



Society Affairs

Presentation of the Van Waterschoot van der Gracht Medal to Dr S. Jelgersma

During the Staring Memorial Symposium 'Sea level and science fiction' held in Amsterdam on October 22, 1997, the President of the Royal Netherlands Geological and Mining Society, Dr E.C. Kusters, presented the Van Waterschoot van der Gracht Medal to Dr S. Jelgersma. English versions of the presentation address and of the response by Dr Jelgersma are given below.

Dr S. Jelgersma

Dear Dr Jelgersma, dear Kiek,

About one year ago, when I was still president-elect, KNGMG's President Salle Kroonenberg telephoned with the message that the Board of the KNGMG had decided to award you the Van Waterschoot van der Gracht Medal, our highest honour. I wholeheartedly supported this decision, and was subsequently faced with having to orchestrate an award ceremony without yet being in function.

Fortunately, however, the laureate is you, who is, as we all know, never afraid of taking the initiative herself. Today's Symposium was therefore largely your work, although I did have something to do with the start and some of the planning.

The idea for this Symposium came when, also last fall, I was listening to a lecture by a well-known professor in photogrammetry, who began his presentation by referring to his own dissertation, which he had completed in 1958, three years before you completed yours. He mentioned his dissertation, because he wanted to illustrate how much had changed in his little corner of the scientific world. He bluntly stated that the topic of his dissertation was of no relevance at all today. Upon hearing that, I knew more or less how we should celebrate your award. Because the relevance of your 1961 dissertation, 'Holocene sea-level changes in the Netherlands', has only increased since it was published. Very few people probably thought

that the topic was very relevant for society at all back in 1961: we assumed that sea level was, at least in human time scales, more or less stable.

The Memoirs of the Geological Survey (Mededelingen Geologische Stichting), the series that holds your dissertation, are not easily accessible international literature. Yet your dissertation quickly became the basis for your international reputation. A most important reason for this success was your thorough methodology. This thoroughness resulted in a Holocene sea-level curve for the Netherlands that is unquestioned to this day. Over the years, as the subject became more popular and society as a whole became more interested, the methods became more refined and one would expect that your curve would at some point have become replaced by a more accurate and up-to-date one. This, however, has yet to happen.

When you completed your dissertation under the supervision of Professor Pannekoek who received this same medal last year, you were already employed by the Geological Survey of the Netherlands and this required that you also obtained related expertise: you worked as a palynologist, heavy minerals expert and hydrogeologist.

In the sixties you worked with the American palynologist Herbert Wright, studying the most recent part of the Wisconsin (Würm) glacial period. This topic was very academic and of no societal relevance in those days, but has gained significance in recent years due to the concern about global change. Your palynological work in the U.S. led you to suggest that the Younger Dryas was possibly not restricted to northern Europe, as we then thought, but this suggestion was not at all welcome with your host, who, as we now know, has since been proven wrong. You were ahead of your time.

The 1970s was the period when the Geological Survey sent you to our drinking water institutions. This task resulted in the first series of comprehensive Quaternary cross sections through the Netherlands. When I study those sections now with my eyes of a sequence stratigrapher trained during the 1980s, then I can't help but seeing a modern interpretation. You must have known, 20 years ago, that the Eem For-

mation is nothing but a transgressive valley fill on top of a lowstand erosional valley. You just gave it a less flashy name. Again an indication of how much your work was ahead of its time.

Over the past few months, while we were preparing for today, I got the impression that you were a bit concerned that you were given this award exclusively for your contribution to the understanding of the coastal geology of the Netherlands. This is not the case: you receive this award because of your entire contribution to the understanding of the Quaternary geology of the Netherlands, but today's focus on your coastal work is because your international reputation is mostly based on that expertise. My own personal first acquaintance with your work was indeed with your subsurface studies, namely when you showed us your results and interpretations during a one-day field trip in the late 70s. I was duly impressed and it took several years before I found out that the reputation of this Dr Jelgersma was not exclusively based on the deep Quaternary of the Netherlands.

