives during the Second World War.

 In consequence, I am older than the Simplex Method. I remember very well the Math Programming Symposium in Lausanne (1997), where we celebrated the 50th birthday of the Simplex Method at the conference dinner with some 1000 participants I believe, with George Dantzig as guest of honour.

I have more memories. To begin with, I have a very activememoryon a trip from Groningen to Zoetermeer (quoting myself in [3]):

“Some day in the autumn of 1988 I got up early to find myself at seven o’clock in the morning in the Oude Boteringestraat downtown Groningen, at the head office of the university. There I joined the rector magnificus and other officials of the university. A Volkswagen bus took us to the Ministry of Education in Zoetermeer, where university officials from all over the Netherlands were invited to be informed about the minister’s decision on the financing of a number of so-called “aio-networks”. (Those days PhD students were called aio’s and oio’s).

I was a little bit nervous, because one of the proposals was the LNMB program. Every now and then some delegates left the conference room, and others came in. When the LNMB was discussed, the waiting room became almost empty, because *all* universities participated in this initiative. Ten minutes later congratulations were collected, since “*the minister granted the complete starting subsidy we asked for!”*

We got in total 2.6 million guilders for 5 years (the value of 1.8 M euro now), whereas all other applicants, mostly local research schools, got only about 50%. In spite of the fact, that precisely local initiatives were in vogue then!

This money allowed us to make a running start of the complete program. The program appeared to be very successful till today, as you know.

How did I get involved in the founding of the LNMB?

To begin with, let me make some remarks on my own history with respect to OR. In 1961 I started my study Mathematics in Groningen. I specialized in applied math, in particular probability and statistics, since I intended not to become a teacher like my grandfather, father and sisters. At the same time a brother-in-law of mine studied economics, and he told me that in his faculty a young professor was appointed with a new subject called Operations Research: OR. So, I followed both courses of Professor Cor Van de Panne, one on linear programming and one on queueing and inventories. Together with about 7 students of quantitative economics, I think. I was his first mathematics student. After these courses, he offered me a job as staff member in OR after my graduation in 1968. And I accepted his offer, at the same time refusing an interesting job offer outside the university. Partly because the university allowed me to avoid the compulsory military service.

(A side remark: As a matter of fact, van de Panne wrote an early paper on the use of a chance-constraint in a cattle feed problem. That paper started my permanent interest in stochastic programming. If you are interested in my research interests, see my paper in STAtOR [4])

Back to the past. Unfortunately, one year after my appointment, van de Panne left for Calgary in Canada. And being already 25 years old I became the only teacher of OR in Groningen, at the Faculty of Economics. Fortunately, one year later a new professor was appointed: Jaap Ponstein.

About the same time, the Interfaculty of Econometrics was founded, so that the mathematics in the curriculum could improve a lot. OR became one of the three main subjects.

Between teaching and developing the curriculum of Econometrics I was very curious about OR itself.

The question was: What do OR-people do, actually?

I visited as many international conferences as I could. And in that way, I met also colleagues from The Netherlands. But these contacts were incidental.

So, I was happy that in 1975 Professor Gijs de Leve and Jan Karel Lenstra completed a traveling salesman tour from Amsterdam, trying to seduce colleagues to more cooperation. They visited all potential OR groups in the Netherlands, amongst others in Groningen, with Jaap Ponstein and myself.

This trip was very successful.

One of the consequences was the start of the conferences on the Math of OR, in Lunteren, in 1976. I liked these conferences very much. Not only because of the beautiful lectures but also because one could play billiards and table tennis with colleagues from all over of the country and having drinks at the bar together. It was not by accident that the site of the conference was “in the middle of nowhere”. In the evenings there was no escape to temptations outdoors. Except for a walk in the woods.

In the Lunteren conferences also business meetings were organized, only for full professors. So I was playing billiards whereas the professors discussed serious matters. One of the issues was the organisation of a national PhD education program. For the Netherlands, this was a new idea.

Not everyone was happy with it. Some thesis advisors were afraid to lose their independence.

And local research schools that were upcoming at the same time, more often than not, aimed at unifying the program for all their PhD students on all areas of the same faculty.

The purpose of the leading Math of OR professors was different. Especially Jaap Wessels and Jan Karel Lenstra aimed consistently and persistently at a *national* program for *all mathematical* *subareas of OR together*. Indeed, many groups were rather small, but together we had **quality as** **well as quantity***. This approach was the basis of the LNMB*.

In 1986 I was asked by Alexander Rinnooy Kan and Jan Karel Lenstra to write a proposal. In an attempt to unite all groups. The proposal was published on July 1, 1987. It contained a specific two-year program in detail. That program started with courses in Utrecht in January 1988. Simultaneously, the proposal was used to apply for a starting subsidy of the Department of Education.

