

SPEECH ON THE OCCASION OF THE PRESENTATION OF THE
1995 DEREK DE SOLLA PRICE AWARD
TO PROF. DR. A. F. J. VAN RAAN AT THE ISSI CONFERENCE
HELD AT RIVER FOREST, ILLINOIS, ON JUNE 10, 1995

Dear Ton,

It gives me great pleasure to address you this evening. I believe you and I first met in 1970, which, I think, was also the year in which I first met Derek Price. Both encounters took place under strained circumstances, yet both have led to wonderfully good relationships.

Derek was Avalon Professor at Yale. I had been working for some time with the National Science Foundation in the US and my contacts suggested I should see Price. I decided to combine a visit with some other business I had to do at MIT and Harvard and I rang him up at short notice. Over the phone he told me he was sorry, he was very busy and he could not spare me more than three quarters of an hour. I arrived at a quarter past one in his office with its impressive shelves of books. We talked and talked... and after dinner we were both very sorry that we had to part because we both had other engagements that we could not forgo. Our relation remained strong after that period. We visited each other regularly thereafter.

I'd like to remind the science of science community of the first scientometric conference in San Francisco. Derek and I were very proud that we were able to bring together some 50 people, although some of them proved to be phobic to numbers and digits. Out of this grew the 4S, the Society for Social Studies of Science and now also ISSI, the International Society for Scientometrics and Informetrics.

During this heavenly stay in the US I was able to observe the US science administration in detail, better than anyone else had ever been able to do, thanks to NSF, the Netherlands Ministry of Science and Education, and FOM. It was thanks to these organizations that I was able to extend my stay. (*These organizations also allowed me to extend my stay.*) During that time I was helped and guided by NSF's Dr. Warren Thompson. Then I had to return to FOM in Holland.

A cold shower in many ways. In the mean time, FOM, the Netherlands' science foundation's physics division, in an attempt to carry democracy to its logical extremes, had set up a 'works council' which threatened to impede every attempt to rationalize physics policy. Not exactly the thing I needed, to put it mildly.

Fortunately the 'works council' had elected you, Ton, as its chairman. This proved to be a wise choice. At the time, you were a graduate student at Utrecht, working on your Ph. D. thesis on Excitation Processes in Helium¹ (supervised by Professor J. A.

Smit — *wild Bill*, as we called him impolitely behind his back, because of his Stetson hat). We got to know each other and mutual trust developed. I think this also marked the beginning of a good understanding between the 'works council' and the FOM-management. As far as I can remember we have never had any serious dispute about physics policy choices since period.

After completing your thesis, you went to be an assistant professor in Astrophysics at the University of Bielefeld, W. Germany, where you conducted some of the first experiments on "Rydberg-Atoms" using a new type of laser.² After your return to the Netherlands you obtained a position at the University of Leiden, which culminated in 1991 in a full professorship. You had left the field of physics and your appointment was to the Faculty of Social Sciences, *mirabile dictu*; there you now direct the CWTS, a separate institute for scientometric studies, which currently has some 15 staff members. Some of the graduate students who worked with you and whose theses you supervised have in the mean time themselves become renowned. Names that come to mind are Henk Moed, Robert Braam, Robert Tijssen, Jos de Haan From Utrecht and V. Rabishoara from Paris.

In the field of scientometrics you developed advanced data-handling techniques especially in the mapping of science, a field of knowledge which was greatly admired by Derek Price and had been opened up through the co-citation techniques of Griffith and Small.³ Your work, which was much more sophisticated, due to your ingenuity and of course due to the availability of more advanced computers, brought you international fame. With Robert Braam and Harry Peters you were able to combine co-word techniques with more traditional scientometric studies.⁴ Together with Robert Tijssen you did valuable work on the mapping of specialty fields.⁵ Your work with Eric Engelsman and Ed Noyons on ways of combining bibliometric information with patent data shed new light on the relations between science and technology.⁶ We now consider those studies as milestones in the history of scientometrics.

Along with Ton Nederhof you also developed several new indicators for the social sciences and the humanities.⁷

Locally you had already received considerable recognition as a result of your careful studies with Henk Moed of the performance of university departments. These studies were carried out meticulously. At the same time you managed to keep on good terms with the peer community.⁸

The relationship that you built up with the world's largest science publisher, Elsevier, is an outstanding example of fruitful co-operation between some seemingly esoteric academic researchers and down-to-earth business.

Dear friends, the Price Award is given for scientometric research and not for the use of such research for policy purposes. Nevertheless Ton shown how scientometric studies can be used for such purposes, and he deserves the highest praise for the way in which he has done this. In my view nothing can be more damaging to the reputation of our community than the simple-minded bibliometric counts and analyses that are done in many places. These are often used in an irresponsible and unscientific was so they sometimes destroy the careers and opportunities of scientists and specialty groups. Ton has always shown great care in interpreting the results of his work and of the work of his group. He has always been very cautious and circumspect about assessing the individual and group performance of particular fields and institutes. This was obvious in the way the CWTS made its results public, but even more in its discussions behind the screens with the boards and research managers responsible for policy implementation. Ton's critical approach to scientometrics and his constant awareness of the limits of its applicability has again been demonstrated publicly in a recent letter to Nature. In that letter he and Frans van den Beemt report on a study that shows that in a special area of applied science bibliometric indicators correlate negatively with the opinion of peers regarding the originality of the work under study.⁹

Last but not least, Ton, you have this rare quality of objectivity and feeling for the general course of affairs which makes you a worthy follower of Derek de Solla Price. I congratulate you most sincerely on the receipt of this award. It honors your work and that of your group. The CWTS has become famous in the field of bibliometric analysis and ranks as one of the top institutes for this kind of work. This should also give your wife Paula a feeling of satisfaction and achievement. Without her backing it would probably have been difficult for you to have got through some of those stressful periods when your institute was struggling for recognition.

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