The above illustrates the general adagium that, when a Dutch person gains fame, no matter in what subject, it is usually the non-Dutch who first acknowledge this. I myself only found out about the importance of your dissertation when I was a beginning PhD student in the U.S. in 1981. One of my teachers was Jim Coleman, who discussed the major literature in this field with us at Louisiana State University. Jim mentioned your dissertation together with the work of Harold Fisk, Richard Russell and Joe Cur-ray and told us that it was not only an important piece of work, but also, and I quote, 'beautiful writing'. It takes reading those authors and Coleman himself to realize what a big compliment that was.

This medal was only once before awarded to a woman geoscientist. Ten years ago, Dr Marie Teichmüller received it during our 75th anniversary conference. This 'rare bird' position is indicative for our profession, but it is also indicative of your stubbornness and endurance. In this relatively hostile environment, you were not only able to maintain yourself, you excelled.

Almost all recipients of this medal have subsequently obtained a professorship, that is, if they didn't have one already. I invite the Deans in the audience to take the appropriate action. Most important, however, is that the proposal for your award to the Board of KNGMG was made by former colleagues who are on the average at least 15 years younger than yourself. To me this indicates how much you are cap-

able of inspiring those around you, those from the next generation who continue our science.

Kiek, you fully deserve this honour and, on behalf of KNGMG, I am proud that I can congratulate you.

Response of S. Jelgersma

Dear Madam President, Mrs. d'Ailly, ladies and gentlemen,

It may sound strange, but when Prof. Kroonenberg, our former Society President, phoned me to ask if I would accept the Van Waterschoot van der Gracht Medal, I was stupefied. I thought of other geoscientists of our Society who, in my opinion, would be more qualified to be honoured by this important award. But, to be honest, I was very glad and proud.

Over the years, many people have asked me why I became a geoscientist, and I will tell you the story. My interest in geology started when I was a school-girl. On my way to school one day, I noticed a boring carried out near our village's dairy shop. The samples collected contained dune sand, which I did know very well. On my way back from school, I stopped again and noticed that the samples collected now contained sand with shells. I was very surprised and concluded that somewhere underneath the dairy shop, there must be a beach.

I was in high school during the war and in that period I visited the excavation of a Roman 'castellum' near our village. Prof. Van Giffen carried out the excavation. I later realised how kind and fine a person Professor Van Giffen was. He extensively explained the excavation to me and answered all my questions. He suggested I study archaeology at his University (Leiden). He realised that I would not be admitted to this study, as I did not have Latin and Greek among my high-school subjects. Therefore, he advised me to start by studying geology and, after obtaining my Bachelor degree, I would be allowed to switch to archaeology. So I started the study of geology, but I liked it so much that I never switched to archaeology.

When I finished my MSc, it was not easy to get a job. I would have liked to work at the palynology laboratory of Shell, but they did not employ women in those positions at the time. I was therefore very glad to obtain a short-term contract as a geologist with the Geological Survey in Haarlem. In this function, I was in charge of various projects, most importantly in the study of past sea-level changes, commissioned by the Delta Commission of the Ministry of Transport,

Public Works and Water Management. The main purpose of this project was to apply the conclusions from past sea-level changes to extrapolate to potential future ones. This information was needed to determine the required height of dikes in the Delta Plan in Zeeland. After the project ended, I was allowed to continue this research and use it to write my PhD thesis. Professor Pannekoek was my promotor. My research on this subject benefited, during my stay in the U.S.A., from discussions with James Coleman at Louisiana State University, and with Joseph Curray and Tjeerd van Andel at Scripps Institute of Oceanography.

