

Reflections of Ronald W. Rousseau

Louisiana State University. I love it now and have loved it all my life. Memories of my father bringing me to an LSU football game when I was a boy include the feel of walking hurriedly across the parade ground, over the gratings in front of Himes Hall, and into a stadium that had not yet had the south end-zone stands constructed. My father enjoyed telling me about being part of the famous train trip arranged by Huey Long for a game with Vanderbilt and that he was in the march Long led through downtown Nashville. I sold 7-Ups at football games during the 1958 national championship year and always made it a point to arrive early in the afternoon for the 8:00 p.m. games so that I could walk around the campus and Tiger Town. It was all magic.

There was never any thought of going to college anywhere else. I grew up in Baton Rouge and always expected to attend LSU. How lucky I am. I would have attended this college even if there had been no engineering college. That may sound absurd, but it is an accurate reflection of the naïveté I brought

to my college studies. What did this luck mean? First, it meant that I would attend a university that had an outstanding chemical engineering program. Second, and perhaps equally important, it meant that I would be able to grow at a rate that matched my interests and capabilities. I did not start out as a great student, partly because of inadequate preparation and partly because I had visions of playing professional baseball. I fumbled along through freshman and sophomore courses liking what I was doing, but not really finding it of much interest. Moreover, I had trouble hitting pitches that varied in speed and location and that frequently broke rapidly as they approached the plate. And then something fortuitous happened: I had a stoichiometry (mass and energy balances) course that was challenging and fascinating, and I had the highest grades in the course. From that point on, there were never problems with my studies or grades; I had found my niche.

In studying chemical engineering, I encountered people who remain important to me because of what I learned from

them: Coates, Murrill, Pike, Groves, Callihan, Greenberg and Daly.

I never had a course with Jesse Coates, but one day he called me into his office and asked why I was taking a lab course in the summer. Upon telling him that it was necessary because of baseball in the spring, he told me that he would make arrangements so that I would not have to take the lab if I took a new course in polymers. Not only that, he said that if I continue to do well, I should go to graduate school and, should I go to graduate school at LSU, I would receive a stipend as a teaching assistant, a possibility that had never occurred to me. The Department Head calling in a student for a talk might seem unremarkable except for the fact that, to this day, I have no idea why Coates even knew I was taking the lab course or how he knew I was doing well in my chemical engineering courses. Coates was an icon among the students of my generation; he molded the department during his tenure as head and influenced a large number of students through his leadership of this outstanding program.

Paul Murrill taught by example. He was thorough in his classroom presentations and always gave students the impression that he knew the entire chemical engineering literature. He was known for sprinkling oral examinations with questions about the history of the Chemical Engineering Department or the latest nontechnical book a student might have read. These were not eccentricities; he was demonstrating the value he placed on culture, literature and people. When he became chancellor of this university, I remember him telling an interviewer that he loved to roam the LSU campus at night because of its feel. Getting the feel of a college campus by seeing it at night is something I also enjoy and recommend.

Paul Murrill's teaching, academic leadership and interests in intellectual pursuits shaped my thinking and guided me into the teaching profession. There is no question in my mind that he would have been successful in any academic, business or political position.

Ralph Pike arrived at LSU from the North Avenue Trade School (also known as Georgia Tech) in Atlanta just in time to teach me transport phenomena. Of course, at that time I had no idea his background was with an institution which would become so important in my life. The discipline and preparation characterizing Pike's lectures were models for my early teaching career.

Frank Groves was the best teacher I have ever seen, and I have seen a lot of great teachers. I have never understood why all of my classmates and I had that opinion. Groves wasn't flashy, and we often had the feeling we were making little progress in covering material; however, the end of the semester would arrive, and we would be astounded at the ground we had covered. I'll never forget the semester I took graduate thermodynamics; we covered everything from classical First- and Second-Law material, to phase equilibria, to statistical thermodynamics, and we never felt rushed! How did he do it? If I could only answer that question, perhaps my students would appreciate my teaching the way I do Frank's.

Dave Greenberg taught more of my chemical engineering courses than any other member of the faculty, and he introduced me to research as an undergraduate one winter between fall and spring semesters. He was the one who taught that course in stoichiometry which was so fateful in determining my future.

Two people directed my dissertation research. Clayton Callihan is reputed to have attended Michigan State when he was told by his supervisor at Dow Chemical that he would go nowhere without a college degree. Not content merely to get a degree, Callihan got his doctorate and returned to Dow. He came to LSU with industrial design experience and expertise in polymers. It was this latter area that interested me and attracted me to his research group. Bill Daly was a new chemistry professor who had just arrived from Brooklyn Poly, and his work in polymers brought him into partnership with Callihan and co-direction of my dissertation. These men complemented each other perfectly; Callihan had the unbridled imagination and industrial experience of an inventor, and Daly had the rigor and enthusiasm for pure research. Both shaped my subsequent efforts as a chemical engineering professor, and I am greatly indebted to them.

I think back upon other aspects of my experience at LSU with great fondness: the meals prepared by Brother Ike Mayeaux at Broussard Hall; Hulen Williams allowing me out of quantitative analysis because I was colorblind; the frozen lakes in the winter of 1961-62; doing research through renovations of the chemical engineering building; Dean Fenn not allowing me to drop Physics, regardless of my status as an athlete; the 1961 football team, which I believe was the best ever; Jim Cordiner, a chemical engineering professor, calling me at home to inquire why I was not at a final exam (I had the time wrong and wound up driving madly to get there to take the exam); the beauty of the campus, especially the quadrangle; the old Huey P. Long Field House whose functions were replaced by the Student Union during my sophomore year; Free Speech Alley, where more nonsense was spouted by

serious young people than anywhere else on campus; the sounds of footsteps and the uniqueness of the murals in Allen Hall; meeting General Troy Middleton, then President of LSU and one of the heroes from the Battle of the Bulge; gathering with a group of students in front of the library on November 22, 1963, to listen to a voice on a radio say that President Kennedy was dead; labs in the Audubon Sugar Factory; Saturday morning classes; orientation of the freshman class of 1961 which included morning-to-evening drills as part of the Army and Air Force cadet corps; married student apartments on Nicholson Drive; Pete Maravich driving for a spectacular basket; late night study with Charlie Moore, a friend with whom I remain personally and professionally close; and so much more.

Louisiana State University is an institution with a glorious and colorful history. I began these remembrances with images from athletics, but we know that the core of this institution and its reason for being is the intellectual life it fosters. Its leaders and faculty have had profound influences on me and, more importantly, on the state and nation. There are thinking and feeling aspects to my affection for LSU, and with my head and heart I believe I am extremely fortunate to have been a part of the student body.