

Seeing Mathematics and Seeing Mathematicians

Mark Huber

Claremont McKenna College

Gizem Karaali

Pomona College

Follow this and additional works at: <https://scholarship.claremont.edu/jhm>



Part of the [Arts and Humanities Commons](#), and the [Mathematics Commons](#)

Recommended Citation

Mark Huber & Gizem Karaali, "Seeing Mathematics and Seeing Mathematicians," *Journal of Humanistic Mathematics*, Volume 12 Issue 1 (January 2022), pages 1-3. DOI: 10.5642/jhummath.202201.02.

Available at: <https://scholarship.claremont.edu/jhm/vol12/iss1/2>

©2022 by the authors. This work is licensed under a Creative Commons License.

JHM is an open access bi-annual journal sponsored by the Claremont Center for the Mathematical Sciences and published by the Claremont Colleges Library | ISSN 2159-8118 | <http://scholarship.claremont.edu/jhm/>

The editorial staff of JHM works hard to make sure the scholarship disseminated in JHM is accurate and upholds professional ethical guidelines. However the views and opinions expressed in each published manuscript belong exclusively to the individual contributor(s). The publisher and the editors do not endorse or accept responsibility for them. See <https://scholarship.claremont.edu/jhm/policies.html> for more information.

Seeing Mathematics and Seeing Mathematicians

Mark Huber

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

Gizem Karaali

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

Is mathematics purely abstract thought? If so, there seem to be an awful lot of drawing and visualizations involved. Graphs and cographs, number theory proofs with pattern blocks, even simple proportions used to find heights using shadows. All these are ways of seeing mathematics in action, and all heighten our mathematical intuitions.

Robert Hass starts off this first issue of 2022 by an exploration of cographs and how they can be used to model the aesthetics of various art forms. Gunhan Caglayan then shows us how to do number proofs with pattern blocks.

While seeing the math, we should not miss the mathematicians doing the math. Amber Simpson and Signe Kastberg write about the young mathematicians in maker spaces and discuss their efforts to use informal measurements to develop mathematical intuition. David Coffland and Ying Xie find mathematicians among middle school students and consider how they explore the mathematics of a restaurant trip.

Jeffrey Pair and Kent Dinh then bring us to the world of preservice elementary teachers, and dig into the question of what triggers happiness for this sometimes-reluctant group of mathematicians in relation to their mathematical learning. Spyros Missiakoulis looks into a different kind of happiness in the myth of Teiresias, and uncovers some very early proportional thinking.

COVID continues to have great effect upon the people of mathematics, and once again we have a selection of pieces dealing with the pandemic and its consequences. Bonnie Jacob explores how being both a mother and a mathe-

matician has influenced her path. Eric Grinberg goes on a search for Internet resistant problems for remote learning, and uncovers a nilpotent mystery.

Melinda Lanius, Tiffany Frugé Jones, Samantha Kao, Tynan Lazarus, and Alex Farrell share the results of a study on how the emergency transition to remote learning during COVID affected math anxiety in undergraduates. Meanwhile, Rob Blom, Olivia Lu, and Chunlei Lu present us with wind and water metaphors to help navigate the COVID-induced cultural storm.

Pamela Pierce shows us entries from her pandemic diary, where a new hamster helps inspire during all the weirdness. Kathy Sun, Jennifer Ruef, Kathleen Stoehr, and Madeline Ahearn consider what happens as we move back from remote learning to in-person teaching: what's worth keeping?

Michael Lewis considers how decision theory treats the question of COVID vaccines. Shane Smith, Tyson Walsh, and Lee Evans relate their experiences at the United States Military Academy trying to determine the best teaching modalities for their particular institutional context during the pandemic.

Our report this issue is from Carlos Alfaro, and it is on extremal mathematicians, those individuals that top the leaderboards in publications, citations, and students. Win a bet at the next Joint Meetings!

K-means is one of the stars of machine learning, but did you know early work came from actual stars? Marcio Nascimento takes us through the history of this well-established clustering algorithm in this issue's Exposition.

Our World of Mathematics section has a number of great papers this issue. Man Keung Siu comments on the story of mathematician and world class cyclist Ann Kiesenhofer. Egan Chernoff reflects on how the laws about gambling winnings in Canada resulted in the introduction of math problems to avoid legal complications and explores different outcomes of a possible scenario involving a young boy, a lottery ticket, and the mnemonics BEDMAS / PEMDAS.

Our next few pieces are about communication. Feryal Alayont sends us a letter from a recovering mean professor who now understands why their relationship with students was not always optimal and wishes to make amends. Gladys Krause explores the world of preservice teachers training to be bilingual math educators, where language and mathematical learning intersect. Richard Delaware reflects on some of his math videos posted on YouTube that garnered an audience around the world.

Next we dive into math and play. Bradley Lucier explores his thoughts on that oft overlooked set of numbers: the computable reals. Firdous Mala then takes us into the world of *Alice in Wonderland* and explores how Lewis Carroll (Charles Lutwidge Dodgson to his fellow academics) used playfully mathematical symbolism in the book to critique what he saw as the overuse of symbols in the modern mathematics of his time.

Our last two World of Mathematics pieces return us to mathematics and art. Lingguo Bu discovers some fascinating opportunities to do mathematics with the twisted cube. Kazmier Maslanka introduces us to proportional visual poetry with his “Pandemic Mediation”.

Michael Caulfield contributes our Activity piece this issue, cleverly introducing students to various voting methods through simple ranking surveys.

Kyle Singh, Veselin Jungic, and Jun Bo Mei bring us an Interview with Ramsey theorist Tom Brown, providing ample evidence that mathematics is very much a human endeavor.

Our Perspectives section continues to grow. Rachel Petrik, Julianne Vega, and Andrés Vidas-Meléndez consider the relationship between growth mindset and the notion of meritocracy. David Drew, Sam Behseta, and Cherie Ichinose make the case for graduate programs in statistics education. Finally Daniel Helman proposes a twelve-step program focusing on mathematics.

Milton Rosa and Daniel Orey review *Reckonings: Numerals, Cognition, and History* by Stephen Chrisomalis, a journey into the history of arithmetic notation and computation.

Our poetry section begins with a collection of *Fib* poems from the Bridges meeting in 2021, curated by Sarah Glaz. Poems by Michael McCormick, Joseph Chaney, Sabrina Sixta, E Laura Golberg, and Bryan McNair complement.

Rami Luisto contributes this issue’s Fiction piece, a proof told in prose.

We wrap up this issue with two Announcements. Carrie Eaton, Rachel Roca, Nancy Rodriguez, and Tian Wong call for papers on *Mathematics and Society* for an upcoming JHM issue, currently scheduled for July 2023. Carolyn Yackel and sarah-marie belcastro call for submissions on *Mathematics of Fiber Arts* for the *Journal for Mathematics and the Arts*.

We hope you will enjoy this winter issue as much as we have.