The Geological Survey allowed me to spend a year at the University of Minnesota to lead the palynology laboratory of Prof. Herbert Wright. This was a year of fascinating work on the palynology of various Late Glacial and Holocene lake deposits. When I returned to the Geological Survey I became geological advisor of the National Institute of Water Supply. In this function, I was responsible for analysis of the geological setting of the subsurface and I contributed to government reports on the supply of industrial and drinking water. I must admit that working on this survey of the subsurface deposits by means of borings and logs was a great pleasure to me. I called it a crossword puzzle.

During my final years in the office, I became involved with the 'Greenhouse Effect'. Together with foreign colleagues I organised meetings to discuss the impact of a rise in sea level on low-lying coastlines and the effect of a potential future sea-level rise, caused by a temperature rise as a result of the greenhouse effect. Together with FAO staff, I mapped low-lying shorelines in developing countries that are most vulnerable to a rise in sea level.

In short, my career at the Geological Survey was very varied. I was allowed to work in different fields and co-operation with my colleagues in the Netherlands and abroad was always interesting.

Madam President, it is a great honour for me to be awarded the Van Waterschoot van der Gracht Medal. I wish to thank you and all members of KNGMG for awarding me this medal and I want to thank you for making this an unforgettable day for me.

Presentation of the Honorary Membership to Dr D.A.J. Batjes

On May 7th, 1998, during the Fourth Netherlands Earth Science Congress in Veldhoven, the President of the Royal Netherlands Geological and Mining Society, Dr E.C. Kusters, presented the Honorary Membership

of the Society to Dr D.A.J. Batjes. English versions of the presentation address and of the response by Dr Batjes are given below.

Dr D.A.J. Batjes

Dear Dr Batjes, dear Dick, and of course dear Marjolein,

Members of the Royal Netherlands Geological and Mining Society, KNGMG, especially those members who have been honoured by the Society in the past, Board members of the Society, and Board members of the National Science Organization as well as of its chapters GOA and ALW, ladies and gentlemen.

It is a great pleasure to me, Dick, to address you here during this Netherlands Earth Science Congress and to tell this audience why we have awarded you the Honorary Membership of KNGMG.

I must first explain a bit of background for the non-KNGMG members in the audience. KNGMG has four different awards: the Honorary Membership, awarded for special services, the Van Waterschoot van der Gracht Medal, which is its highest honour, the invitation to present the Staring Memorial Lecture, and the Escher Award for the best MSc thesis.

The Honorary Membership of our now 86-year-old professional and scientific society is only awarded when there is someone who actually earns it. It is not awarded annually or automatically at some time interval. You will be the 20th Honorary Member of the Society and this category is therefore rather exclusive because there are no fewer than 44 persons who received the Van Waterschoot van der Gracht Medal.

You are awarded the Honorary Membership for your work as Technical Editor of our international scientific journal 'Geologie en Mijnbouw', now in its 76th volume. To date, you have contributed your free time during nearly seven years, about two days per week, to this task. This service is entirely free to the authors. Being Technical Editor is not the most glorious job on the Editorial Board; on the contrary, the Technical Editor is a bit of a . . . However, you have made yourself rather indispensable in this task: the final barrier between the author and the article as a paper product is you. If Dick doesn't approve of the manuscript, then it doesn't make it to the publisher. This caused one of your victims to state: 'he drives me nuts, but I have decided that I better listen to him, because he is *always* right.'

The statistics of the Institute of Scientific Information (ISI) show that 'Geologie en Mijnbouw' is now ranked eleventh in the category 'geology – interdisciplinary'. This is not a bad position and the journal most likely owes it to the relatively long half life of a relatively small number of articles, the real classics, often groups of articles in a special issue. One of the more recent special issues, the K/T issue, is on its way to become one of those classics as well.

Many national and international scientific societies, comparable to KNGMG, publish a scientific journal. It used to be more or less an unwritten law until about 20 years ago that such societies publish their 'own' journal. Why not? Scientists went to libraries and read, and nobody would dream of counting how often someone's article was read or cited. Today, nobody has time to read any more and this has led to ISI and the invention of ranking, so that someone else tells you in fact what you should read. This rat race puts an unrealistic pressure on scientists, authors, editorial boards and the organizations that carry the journals. Because if you drop to low levels in the ranks of ISI, authors will start turning their back on your journal.

