David E. Zitarelli: An Autobiographical Sketch

What a charmed life! Schooling was prized even though my family had little formal education—my Italian grandparents did not go to school and my father dropped out in ninth grade during the depression. Since I loved school, this was the perfect setting for me, and I have remained in academics my entire life. Indeed, my wife Anita has sheltered me from the real world all these years, allowing me to concentrate on mathematics, its history, and the teaching of it. Nonetheless, I am becoming a vanishing breed—a native Philadelphian with tenure in Temple's mathematics department. With the retirements of South Philly friends Sarah Evangelista and Nick Macri, only Jack Schiller and Frank Thornton remain as natives of the City of Brotherly Love.

I suppose I was born to be a mathematician, though I did not admit it until about my junior year at Pennsylvania Military College, a realization that caused me to transfer to Temple. Although I graduated in only one year, four Temple professors left indelible marks on me: Marie Wurster, Leon Steinberg, Albert Schild, and Peter Hagis. Over the summer between graduation and enrollment in the graduate program at Penn State, my South Philly buddy Gary Sampson and I solved every problem in Herstein's *Topics in Algebra* and Rudin's *Principles of Analysis*. OK, truth be told, we did not solve every problem, but we attempted most and solved a significant number. By the end of that summer Gary was a lifetime analyst and I was a committed algebraist. We both obtained our Ph.D.s in 1970, he at Syracuse (in complex analysis) and me at Penn State (in algebraic semigroups under Mario Petrich).

While a student at Temple I met this cute French major named Anita Paul. I will supply no further details except to say that after one year of me in nowhere (State College) and her in civilization (Philadelphia), we got married and she transferred to Penn State. Marriage has been pretty cool for us, even though she was only 19 at the time. (Note to youngsters of a certain age: do **not** try this at home!) Anita received BA and MA degrees in French while I completed my doctorate. Our subscripts Paul and Nicole were born in 1978 and 1979. The superscript and I still like each other in 2007 but induction guarantees nothing about 2008.

Nor were we sure how we would like Hartford when my friend and former Temple classmate Sheldon Eisenberg offered me a position there. We intended to move there so I accepted the offer, but my mother died of cancer that year (at age 50) and I felt obligated to help raise my younger brother, Joe (now a surgeon), so I called Albert Schild to see if anything could be arranged at Temple. This was in June, 1970. He offered an assistant professorship, so Anita and I returned to Philadelphia two months later. We are still here!

Like Gaul, my professional career can be divided into three parts. For the first ten years I concentrated on algebraic semigroups, which produced intriguing contacts with Russian mathematicians, notably Boris Schein. But I was beginning to lose interest when the chair of the department, Leon Steinberg, asked Ray Coughlin and me to write material for a core course the College of Arts and Science was about to require of all non-science majors. This led to my second career—author—as Ray and I wrote a dozen books over the next 10 years. During this time Dave Hill and I began sharing notes on the linear algebra courses we were teaching with computers—he with an Apple and me with Radio Shack—and the resulting collaboration led to

an NSF grant that produced the first mathematics computer lab at Temple and a corresponding lab manual for teaching linear algebra with MATLAB. The culmination of this work was an invitation to deliver a one-hour address at the annual AMS-MAA meeting in San Francisco in 1995. Speaking in front of 500 mathematicians was daunting—but I survived.

Although I seem to have been born a mathematician, I was always captivated by the history of mathematics, so I read lots of it. But I did not get the opportunity to understand its structure until teaching the course in my second year at Temple, 1971. Two years later the esteemed historian/mathematician Ken May encouraged me (with funding!) to attend a conference on the history of American mathematics. And would you believe that I shared dinner with Dirk Struik, Marshall Stone, and Garrett Birkhoff? Now, who does **not** fit in that quartet? Anyway, I was hooked on history, even though that meeting was held in the desert of west Texas (Lubbock). However, it was not until Albert Lewis invited me to become abstracts editor of the journal *Historia Mathematica* in 1988 that my association with history became formalized. That position required me to read a broad swatch of topics, which was often a nuisance but ultimately led to several important friendships and helped narrow my primary interest to the history of American mathematics. As a result, two years before ending my editorship in 2000, I offered my first course on the history of American mathematics; I have offered it every other spring since then. Moreover, in 1998 I organized a special conference on American mathematics at a regional AMS meeting with my friend Karen Parshall, co-author of a book providing the structure of the history of mathematics in America. The next year Karen and I organized a special session at the annual AMS-MAA joint meetings, and I continued to organize these sessions through 2004 with Tom Archibald and Joe Dauben. Along the way I met an extraordinary group of people with a passion for history. While I will not attempt to name all of them, I might mention that Anita and I have enjoyed the international experience of sharing our home with Rüdiger Thiele (Germany), Eleanor Robson and Ivor Grattan Guinness (England), and Evgeny Zaitsev (Russia).

