Mathematical Perspectives

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Much of mathematics is about looking at familiar objects in new ways. Geometry transformed into analysis, relationships turned into graphs. A new perspective can make a hard problem easy, or an easy problem hard.

In this issue we are starting two new types of articles. Perspectives will focus on discussion pieces that offer new ways of looking at how mathematics is done and opinions on what changes are needed. We expect and welcome contributions to this column which intend to provoke and demand a response. As usual, readers are invited to join the conversation by adding comments to the journal website or submitting response papers as they wish.

Viktor Blåsjö and Michael Fried author our two perspective pieces, debating the modern consensus in the historiography of mathematics. As contemporary historians of science discuss the foundational tenets of their discipline (cf. [1]), it is apt that the pages of Journal of Humanistic Mathematics host a conversation about the fundamental disciplinary assumptions of history of mathematics.

With the Recreation section we have added a forum for puzzles and other diversions. This feature column is inaugurated in this issue by a light-hearted word puzzle from Robert Haas.

In his feature article, Chris Fields looks at how a major project in science, such as the Human Genome Project, can radically alter the collaboration graph among mathematicians and authors in other fields. James Marcotte and Matthew Salomone then show how Escher’s Sphere Surface gains its geometric properties from angle-preserving transformations, offering some insight along the way to how it was constructed.
Murad Jurdak investigates the effect of religion and language in mathematics education, updating an earlier report on how our early childhood mode of thinking affects the way we learn. Douglas Campbell and Dirk Schlimm tell us of a student’s experience learning mathematics from two textbooks written over a hundred years apart.

Rita Capezzi and Christine Kinsey introduce us to their team-taught interdisciplinary mathematics and literature course where links between the two subjects are used to introduce new mathematical ideas to students with little prior mathematical knowledge. Gary Stogsdill continues helping students learn outside of the mathematical box through the use of brainteasers.

Susan D’Agustino describes the evolution of her perspective as she moved from life on the farm to a life in mathematics. Poetry meets combinatorics in Mike Pinter’s piece on syllabic variation in the Dekaaaz poetic form. Ben Orlin takes us out to the ballgame from a mathematician’s (and cartoonist’s) perspective.

We have three poems in this issue, a meditation on the irresistibility of the irrationals from Martin Cohen, a personal construction from Sandra Stein, and a Homeric epic by Geoffrey Landis. Our fiction piece for the summer is a dark reflection on movement and inevitability by Nora Culik.

We close the issue with an announcement related to the 2016 retirement of one of our great friends and contributors: Judy Grabiner. Her position at Pitzer College is rare, if not unique. And Pitzer is now seeking a humanistic mathematician with a specialty in history of mathematics, philosophy of mathematics, or Ethnomathematics. That is a position with an interesting perspective!

References