

NELSON DE PRIL  
1950-99



Only 49 years old, Nelson De Pril died on April 9, 1999. It seems so unreal that Nelson is no longer with us. He was so full of life, not abstaining from practical jokes or dancing on the table.

Nelson obtained his doctoral degree in actuarial sciences from the Katholieke Universiteit Leuven in 1979 with a dissertation on bonus-malus systems. The problem of a “fair” segmentation of the market kept his attention, and he had intended to present a paper on that subject at the ASTIN Colloquium in Tokyo.

In the early eighties, recursive methods for aggregate claims distributions became a hot subject. At that time most people in the area were concerned with collective models, that is, methods for compound distributions. However, Nelson turned his mind to individual models. It is interesting to follow the development of his research. First he presented an algorithm for evaluation of the  $n$ -fold convolution of a distribution. This algorithm is

essentially a special case of Panjer's algorithm for compound distributions, but can also be applied to an individual model with identical policies. His next step was to leave the assumption of identical policies, first in a simple model, then in a more general context. When leaving the assumption of identical policies, the algorithms become much more complicated and time-consuming. Nelson therefore developed time-reducing approximations and gave error bounds for these approximations. His contributions to the theory of aggregate claims distributions must be considered as one of the cornerstones in that field.

Both in Nelson's papers and in his spoken presentations one felt the person behind the theory. One had the feeling that the person was strongly involved with what he presented. His presentations were always well organised and very pedagogical. His scientific output was not particularly extensive; to write a paper just for the sake of writing a paper was not Nelson's style. When Nelson wrote a paper, it was because he had something to say. His papers were always well worked through. It was obvious that the author had done a very conscientious job on the presentation, like an artist working out details in a painting; this was not something written in a hurry.

When refereeing a paper by Nelson, one immediately got the feeling that the author deserved respect. My enthusiasm as referee for papers by him is reflected by formulations like "Enclosed you find my referee's report on N. De Pril: ... which I really enjoyed; it is fabulous what that wizard can do." and "You knew I could not resist it! You knew that putting a paper by De Pril in front of me is like putting a piece of cake in front of your wife! Well, you got it. Here you are." in my correspondence with editors of *ASTIN Bulletin*.

Nelson was a modest person. Once when Jan Dhaene and I worked on some research where Nelson had given us essential input, we found it appropriate to suggest co-authorship. Nelson's reaction was typical of him. He asked whether his contribution was sufficient to justify his co-authorship. The fact is that we would not have got through without his ideas.

With the death of Nelson De Pril the actuarial community has lost a fine researcher and a warm and caring person. He will be missed, but we will treasure the memories.

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