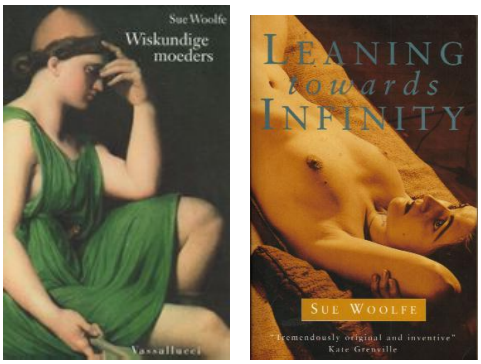
Sue Woolfe *Leaning towards infinity: how my mother's apron unfolds into my life*, Vintage, Random House Australia, 1996, Faber & Faber, 1997; Dutch translation: *Wiskundige moeders*, Vessalucci, Amsterdam, 1997.



The author is not a mathematician. She admits that in the introduction and after reading the book, I have no doubt that this is certainly true. So what has attracted her to write about mathematics? I quote "it has always been my impression that mathematics are a metaphor for what we are". I must confess that I do not see how she wants to make this clear by this novel.

When I read a summary of the plot on the cover, it was very promising. In 1996 it had been on the bestselling list for months. This is how I was hooked.

Frances Montrose is an amateur obsessed by mathematics. She has seen her mother Juanita neglecting her household, children and her husband hiding in an abstract world of mathematics in which she seeks for some "special number" about which she wants to prove something, but without any professional mathematical knowledge. She also hides literally in the closet in an obsessional fear for meeting foreign people. It is Juanita's hope that Matti, Frances younger brother, will study mathematics to continue her work. Frances however is the one who has inherited the mathematical microbe, but because Juanita does not see this, the relationship between mother and daughter, becomes very ambiguous. Certainly when her mother takes a lover who is a mathematician and divorces her husband in a period that Matti "disappears" and Frances is in full puberty, there is practically no communication possible between the two women. After her mothers death, Frances continues her mothers work and succeeds in finding a proof for the first number and is now ambitious in trying to find the second number. She sends in her nonconventional mathematics, and wins a price: she may travel to Athens (Greece) and present her (mothers) work at a mathematics congress. There she arrives in a male world where nobody is interested in her work, except for a pr-man who has arranged her invitation. The only people who have some human-like behaviour are female.

The story is brought mainly by Frances telling her "adventures" in Greece interlaced with flash-backs of her youth and by letters from her daughter Hypatia, who just got a baby and writes letters to Frances, trying to catch her attention, the relationship between these two also being sickened for unclear reasons. The book ends with a diary of Juanita in the year shortly after Matti was born.

So the main theme of this book is the mother-daughter relations which seem to be always problematic. I read in another review that the book "beautifully illustrates that mathematics are not only an abstract truth that is out-there, waiting for men to be discovered, but that

mathematics are produced by real humans". True as that may be, all humans in this novel are frustrated emotionally disabled persons, living in socially isolated deserts. Mathematics seems to be the sole domain of male sharks with no emotional intelligence at all. During the lectures they scream and yell, interrupt the speaker continuously, not even giving him the occasion to make his first statement. The most hilarious atrocity being somebody shouting from the audience "I can see a nipple, I can see a nipple" during the lecture of a young female postdoc.

Moreover, the mathematics about the mysterious numbers that are the obsession of these women are so vague that the hints given will only irritate a mathematician. And if you do not read it for the story, it may be interesting reading it for the beauty of the language. Here I can only judge the Dutch translation that I read, but I did not recognize the "marvellous poetic style" that was promised on the cover. Adverbs are skew or inappropriate, images are highly artificial. The poetry is as much poetry as the mathematics are mathematics. During a break, one of the people at the conference states that the probability to inhale a molecule of the last breath of Cesar is $1-(1-AN)B$ where N is the number of molecules in the air, A is the number of molecules that Cesar exhaled, and B is the number of molecules one inhales. Is this meant to be ironic? Is it a typo? I doubt it.

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