

A greeting of the VVS,  
the Netherlands Society for Statistics and Operations Research,  
in celebration of the Sesquicentennial of the  
American Statistical Association (ASA) in 1989.

Paul van der Laan  
 President VVS, the Netherlands Society for  
 Statistics and Operations Research.

"To understand God's thoughts we must  
 study statistics, for these are the  
 measure of his purpose."

Florence Nightingale 1820-1910.

On behalf of the VVS, the Netherlands Society for Statistics and Operations Research, I congratulate the American Statistical Association (ASA) with its Sesquicentennial in 1989.

A Sesquicentennial is an important mile stone in the existence of the American Statistical Association. The ASA has during the years 1839 - 1989 had a distinguished record of service and leadership. I wish the American Statistical Association good luck with its climax of the celebration during the meeting in August 6-10, 1989 in Washington, D.C.

In the Bible one can read in St. Luke 2:1 the following: "And it came to pass in those days, that there went out a decree from Caesar Augustus, that all the world should be taxed." This quotation shows that 2000 years ago (descriptive) statistics was already in vogue. In our country the first lectures in statistics were presented at Leiden University in approximately 1800. The Agricultural University Wageningen began lecturing in statistics and probability calculus in the twenties. The origin of the ASA dates back to 1839. A tremendous acceleration in the development of statistical methods came during and after the second world war. The United States of America, England and also India, have contributed to the succes of statistics. Statistical theory expanded so much during this period that a wide variety of methods and techniques is now available. Of course, new methodologies are still needed in many directions.

In the Netherlands the equivalent organization to the ASA, is the VVS (Vereniging voor Statistiek), the Netherlands Society for Statistics and Operations Research. The Oxford English Dictionary gives the following definition of a Society: "A Society is a number of persons united together for the purpose of promoting some branch of study by means of meetings, publications etc." Of course the branch of study being promoted by the Society, has to be filled in. The VVS is the Netherlands Society for the advancement of science and society through the development and dissemination of Quantitative Methods, like Statistics and Operations Research, and their application. To this end the Society welcomes membership of mathematicians, statisticians and other interested in applying quantitative techniques. The journals *Statistica Neerlandica* (English) and *Quantitative Methods* (papers in Dutch and English) and the VVS bulletin (announcements of conferences, lectures, etc.) are publications of the VVS.

Every year, amongst other things, a conference is organized in the Netherlands, the so-called "Statistische Dag" (Statistical Day). Specifically the use of statistics in Biology, Agriculture, Industry, Economy, Medicine, Social Science, and with storm surges, etc. plays an important role in the Society.

The celebration of a jubilee, especially a sesquicentennial, affords me, as President of the VVS, an opportunity to look back over the last years and see what has been achieved. The VVS will celebrate the 50th anniversary of its accession to office in 1995. The USA has been very fortunate in recognizing the importance of statistics as early as the 1830's due to pioneering efforts which laid a firm foundation of Statistics in the United States of America. The ASA continues to provide world leadership in theoretical as well as applied statistics and publishes a well-known statistical journal, the JASA. On behalf of the Netherlands Society I wish to express our sincerest appreciation for all the efforts of the ASA during the last 150 years. Besides the Journal of the American Statistical Association I will mention explicitly the meetings. Conferences are important at the strict scientific level, but also because they serve as a meeting place for statisticians from different countries and with different scientific and social backgrounds to meet and exchange ideas.

In a certain sense one can say that the Netherlands Society is more than 100 years behind the time compared with the American Statistical Association, setting aside the Dutch statistical society "Vereeniging voor de Statistiek" (1857 - 1892) in the nineteenth century, dealing with statistics as facts about society. Nevertheless I can assure you that many Dutch statisticians have contributed to the Statistical Science, to draw a small (random ?) sample: David van Dantzig, Jan Hemelrijk, Huug C. Hamaker and Willem R. van Zwet. One may expect that in the future Dutch statisticians will contribute to new methods and application of existing statistical techniques to real problems. Relations between the USA and the Netherlands can be found in the history of statistics. We all know the conjecture of Euler that no Graeco-Latin square can be constructed for the number of treatments  $t$  equal to  $4u+2$ , where  $u$  is a positive integer. The problem of Latin Squares was first discussed by L. Euler in 1782 in "Recherches sur une nouvelle espèce de quarrés magiques", Verhandelingen uitgegeven door het Zeeuws Genootschap der Wetenschappen te Vlissingen, 9<sup>e</sup> deel, 85-239. This is a publication in the Netherlands. Nearly 200 years later, namely in 1959, R.C. Bose, E.T. Parker, and S.S. Shrikhande presented a paper to the American Mathematical Association, in which they reported the construction of Graeco-Latin Squares for  $t = 10, 22$  and  $50$  (New York Times, April 26, 1959).

Quantitative methods flourish. The last years can be seen as a period in which the recognition of Quantitative Methods emerges. The acknowledgement of Statistics and Operations Research is gaining weight in the Netherlands. The number of applications, industrial and non-industrial, increases steadily. Nevertheless, man will not abide in honour (Prayer book, 1662). A reason for optimism is the impression I have that also in the USA the attitude towards Statistics is improving. Many scientists are waking up to the fact that the quality of their work can be improved by calling in the assistance of Quantitative Methods. Also the Management is often aware of this fact. It is not only important that the society knows what can be expected from Quantitative Methods, but also what can be expected from the researcher who comes for statistical advice. From both sides a willingness is needed to carry out teamwork. A realistic description of the problem, an adequate statistical model and a correct analysis can only be attained in collaboration. Team-spirit is necessary for a realistic approach of the problems in the society. The advisor of Quantitative Methods stands in a certain field of tension between the choice of a model and reality. In general the reality asks for a complex model. But a simple or moderately complex model is needed in order to make a statistical analysis possible.



When it is too risky to use available models, then theoretical statisticians must develop a suitable model. If the advisor of Quantitative Methods is too precise, then he will not be able to apply statistical procedures on real problems. In practice assumptions have to be made, to mention a few: mutually independency of stochastic variables or time-independency of probability distributions. Often one can not be sure that such assumptions are absolutely correct. One has to be satisfied with a limited certainty or, in other words, the deviations from the assumptions may not be too great.

What can we expect in the future? I am sure that the wealth of talent in the USA, and also in other parts of the world, will generate new methods and techniques which will contribute to fruitful applications.

In the past many statisticians in the Netherlands have read the Journal of the American Statistical Association. This journal, besides other foreign journals and *Statistica Neerlandica* (the Journal of the Netherlands Society for Statistics and Operations Research), has taken a front position in the statistical life in the Netherlands. I hope that in the future this will be continued or even improved.

Good contacts between the ASA and the VVS are important in order to attain the goals of both organizations, namely to foster statistics and its applications and to increase the contribution of statistics to human welfare and the progress of the society and the environment.

I will end with words of William Shakespeare (1564-1616) in *Troilus and Cressida*, namely:

Perseverance, dear my lord,  
Keeps honour bright: to have done, is to hang  
Quite out of fashion, like a rusty mail  
In monumental mockery.

I wish the ASA good luck and a fruitful statistical life.