The biographical snippet that appeared at the end of my *Monthly* article in the June/July 2004 issue provided a nice overview of my activity up to then:

> So far, the twenty-first century has been very good to David E. Zitarelli. In addition to publishing a paper on towering figures in American mathematics and a book on the history of an MAA section, a video of his lecture on the genesis of the Moore Method was produced and distributed. In 2001 he won the Lindback Award for Excellence in Teaching and was chosen Professor of the Year by students in Temple's Honors Program. The following year he was a Buckingham Scholar-in-Residence at Miami University in Ohio. In 2003 he was elected the first chair of HOMSIGMAA, the MAA special interest group on the history of mathematics. He has also organized AMS-MAA special sessions on the history of mathematics every year in the millennium, whether 2000 is included or not.

My activity has continued apace—in publications and awards. Two papers appeared in 2005, one in the *College Mathematics Journal* celebrating the bicentennial of the first American mathematics journal, and the other in *Mathematics Magazine* describing the extraordinary achievements of five rank-and-file American mathematicians. One on J. B. Reynolds appeared in *Historia Mathematica* in 2007 and another contrasting the proof of the Pythagorean Theorem in ancient Greece and China will soon be published in an MAA book. I seem to be a popular book reviewer too, penning (an anachronism) four recent reviews, a book on human computers and a biography of R. L. Moore (that appeared in the *Monthly* in 2006), as well as a history of

the Institute for Advanced Study (in *Historia Mathematica* in 2007) and a biography of Vito Volterra (in *Mathematical Reviews* in 2007). In addition I served as a reviewer for mathematical biographies of Benjamin Franklin (for Princeton Univ. Press) and Benjamin Peirce (for Lehigh Univ. Press), both of which will be on the market this year. I also won a Great Teacher Award in 2005. Some regard this prize as the most prestigious teaching award at Temple but I view it as secondary to my selection as Honors Professor of the Year, though having your name carved in marble *before* your demise is comforting.

The summer of 2007 was very productive. At the beginning, my paper on Anna Mullikin (written with my PASHoM buddy Thomas Bartlow) was accepted by the *Monthly* and will appear in 2008. Toward the end, I completed a paper on Mullikin's nautilus with the indefatigable David Hill and submitted it for publication. In between, Anita and I traveled to Asia, where we spent ten days touring China after spending four in Lhasa, Tibet, where I gave a one-hour talk on Mullikin's topology. What a charmed life! Back in January of 2007 I gave another invited lecture, this one at the joint AMS-MAA meeting in New Orleans, on an extraordinary congress of mathematicians held one hundred years ago. I hope to complete a paper on this topic this coming year.

And what about teaching? I was feeling rather blue in the fall of 2005 for two reasons. For one, the semester got off to a rocky start physically when I suffered through gum problems, a kidney stone, and a ruptured plantaris tendon. Ouch! Secondly, the graduation of a wonderful class of math majors left me with an empty nest at Temple as well as at home (son Paul lives in Seattle with his wife Kelli, while daughter Nicole resides in Minneapolis with fiancé Ryan; and yes, Nicole had driven over the I-35W bridge a half hour before it collapsed). The 2005 class of Neil Lampton, Pete Bogunovich, Kate Ploskina, Gino Pagano, Andrew Silberman, and Lesia Midzak reminded me of the class of 1989 with Terri Bennett, Hans Johnston, Penny Yelshin, and Jim Papacostas. Nonetheless, I have had the fortune of having great students since then, and a superb cast of Classroom Assistants for my Honors Calculus I and II classes (Steve Midzak, Dayton Duncan, Rina Edi, Brian Fiore, Natasha Fonseka, Andrew Kalemkarian, Maria Prozorov, and Anthony DeFusco). Moreover, for 2007-2008 I will have the services of Novneet Sahu, Tim Jennings, Mike Swartwood, and Jake Kesselman. Charmed life, eh?