As I said, this application was very successful. Why?

Of course, in our opinion the proposal was good. And the first courses attracted an encouraging number of PhD students, about 25 each course. But the success was also due to a lot of lobbying. Alexander arranged an informal meeting on the Department of Education with Jan Karel and myself. And in the meantime, I made about one hundred phone calls to convince all participants in the country to support the initiative. Not only OR colleagues, but also officials of all universities.

The money from the government, for the period 1989 – 1993, made it possible to realize the complete 2-year program in short time. In Utrecht 4 courses each year, with colloquia. Moreover, two 3-day workshops each year at one of the participating OR groups focussing on the specialty of that university. One in the summer and one in the winter.

Starting in the winter of 1991/1992 the winter workshop was integrated with the Lunteren conference. **So, the *17th Conference on the Math of OR in 1992 was the first LNMB Conference***. At the same time, PhD presentations were introduced. And the diplomas. Mini courses came up. After some time, the summer workshops stopped. And from 1999 the last day of the conference in January was filled with a joint seminar with NGB on OR applications.

You will recognize that this structure survived, with due adjustments of course.

Thanks to the starting subsidy, the network was able to pay the travel cost for the PhD students to the courses, and the complete costs of both workshops. In addition, each PhD student could apply for a grant for a visit of a couple of months to a foreign scholar, in the third year of the PhD process.

Moreover, the starting subsidy allowed us to distribute 5 places for PhD students: Sem Borst, Rob Vaessens, Geert-Jan van Houtum, Maarten Oosten and Maarten van der Vlerk. You probably know them.

Of course, participating institutes should pay for the participation of their PhD students in the LNMB, but there was no hurry in the beginning to collect money. The network had time to prove that its program was of high quality, and it did. During the years we succeeded to invite the best foreign scholars in the conferences, and the best national teachers in the courses. Everyone happy.

In this way, the LNMB acts already almost 40 years as the Netherlands Faculty on Mathematics of Operations Research. But at the same time: ***Without having a formal status or formal power***! It is indispensable just as a *voluntary* cooperation of all researchers and PhD students. As far as I know all evaluations of the LNMB program haven been very positive.

You may conclude that I am very happy with the LNMB and its conferences. That is true indeed.

*I think that our goals have been achieved*.

Which goals?

In short**: *High quality and strong mutual connection***.

Indeed, I am convinced that each PhD student who follows the LNMB program gains quality.

Not only on the specific subject of the thesis, but also on neighbouring areas.

And I am convinced that after the dissertation this input is helpful for further research. More often than not progress is made in the combination of various subdisciplines.

Also, it is important that one knows the leading researchers in our own country *personally*. That is one of the main side effects of the conferences, as today in Soesterberg. Ideally, one gets a kind of “family” feeling.

For example.

When someone, say for instance Dick den Hertogh, gets a prestigious price, of course *he* deserves it together with his team because of *their own* extraordinary achievement. On the other hand, when I read about such a reward, I do not feel that he is a researcher from Delft, Tilburg or Amsterdam. No, *for me it is the OR faculty of the Netherlands where he comes from*. I feel that this “mind set” is a nice side effect of the existence of LNMB.

The size of our country is an important factor of the success. Every Dutch student can visit courses in Utrecht, or conferences in Soesterberg, in a two-hour trip. The same is true for Dutch scholars: by only say 6 trips to Utrecht they can teach the actual state of affairs to a relatively large audience of smart people eager to learn. I know several foreign colleagues who are jealous. They have also experts on several subdisciplines and eager PhD students. But they recognize that their country is too large to combine quality and quantity in the same intensive way as the LNMB does. Indeed, they admire our strong cooperation. Moreover, practice shows that it is no effort at all to convince top researchers from abroad to give presentations in our conferences.

Of course, time changes.

When we founded the LNMB we benefited from the policy of the government who intended to improve the quality and organisation of scientific research.

And the fact that a new scientific area had to fight for its place in the universities was helpful too, of course.

Today it seems that OR is a well-established area all over the country. But still scattered in various faculties each with their own interests.

Moreover, the present government does not seem to see the great value of scientific research and education anymore.

 On the other hand, the international interactions are larger than ever before.

In changing circumstances, living institutions have to adjust in order to stay alive. That is obvious.

Nevertheless, I am convinced that in the future as well as in the past, it is essential for Dutch OR people to care about each other, as a family, while together maintaining high quality in a broad spectrum, and teaching a large group of the PhD students jointly. With ample opportunities for informal contacts, with national and international experts. This is the best for everyone.

The future is up to you!

Thank you very much.

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Speech on the 50th LNMB conference, Soesterberg, 13-01-2025

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