

The Obituary of Prof Paulus Gerdes

I believe some of us received the sad news of the sudden death of Prof. Paulus Gerdes in Mozambique on Monday 10th Nov. 2014 with grieve and deep shock. Prof Paulus Gerdes was a Full Professor of Mathematics, Vice-President for Southern Africa, African Academy of Sciences; Former Chairman, African Mathematical Union Commission for the History of Mathematics in Africa (1986-2013); President, International Studygroup for Ethnomathematics; Former Rector / President, Pedagogical University, Mozambique (1989-1996); Senior Advisor for Research and Quality, ISTEg-University, Boane, Mozambique. He was a book writer and his books published or distributed by Lulu are found on: <http://www.lulu.com/spotlight/pgerdes>

Prof. Gerdes was a pioneer in the fields of Ethnomathematics and of Historiography of Mathematics in African cultures. He is well known internationally for his path-breaking contributions in these fields. Prof. Gerdes was one of the founding members of Southern Africa Mathematical Sciences Association (SAMSA) who was always a plenary/guest speaker at SAMSA conferences.

Some of us already know him since he was one of our invited speakers who spoke at our Inaugural meeting for the launch of the African Women in Mathematics Association (AWMA) at AIMS, Cape Town, South Africa in 2013, where he gave a lecture on the theme "Mathematical ideas, creativity and invention in African female cultural practices: Case studies of Makwe and Tonga mat- and basket weavers in Mozambique" which was highly appreciated. His contribution to Mathematics Educations, taking both local and traditional contexts into account is significant and the History in particular of 'African Mathematics' is significant. Prof Paulus Gerdes had already accepted to be one of our speakers on **Lecturers on Women Situation In Africa** at our next AMUCWMA / AWMA 2015 workshop in Mombasa, Kenya in 2015. He was going to give a lecture on **Contributions of African Women to Mathematics**. He was very keen to let everyone know about his work as shown by his communications below.

In October 2013 he gave out details on how to get eBook editions of AMUCHMA publications for free in the following emails:

“Dear colleagues,

I have the pleasure to announce that the eBook versions of the following four books published originally by the African Mathematical Union Commission on the History of Mathematics in Africa (AMUCHMA) are now available and can be downloaded for free from the Lulu website:

* Gerdes, Paulus & Djebbar, Ahmed (2011), “History of Mathematics in Africa: AMUCHMA 25 Years”, 2 volumes (Volume 1: 1986-1999; Volume 2: 2000-2011), 924 pp. (Forewords: Saliou Touré, President, African Mathematical Union; Craig Fraser & Elena Ausejo, Chair & Secretary,

International Commission for the History of Mathematics; Eberhard Knobloch, President, International Academy for the History of Science; Afterwords: Aderemi Kuku, Honorary President, African Mathematical Union; Jean-Pierre Ezin, Commissioner for Human Resources, Sciences and Technology of the African Union)

* Gerdes, Paulus & Djebbar, Ahmed (2007), "Mathematics in African History and Cultures. An annotated Bibliography", 430 pp. (Foreword: Jan Persens, President of the African Mathematical Union) (Special Mention, Conover-Porter Award, African Studies Association USA)

* Gerdes, Paulus (2007), "African Doctorates in Mathematics: A Catalogue", 383 pp.(Foreword: Mohamed Hassan, President of the African Academy of Sciences)

I suppose some of you may order copies of the printed version of the books for your personal, institutional, or university library. The printed version may be ordered on the Lulu website:

Distribution:

<http://www.lulu.com/spotlight/pgerdes>
(<http://stores.lulu.com/pgerdes>, www.lulu.com)

Best regards,
Paulus Gerdes"

In May 2010 he again sent the following email:

" Dear colleagues and friends,

I have the pleasure to announce the publication of the English language version of the book:

"OTTHAVA: Making Baskets and Doing Geometry in the Makhuwa Culture in the Northeast of Mozambique" (ISBN 978-0-557-38290-3, 2010, 292 pp.)

together with the full-colour supplement: "OTTHAVA Images in Colour" (ISBN 978-0-557-38292-7, 2010, 68 pp.)

Author: Paulus Gerdes;

Preface: Dr. Abdulcarimo Ismael (Academic Director, Lurio University); Afterword: Dr. Mateus Katupha (Minister of Culture, Youth and Sports, 1991-2000)

Available from <http://stores.lulu.com/pgerdes>

Backcover text:

In the book "Otthava: Making Baskets and Doing Geometry in the Makhuwa Culture in the Northeast of Mozambique" I reflect on practices in the Makhuwa culture, which provide evidence of the geometric considerations operating in basket weaving, and are

suitable and appropriate for mathematical and educational exploration. A proper scientific understanding of this knowledge, and the educational value of these manifestations may lead to a better appreciation of the Makhuwa culture, and its contribution to Mozambican culture as a whole.

The practices I present in this book belong to the cultural sphere of ‘otthava’ – weaving, plaiting, interweaving, interlacing, braiding – that is, to basket- and mat- weaving. The topics which are analysed are the making of funnels (Chapter 1), hats (Chapter 2), fish traps (Chapter 3), containers (Chapter 4), trays (Chapter 5), dance rattles (Chapter 6), purses (Chapter 7), decorated braids (Chapter 8), baskets and handbags (Chapters 9 and 10), knots (Chapter 11) and circular mats (Appendix 3).

