The Journal of Humanistic Mathematics

JANUARY 2023

ISSUE CONTENTS

Editorial

Where Does Mathematics Come From? Really, Where? Mark Huber and Gizem Karaali 1

Articles

From a Doodle to a Theorem:
A Case Study in Mathematical Discovery Juan Fernández González and Dirk Schlimm 4

The Roles of Mathematical Metaphors and Gestures in the Understanding of Abstract Mathematical Concepts Omid Khatin-Zadeh, Zahra Eskandari, and Danyal Farsani 36

Collapsing Spaces, Colliding Places: Leveraging Constructs from Humanistic Geography to Explore Mathematics Classes Valentin A. B. Küchle, Shiv S. Karunakaran, Mariana Levin, John P. Smith III, Sarah Castle, Jihye Hwang, Yaomingxin Lu, and Robert A. Elmore 54

The Merchant and the Mathematician: Commerce and Accounting Graziano Gentili, Luisa Simonutti, and Daniele C. Struppa 70

Human-Machine Collaboration in the Teaching of Proof Gila Hanna, Brendan P. Larvor, Xiaoheng (Kitty) Yan 99

A Classification of Musical Scales Using Binary Sequences Thomas Hillen 118

Thematic Folder: Math in the Time of COVID

Teaching Mathematics After COVID: A Conversation, not a Discussion Wendy Ann Forbes and Joyce Mgombelo 131

Exposition

Where Do Babies Come From? Marcio Luis Ferreira Nascimento 139
World of Mathematics

The Use and Development of Mathematics Within Creative Literature 
Toby S C Peres 148

The Genesis of a Theorem 
Osvaldo Marrero 164

The Nothing That Really Matters 
Szilárd Svitek 171

Lessons from Human Experience: Teaching a Humanities Course Made Me a Better Math Teacher 
Erin Griesenauer 180

The Mathematics of the Harp: Modeling the Classical Instrument and Designing Futuristic Ones 
Cristina Carr, Daniel Chioffi, Maya Glenn, Stefan O. Nita, Vlad N. Nita, and Bogdan G. Nita 189

Using Bloom’s Taxonomy for Math Outreach Within and Outside the Classroom 
Manmohan Kaur 206

Figure-Ground Perception: A Poem Proof 
Richard Delaware 214

Blending Mathematics Teaching with Kindness 
Kien H. Lim and Anthony Matsuura 217

Mathaphor as a Literary Tool 
Sarah Voss 232

Memories & Remembrances

Walking Alone: My Career in Mathematics 
Maohua Le and Yongzhong Hu 239

Anneli Lax: They Think, Therefore We Are 
Elena Anne Corie Marchisotto 252
Book Review

Book Review: *Algebra the Beautiful: An Ode to Math’s Least-Loved Subject*  
by G. Arnell Williams

Poetry Folder

Poetry Folder: Mathematical Constants Beyond the Half-Circle

Poetry

Self-Reference and Diagonalisation  
Joël A. Doat  297

Wartime Logic  
Tony Bedenikovic  299

Mathematics  
Kim Regnier Jongerius  300

Locked in Functions: A Short Poem for Robert Langlands  
Virgilio A. Rivas  301

Unsolved Haiku  
Scott W. Williams  303

Fiction

The Babelogic of Mathematics  
Vijay Fafat  304

Astor Place Barber  
Audrey Nasar  316

Artwork

Between Heaven and Earth!  
A Poem-Collage Pair About Hypatia of Alexandria  
Sarah Glaz and Mark Sanders  318
The Journal of Humanistic Mathematics provides an open forum for both academic and informal discussions on the various threads of mathematical inquiry. The focus of submitted papers should be on the aesthetic, cultural, historical, literary, pedagogical, philosophical, psychological, and sociological aspects of doing, learning, and teaching mathematics. Authors should keep in mind that the Journal intends to publish work that appeals to a general mathematical audience. This includes people who are seriously interested in mathematics, but may come from a variety of backgrounds both within and beyond academia.

We hope to serve the whole mathematical community and we wish to encourage the development and sustenance of an equitable and welcome environment for all individuals, independent of their status within and relationship to the community. Occasionally some of our content might make some readers uncomfortable. We welcome reader responses to content that provokes disagreement. The publication of an article shall not constitute or be deemed to constitute any representation of the views and opinions of the Editors or the Journal. This also applies to the actions and attitudes depicted in works of fiction and poetry. In general, publication in JHM does not imply the endorsement of individual authors’ behaviors, philosophical stances, or ideological perspectives.

For more information, please see our Aims and Scope page at https://scholarship.claremont.edu/jhm/aimsandscope.html.