Džemila Šero

Computational Imaging group Centrum Wiskunde & Informatica, Amsterdam dzemila.sero@cwi.nl Diletta Martinelli Korteweg-de Vries Institute for Mathematics University of Amsterdam d.martinelli@uva.nl

Proof by example Portraits of women in Dutch mathematics

Shanti Adensi Venetiaan

In 'Proof by example', women in Dutch mathematics are portrayed. This edition portrays Professor Shanti Adensi Venetiaan, from the Anton de Kom University of Suriname, who works in mathematical statistics. She studied mathematics at the University of Leiden and then obtained a PhD from the University of Amsterdam in 1994. This time the interview has been done by Džemila Šero and Diletta Martinelli, who asked Professor Venetiaan about her mathematical career and inspiring work in fostering the mathematical community in Suriname.

When did you first get interested in mathematics?

"I think that I have always been interested in mathematics. I was a curious child and I liked puzzling. I always requested puzzles for my birthday, like the Jigsaw ones. At school, mathematics was my favorite subject. Moreover, my father is also a mathematician. So by the time that I had to choose a study at university, it was very clear that it had to be mathematics."

And that is when you came to the Netherlands. Was there a specific reason for that?

"Given that Suriname was a former Dutch colony, it was actually very common for Surinamese students to study in the



Shanti Adensi Venetiaan

Netherlands, so it was almost a natural choice. All my school mates went to the Technical University in Delft, but I decided to go to Leiden University: the same university where my father had studied."

Were you always sure that you wanted to pursue an academic career?

"I was not actively pursuing an academic career when I started university. I do remember reading the leaflet that described all the steps leading to a PhD and beyond. At that moment, I realized that that was what I wanted. After I did my final thesis in Leiden with Professor Chris Klaaseen, he moved to the University of Amsterdam. He asked me whether I was interested in becoming his PhD student. Still, I was not sure what to do at that moment: I had been in the Netherlands for five years already and I was ready to go back home to Suriname. I discussed this with my parents, and they persuaded me to stay and to take the opportunity, so I did. Now, I can say that I am very happy that I took this opportunity!"



So it was only after your PhD that you went back to Suriname. Could you tell us a bit more about the mathematical scenery in Suriname?

"When I came back from the Netherlands there was no mathematics department at the Anton de Kom University and I was hired in the School of Technology. The academic life here revolves mainly around teaching, and there is no real research environment. But we are working hard to change this. Our bachelor's in mathematics got accredited and we are trying to achieve a research culture. One of the main difficulties is the lack of expertise: I am the only person with a PhD in mathematics in the country. Suriname is a very small country with a population of around 500 thousand people, so it is common to be the only one with a certain expertise. But it is a nice challenge, and I like it!"

Do you think that Dutch institutions could play a role in helping the Suriname mathematical community to grow and thrive? "At the moment, there are not many institutional connections. This is partially because there is a big gap in development and infrastructure between the two countries. Foreign researchers are mostly here to investigate the great biodiversity that the country offers. Nevertheless, we are initiating more collaborations. For instance, the pandemic opened new possibilities for our students: they could now follow online lectures from universities around the world. I hope similar opportunities will continue after Covid-19 and become official partnerships."

What do you think about the idea of creating more scholarships for Surinamese students to study in the Netherlands? "These are of course useful opportunities. It was actually very common until the eighties, then they stopped due to the beginning of a military dictatorship in Suriname. However, these types of scholarships have to be accompanied by capacity building programs in Suriname. Otherwise, I am afraid that they will just increase the brain drain of talented people who leave the country for education or work and do not come back."

In the Netherlands, there is still a substantial gender gap in mathematics, what is the situation in Suriname? Is mathematics perceived to be a 'male subject' or a 'male profession'?

"I think that in Suriname, not much attention is given to mathematics at all. Generally, people think that you do not have many options after a mathematics degree outside of teaching. We are trying to change this perception. We work with schools and companies to increase the awareness of the beauty and usefulness of mathematics. But regarding gender, I think there are no biases against women. Actually, most of our students are female. People are more worried about the large number of boys dropping out of schools. I think that women and men are equally encouraged to study and work."

And finally, what advice would you give to a young student who would like to study mathematics?

"I think I would say to follow your heart. If mathematics is where your heart is, then do it! It is a beautiful subject. If you like puzzling, it is very fulfilling. Furthermore, mathematics provides you a training in abstract thinking that you can use everywhere!"