This is what happened to 'Geologie en Mijnbouw' over the last few years. Our own members don't publish in it very often any more, because of its relatively low ranking and its rather broad generalist focus. Most Dutch geoscientists must turn to other journals for keeping up to date, whether scientifically or professionally. My own first issue of 'Geologie en Mijnbouw', the January issue of 1972, a special issue on the hydrology of the Netherlands, contains a mixture of scientific articles and professional communications. It is still worth reading. What appears to have happened is that the professionalization of science has broken down the bridges between science and practice more than it has built them.

This year is a crucial one for 'Geologie en Mijnbouw' and thus for KNGMG. The planned merger with the journal of the Netherlands Institute for Applied Geoscience (NITG/TNO) appears more or less finalized and if everything goes as both parties want it to go, this will be the last year in which 'Geologie en Mijnbouw' will be published. A new journal, the 'Netherlands Journal of Geosciences', is planned to start in 1999, carried by both KNGMG and NITG/TNO. This journal will focus on the North Sea Basin, a geological basin with a wealth of scientific and practical geological problems, from petroleum geology to recent muds and biodiversity.

I have to admit that it appears as if we want to award you this Honorary Membership because we wanted to say something nice about the journal in its final year. Nothing is less true: the proposal for your Honorary Membership was spontaneous and was immediately and enthusiastically endorsed and accepted by the Society's Council and all formal and informal reactions since then have been unanimously positive. Hence, the relation to the demise of 'Geologie en Mijnbouw' is sheer coincidence.

Dick, you worked for Shell during 32 years, first as paleontologist, then as an exploration geologist, and also as a trainer-lecturer. You were based in the Netherlands, Trinidad, France, Japan and Gabon. What moves someone with such a widely varying career behind him to subsequently give so much of his time and energy to the thankless task of improving manuscripts? I don't really know what you moved, but I did understand that you had some interest in gardening but that Marjolein apparently had different ideas about the garden, so that you were forced to divert your energy elsewhere. I therefore think that we owe Marjolein also a word of thanks.

The protocol requires that I hand you this award, a nice-looking piece of paper. I do this with some hesitation. First, because it turned out that the Society didn't have a standard text, so that I hope that you can agree with what we have composed. Second, because I am afraid that you will find a mistake, a slight imperfection. We tried really hard, but we have learned that you always find a mistake. I therefore promise that, if you find an unforgivable mistake, we'll take it back and do it again.

Congratulations Dick, you really deserve this, and thank you for your contribution.

Response of D.A.J. Batjes

Madam President, ladies and gentlemen,

I thank you for your words and for the award you presented to me. I am really grateful for this mark of appreciation, and believe that I should share it with the authors, reviewers and fellow editors who together strive to produce the articles that are needed for our journal. I also appreciate it that you present this Honorary Membership here, at this Congress, in the presence of so many colleagues. Many of them I know. Many more I don't know, and I look forward to meeting them, for instance in connection with future publications.

As for the motives of an editor: many books about editing have been written, and I don't have the impression that they are frequently read. The work keeps me informed geologically and brings me in contact with people. It keeps me busy in what I think to be a useful way, and it certainly also keeps me a bit out of our garden.

Finally, I express my hope that members in the audience will step forward to offer their expertise to the Editorial Board that will launch the new journal, and that will have to keep it going.

I thank you very much.

Presentation of the Van Waterschoot van der Gracht Medal to Prof. A. Brouwer

During the Staring Memorial Symposium 'Variation and regularity: periodicity in the Earth's system' held in 'Naturalis' in Leiden on October 15, 1998, the President of the Royal Netherlands Geological and Mining Society, Dr E.C. Kusters, presented the Van Waterschoot van der Gracht Medal to Prof. A. Brouwer. English versions of the presentation address and of the response by Prof. Brouwer are given below.