In each chapter, I propose possible ways in which to explore and value, both scientifically and educationally, the geometrical knowledge inherent in the cultural practices under consideration. For instance, symmetries, polygons and polyhedra, spirals, cylinders, helices, band- and plane patterns are analysed.

The chapters of this book may be read (and re-read) in practically any order. The reading may prove to be more productive if the reader tries to solve the various problems, which are provided.

I have written this book for a very varied public: for all who are interested in the Makhuwa culture; for those who would like to know more about some aspects of the Mozambican culture, which is constantly and dynamically under construction; for teachers and future teachers of mathematics, for students and (future) lovers of mathematics and of geometry in particular.

The first two Makhuwa scholars awarded doctorates for theses about the Makhuwa culture, have written, respectively, the Afterword and the Preface of the book: the linguist Mateus Katupha, Minister of Culture, Youth and Sports (1991-2000), and the ethnomathematician Abdulcarimo Ismael.

Key-words

Africa, Mozambique, Nampula, Cabo Delgado, Niassa, Macua, Makhuwa, basketry, culture, ethnomathematics, geometry, mathematics, craft, art, indigenous knowledge, endogenous knowledge, indigenous knowledge systems, science, education, mathematics education, symmetry
Paulus Gerdes”

When Paulus Gerdes was the Chairman of AMUCHMA he again notified Samsalist members through the following email:

“Dear colleagues and friends,
We have the honour to announce the publication of the book

New book: “History of Mathematics in Africa: AMUCHMA 25 Years”

(2 volumes)

[Samsalist] New book on an African culture and mathematics

(Please forward to those who may be interested)

Paulus Gerdes”

“History of Mathematics in Africa: AMUCHMA 25 Years”

(Authors: Paulus Gerdes & Ahmed Djebbar, 924 pages in two volumes; Volume 1: 1986-1999 [ISBN 978-1-105-11807-4, 480 pp.]; Volume 2: 2000-2011 [ISBN 978-1-105-14100-3, 444 pp.]; Distribution by Lulu, Morriville NC, <http://stores.lulu.com/pgerdes>, Published October 27, 2011)

The book reproduces the thirty-seven newsletters published by AMUCHMA (African Mathematical Union Commission on the History of Mathematics in Africa) since its birth in 1986. The book celebrates the 25 years of AMUCHMA by giving a vivid picture of the activities that took place, of the studies done, of the queries, of sources, of meetings, of lectures, of dissertations, of publications... At the end of the book are included country and name indices. The book contains Prefaces written by Professor Saliou Touré (President of the African Mathematical Union), by Professors Craig Fraser and Elena Ausejo (Chair and Secretary of the International Commission for the History of Mathematics), and by Professor Eberhard Knobloch (President of the International Academy of the History of Science). Professors Aderemi Kuku (President [1986-1995] and Honorary President of the African Mathematical Union) and Jean-Pierre Ezin (Commissioner for Human Resources, Sciences and Technology of the African Union) wrote the Afterwords.

The following are some extracts of the Prefaces and After words included on the back cover of the book by some renowned academics:

“I am particularly delighted to say that the successes achieved by AMUCHMA in its activities ... have been spectacular and exemplary ...”Aderemi Kuku, Honorary President of the African Mathematical Union

“I hope that this book will rapidly become reference material for use by teachers and students of the history of mathematics and all those interested in Africa’s many contributions to the advancement of science in general and mathematics in particular.”
Saliou Touré, President of the African Mathematical Union

AMUCHMA “has helped to bring awareness in Africa and globally of the rich legacy of thousands of years of Africa’s mathematical contributions to the international

development of mathematics.”Jean-Pierre Ezin, Commissioner for Human Resources, Sciences and Technology, African Union Commission

“The AMUCHMA newsletters have advanced our understanding of the history of mathematics in Africa and have facilitated communication among those interested in this subject.”Craig Fraser & Elena Ausejo, Chair and Secretary of the International Commission on the History of Mathematics

“... I would like to offer my most cordial congratulations to Paulus Gerdes and Ahmed Djebbar ... The international community of historians of science very much appreciate their work ...”

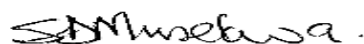
Eberhard Knobloch, President of the International Academy of the History of Science

Paulus Gerdes & Ahmed Djebbar
Chairman & Secretary of AMUCHMA”

I also remember him when I attended “*Symposium on the African Woman and Mathematics*”, held at Girassol Indy Village, Maputo, Mozambique during the period of 29 – 30 November 2008 which was organised by AMMSI Programme Committee in addition to the number of times I met him at SAMSA conferences.

On behalf of the AWMA executive committee members, AWMA members and the entire African Mathematical Science community, I wish to express our sincere condolence to Prof. Gerdes’ family. We will miss him indeed. May his soul rest in peace. I trust that what Prof Paulus Gerdes left behind constitutes a good foundation to build on to our understanding of the history of mathematics in Africa in general and to the role of African women in the understanding and application of Mathematics in particular.

Compiled by



Prof Dr Senelani Dorothy Hove-Musekwa
AWMA Secretary
December 2014