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Mathematics and Society

Mark Huber

Claremont McKenna College

Gizem Karaali

Pomona College

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Mathematics and Society

Mark Huber

Department of Mathematical Sciences, Claremont McKenna College, California, USA
mhuber@cmc.edu

Gizem Karaali

Department of Mathematics & Statistics, Pomona College, California, USA
gizem.karaali@pomona.edu

Journal of Humanistic Mathematics has so far published four special issues. Volume 6 Issue 1 (January 2016) was a [Special Issue on The Nature and Experience of Mathematical Beauty](#); Volume 8 Issue 2 (July 2018) was a [Special Issue on Mathematics and Motherhood](#); Volume 10 Issue 2 (July 2020) was a [Special Issue on Creativity in Mathematics](#); and Volume 12 Issue 2 (July 2022) was a [Special Issue on Ethics in Mathematics](#). This summer issue is our fifth special issue. Guest edited by Tian An Wong, Carrie Diaz Eaton, Rachel Roca, and Nancy Rodriguez, this [Special Issue on Mathematics and Society](#) offers our readers seven outstanding and provocative articles exploring various aspects of the theme. You can read more about these articles in [the guest editors' foreword](#).

Our issue begins, but does not end, with these Mathematics and Society articles! As you scroll down our main page or table of contents, you will also find a selection of eclectic essays, a neat short story, as well as some poetry and a work of visual art, some of which have interesting resonances with the special issue contents.

Practitioners of mathematics continue to feel the effects of COVID, and this issue brings us two articles about math in the time of COVID. In the first, Jessica Mean and Shilpa Dasgupta consider the results of substituting a final project for a final exam. In the second, Alexandra R. Aguilar, Emma C. Gargroetzi, Lynne M. Zummo, and Emma P. Bene explore the mathematics inherent in video essays about COVID and its impacts submitted by students to a project run by KQED, a public broadcasting service in California.

The Collatz conjecture is one of the most fascinating open questions in mathematics, and Oliver Clay presents a neat Exposition of this problem which almost reads like a detective story. The issue then turns to the World of Mathematics. Frode Larsen and Harald Moe start us off by returning to a work of art covered often in this Journal and discovering more hidden geometry in Raphael's *School of Athens*.

Alexis Langellier describes her efforts to build student excitement in mathematics using poetry as an activity. Kimberly Gladman then gives a translation into English of four poems written by the renowned mathematician Felix Hausdorff.

Anne M. Marshall, Sarah Sword, Mollie Applegate, Steven Greenstein, Terrence Pendleton, Kamuela E. Yong, Michael Young, Jennifer A. Wolfe, Theodore Chao, and Pamela E. Harris come together to share the results of a collaborative project between mathematics educators and mathematicians.

John Little then takes us through two ways of creating geometric proofs, with Pappus' Theorem as an example. Shelly Sheats Harkness, Bethany A. Noblitt, and Nicole Giesbers then show us how synesthesia, the ability to sense numbers as colors, affects mathematical learning.

Caleb Holloway then presents the results of implementing open educational resources for a university trigonometry course. Chadrack Bantange, Darby Burgett, Luke Haws, and Sybil Prince Nelson then finish our World of Mathematics section by presenting the results of their analysis of Classical and Baroque music via the lens of Benford's law.

Bill Bauldry, Michael J. Bossé, William J. Cook, Katrina Palmer, and Jaehee K. Post present the first activity of this issue, involving a way to introduce students to the many number systems that mathematicians have developed. Soumya Banerjee, Joyeeta Ghose, Tarakeswar Banerjee, and Kalyani Banerjee then present our second activity, showing how simulations with NetLOGO can help develop student intuition about and interest dynamical systems and complex systems.

The tale of a meeting between the logicians Tarski and Bachmann is then relayed by James T. Smith in the Communities piece for this issue. In Memories and Remembrances, Samuel Coskey relates the unforeseen problems that might arise for any graduate student about to turn in their dissertation.

In the Perspective article of this issue, Dioneia Monte-Serrat and Carlo Cattani consider the relationship between ethics, mathematics, and AI.

Marion D. Cohen brings us our Poetry Folder for this issue, a collection of limericks celebrating women in mathematics. Klaas Pieter Hart, Holly Wilson, Cacey Wells, Sabrina Sixta, and Joseph Chaney fill out the rest of our poetry section with their exquisite poems.

Our Fiction piece this issue comes from David Sheskin, who inserts a classic problem in probability into a classic tale. Lawrence Lesser then provides the Artwork for this issue, combining poetry with illustration and putting the complexities involved with the construct of fairness right in the foreground.

We hope you will enjoy this eclectic summer issue, and share it with friends, family, students, and colleagues.

Acknowledgment. In this issue we had the opportunity to work with student editor Andrew Kim from Pomona College, USA. We thank him for his hard work. Andrew is the fifth student editor we have worked with till now. (Earlier student editors were Claire Skrivanos (Colorado College, USA), Amy Lauren Shoemaker (Pomona College, USA), Cyrus Bahi (Academy for Science and Design, USA), and Alma S. McKown (Pitzer College, USA).)
