

## SOME REFLECTIONS V. Giambalvo



(EDITOR'S NOTE – Vincent Giambalvo did his undergraduate and graduate work at M.I.T. His dissertation was in algebraic topology, and he continued this work with a series of papers in the 1970s on equivariant cobordism, a topic in the topology of manifolds. From 1977 to 1982, Vince and former Department member Bob Sidman (Southwestern Louisiana) were co-authors (along with medical, biological science and bio-engineering colleagues) of a series of seven articles on the mathematics of brain wave analysis. Meanwhile, Vince's work in topology continued, and from the 1980s through 2001 he published numerous papers, with an emphasis on the Steenrod algebra and the Dickson algebra. Vince has also been a major guru of computing in the Department, and his help has been invaluable to many of us.

Vince retired in the summer of 2001 but remains active as a consultant to the Department. He wrote the following reminiscences in November 2001.)

### INVARIANTS

When my retirement was announced the first question I was asked was "What are you going to do?" My glib answer was, "I am going to Australia."

Well, I did, my wife and I are back from a wonderful trip to the land "down under," and except for the constellations in the sky, nothing is upside down. By the time this appears there will be a trip report on my Web page. But as a preview: If you find a Yarra Ridge Pinot Noir 2000, buy it.

Now that we have returned, I am doing a lot of what I did before, except for teaching calculus and giving exams. I am doing mathematical research, and will give a presentation at the AMS meeting in January as well as a seminar in Rochester. To keep up with technology I am consulting for the Department on IT matters. But not teaching means I am free to travel anytime during the year, especially September, October, and April, months which my wife says are the best to travel. She was certainly right about Australia in October.

So I anticipate that the future will be somewhat like the past. During my thirty-three years at UConn there have been of course many changes, but there are also a few invariants, some unexpected. Let's chase down a few.

In the fall of 1968, I was just finishing two years of a Post-Doc at the University of Heidelberg. Elliot Wolk was department head at UConn, and he offered me a position as Assistant Professor. I had visited UConn, and a good friend from graduate school, Eugene Spiegel, had been hired from Cal Tech the previous year. Elliot offered to locate an apartment for me, and he paid the first month's rent. This was about 1% of my yearly gross salary. Another invariant: Last year my mortgage payment was about 1% of my yearly gross salary.

The Math Department at that time lived on the fourth floor of Beach Hall, which is next to Gulley Hall, where the president's office was. A few years later we had very good views of student demonstrations.

Beach Hall had its problems. Another wing had student labs, and the fire alarms would sound with disturbing regularity. The roof leaked, but only when it rained.

Technology was what you would call primitive. The Department office was the only place to make long distance calls, and the only computer was in Engineering II. (There was an Engineering I – it is now called Castleman.)

The students were very resourceful. One day I succeeded in locking my keys in my office, and of course the secretaries were out for lunch. And I was giving an exam in my 12:30 class, and the exams were in my office. As usual before classes, there were students hanging around in the hall, so I asked: "Can anyone pick a lock?" One of the students quickly opened my office for me, and I recovered my keys and exams.

Homer Babbidge was president. When he was inaugurated he said that no one should be president of a university for more than 10 years. So why was everyone except me surprised when he resigned 10 years later?

What would become the Homer Babbidge Library was in the the Wilbur Cross Building. We just called it the Library.

The technology started to improve with the installation of a typewriter terminal in Beach Hall. It was an IBM product, and used its own language, which was a variant of BASIC. But you could use it to submit jobs to the main computer. It was called Remote Job Entry, and it was really virtual punch cards. But I decided to try to use the computer to solve some problems related to my PhD dissertation. It turned out to be a much longer project than planned, but I did learn a lot about the computer systems here, and I continue to use them in my research.

After years of delay, the Math Sciences Building was completed, and the move was scheduled. It was decided that the faculty would move in before the secretaries. So in a pretty empty building I went with two pencils in search of a sharpener. I found the Physics Department office, but the secretary there refused to let me sharpen the pencils.

The move was completed, the new furniture inferior to the old, but we had individual offices and phones that worked. Then we discovered that the roof (or ceiling) leaked even when it didn't rain.

The computer center was now close, just downstairs, and it was easier to get the printouts, but they still used punch cards and accounts in dollars. My research turned to modeling the brain for some EEG experiments, and this involved lots of computation. I ran jobs for several hours overnight, for several hundred dollars apiece, and they worked well, but usually produced only a page or two of output. This sometimes got lost, and when I complained, the operators would say, "just run it again."

The control of the University from Hartford was severe. When we tried to get a computer system in the Department (a PDP-11, which was pretty standard for math departments at the time), an official from the State, whose name was Ober, visited us, told us we didn't know what we were doing, and we should get a video terminal instead. It really wasn't until well after the introduction of the IBM-PC that we got an NSF grant for a system of Sun workstations, which really got the Department into the computer age.

The most visible change in the University in the last few years has been UConn 2000, the construction and renovation program. It had, of course, its problems. Two years ago when I asked for a Hi-Tech classroom and all of them in MSB were filled, I was given a room in DRM. When I went to check it out a week before classes were to start, not only was there no hi-tech equipment in the room, there was no floor. But the room was finished about 3 weeks later.

Most of the recollections of the last 33 years involve people, and there are too many to mention and thank individually. But I would like to mention two I can no longer thank personally, and who are remembered in special ways. The first is Lou DeLuca, who is remembered with a departmental award in his name, and whom I remember as a friend and valued colleague. The second is Joel Mermin, who is remembered with a memorial engraved into the Cliff Walk in Newport, RI.

Finally I would like to thank all those who made my career time at UConn a lively, productive and enjoyable time. I look forward to being involved in the department professionally, as mentioned above, and with members of the Department, as friends.