Prof. Dr A. Brouwer

Dear Professor Brouwer,

The protocol requires that I present you the Van Waterschoot van der Gracht Medal after reading you the laudation. I find this a bit odd, since we don't really know each other. We only first met this morning. The reason is of course that I didn't study geology in Leiden. But I did know who you were, although I have to confess that this was mostly due to my parents who, when I spent a number of years in the U.S., used to send me articles on geology from NRC Handelsblad. These articles were mostly from your hand.

I have, as many of those in the audience know by now, made a thorough study of KNGMG's membership list when I became the Society's President. And I was therefore aware of and a bit surprised by the fact that you had not been honoured with the Van Waterschoot van der Gracht Medal. And therefore, when you were proposed for this medal by our members Freek van Veen, Peter Westbroek and Leo Minnigh in the spring of this year, I thought this to be no more

than logical. Needless to say, the proposal met with no opposition whatsoever.

You started your studies in geology in 1934, here in Leiden. After your graduation, you became an assistant of Professor Kuenen in Groningen. You managed to avoid the 'Arbeitseinsatz' thanks to Van Waterschoot van der Gracht himself, who was then President of the Geological Survey. Van Waterschoot van der Gracht, together with the Bataafsche Petroleum Maatschappij (Shell) and the coal-mining companies in Limburg designed and implemented a program that enabled young Dutch geologists to work in research jobs in the Netherlands. Thus, you spent the war years in Heerlen in the offices of the Geological Survey.

Immediately after the war, you became Curator of the National Museum for Geology and Mineralogy, here in Leiden, and you stayed in that position until 1953. This museum no longer exists. It was incorporated in the museum where we are today, the new Naturalis, opened as recently as this spring. I therefore find it very special to award you this honour in this location.

During the time that you were Curator you completed your dissertation, entitled 'Pollenanalytical and geological research of the Lower and Middle Pleistocene of the northern Netherlands'.

In 1953 you moved to the Faculty of Earth Sciences of Leiden University, first as associate professor and subsequently as full professor. You therefore gave two inaugural addresses. In the light of today's Symposium, it is worthwhile to mention here the title of your first lecture: 'Time and space in stratigraphy'.

You stayed in Leiden until the end of your career in 1983 as Professor of historical geology, stratigraphy and paleontology. In those 30 years, no less than 40 dissertations were successfully completed under your supervision. Forty dissertations . . . and this in a period when nobody had heard about a research school, let alone a so-called top school. The pre-AiO period, when PhD students were staff members and when it was honourable to spend a respectable number of years on a dissertation. A period during which professors were not yet made accountable for the quantity of their output, because nobody in their right mind would count dissertations. All that changed right after your retirement, but you managed consistently to send 1.3 dissertations per year to the printers. In my view, this is a very special accomplishment. Some of the PhD students of those days are here with us today.

During your professional life, your interest shifted from the Quaternary to the Paleozoic. You also

became more and more interested in the historical development of geological ideas. I was intrigued to find this out. I myself was, especially during my first year in the U.S., fascinated by the manner in which American professors would treat the subject of their lectures from a point of view of idea development and I realized that I had sorely missed this approach in my studies in the Netherlands. I guess I should have studied in Leiden.

Aside from a respectable scientific reputation as Quaternary geologist, you are also well-known as an expert on Devonian stratigraphy. You were a member of the international committee on Devonian stratigraphy for many years. You also published a text book, entitled 'General Paleontology', which was translated into English and Italian. And last but not least, you are a never ending source of information for those who want to study the history of geology, a subject about which you have written a great deal.

A good scientist, as we have seen and heard once again this afternoon, is also someone who is capable of explaining complicated issues in a simple manner, someone who is able to translate to the public what makes science so fascinating. As a student you were already a dedicated 'teacher'. You published innumerable popular scientific articles in for example the journal of the NJN (Netherlands Youth Organisation for Nature Studies), the journal of the Society for Nature Protection, the Journal of the Royal Netherlands Geographical Society (KNAG) and, once again, the Science and Education section of NRC Handelsblad. In addition, you gave many lectures for naturalist societies, community colleges and amateur geological societies, as well as a series of lectures for Leiden University's program 'Higher Education for Senior Citizens'.

Your contributions to the earth sciences are therefore strictly scientific as well as for the general public, but you also contributed a great deal to KNGMG. From 1952 to 1960 you were General Editor of 'Geologie en Mijnbouw' and you wrote no less than 100 book reviews for our scientific journal.

Professor Brouwer, it is a great honour to award you, on behalf of all 1500 members of KNGMG the Van Waterschoot van der Gracht Medal today. You have earned it without doubt.

Response of A. Brouwer

Madam President,

When a messenger arrived recently to announce that your Board had decided to award the Van Waterschoot van der Gracht Medal to me, I was pleasantly surprised. However, this pleasure soon became mixed with another feeling: wouldn't there be someone else more deserving of this honour? Therefore, I've been looking forward to this day with mixed feelings, albeit not quite poised between hope and fear. Now that I have listened to your words, so well and convincingly spoken, I realise once again that we have a wise Board. From the bottom of my heart, I would like to thank you and the Board of the Royal Geological and Mining Society of the Netherlands for this award. The fact that this honour is bestowed upon me in this dark stage of my life gives it additional lustre. I am most grateful to you.

Today, other things are most gratifying to me as well. This gathering is held in the institute in which, over fifty years ago, I worked as a curator for some years. Another thing that pleases me is the fact that this occasion marks the end of this Staring Symposium, Staring, 'the father of Dutch geology'. This way his name lives on, although few people today are familiar with his work. What Staring did for the surface geology, Van Waterschoot van der Gracht did for the deeper geology, half a century later. For both of them, it was a very large first step.

Our fellow member, F.R. van Veen, recently compiled a biography of Van Waterschoot van der Gracht. This biography, very much worth reading, draws largely on primary sources, an unusual approach in Dutch geological historiography. Admittedly we have Veldink's 1970 biography of Staring, but he focuses on Staring's agricultural career, rather than on his geological one. Staring's main contribution to the geological knowledge of the Netherlands was made between 1850 and 1860. He single-handedly compiled a geological map of the Netherlands at a scale of 1 : 200 000, accompanied, by way of explanatory notes, by a two-volume 'Geology of the Netherlands' (1856, 1860). Re-examination of his geological map, admittedly rather difficult to read because of its vague colours, shows that the main geological features are strikingly correct.

Staring obtained his doctoral degree in Leiden in 1833 with his thesis 'De geologia patriae', written in Latin, according to the custom of his time, and there-

fore no longer easily accessible. Of all those present here today, a mere dozen may have read it completely! The thesis, however, is an interesting document: in the first place because the writer became famous later on – how did a 25-year-old PhD student tackle such a subject? – and in the second place because of the year it was published, 1833, the same year Charles Lyell completed the third volume of his ‘Principles of Geology’. Anyone who considers the latter to be the origin of the modern-day science of geology, and there is every reason to see it that way, will recognise Staring’s thesis as an early regional geology. A translation into Dutch therefore seems warranted.

I therefore gladly wish to offer the Society a contribution towards the cost of such an endeavour.

Assuming that the Society will be prepared to bear the cost of the final pages, actual translation work has started. I may gratefully add that the Museum, of which we are guests today, and which keeps the major part of Staring’s collection, has already declared that it is prepared to publish a bi-lingual edition as part of its geological series ‘Scripta geologica’.

Madam President, as a surprise on my part at the end of this day, may I present to you, symbolically, a design for the title page.