

## CONTRIBUTOR'S NOTE

By Michael Martone

Michael Martone was born in Fort Wayne, Indiana, and went to the public school there, attending North Side High School during the years they took to renovate the old building. The construction went on all four years of Martone's time in high school and the students worked around the workers who closed first one wing of rooms then the next, sending classes looking for a new space or reclaiming a room now rewired or freshly painted or floored with new terrazzo. The electricity for the master clock in the principal's office had been cut early, and all the clocks in the hallways and classrooms found their own separate times. Most stopped. Some sped up, swept ceaselessly, or stuttered in place as if it was now impossible to move to the next second or the next, sticking with each tick, mesmerizing Martone with a cruel montage of what was now becoming his lost and wasted youth. The period bells, the commencement and dismissal bells, had quit ringing months ago, and the space of time when the students changed classes marked in gritty silence. A rudimentary PA system had been jerry-rigged, tinny speakers and exposed wires, and each morning the Guidance Counselor squeaked that the official North Side time was whatever it was. Everyone set his or her watch, regulated for the rest of the day, shuffling through the debris and drop cloths in the work-light lit hallways. It was here Martone first studied chemistry in the fifty-year-old laboratories on the third floor east wing that would be the last to see repair. He still has his slide rule, Army surplus, in its leather case. The hairline cursor embedded in the sliding glass indicator, he realized, was a real hair. He learned to manipulate the contraption in the oversubscribed extra credit

slide rule seminar after the regulation lab session. There, too, in the chemistry labs, he saw, for the first time, his teacher perform the Old Nassau clock reaction. He mixed the solutions in the big Pyrex beaker to first produce a pumpkin orange precipitate as a mercury compound settled out and then, after several seconds, the bright orange suddenly turned to a liquid lamp-black as the excess iodine leftover transmuted to starch and turned on its color, a black black curtain dropping instantly. The demonstration was meant to astound with its alchemy, and Martone was astounded, asking to see again the chemical logic of it, how benign soluble concoctions created a product that became a new reactant that then was ready to react. He liked both the anticipation and the rapidity of the transformations, the visual demonstration of whole moles being stewed in their own molecular juices, the quick switch and then its double-cross. It was called a “clock” because of the predictable ticking of the bonding and unbonding that timed-out perfectly, a collection of ionic seconds spinning on their own internal clocks. This led to this and that to this. The equal sign is replaced by arrows in a chemical reaction, one thing after the other. Years later, when he was a senior in organic chemistry, Martone asked the teacher if he could, in his spare time, work on constructing a new clock reaction that would, this time, express itself in North Side High School’s colors, red and white, not out of any school spirit but mainly out of an urge to tinker with the watch-works of cooked-up nuclei and electron shells. After all, the class he was taking spent its time knitting together long compounded chains of carbons and hydrogens and oxygens, matrices of esters and ethers, another kind of ticking, the proteins twisted into the worsted zipper of a gene undergoing mitosis, another two-step through time. In that lab, too, he set a girl’s hair on fire with the Bunsen burner, the flame eating up the long straight strands of her long brown hair like a fuse, another illustration of time. The burned hair, turning to ash, flaked, crumbs of a rubber eraser, spilling to the floor as the stink of it, the hair burning, rose in almost visible solid cartoon waves of wavy stench, the glow of the actual burning peeling now in the nape of her neck, the instant chemical reaction of it, giving off its own

unique rainbow of bright colors. They had been performing primitive, spectral analysis, igniting unknown compounds held in little wire loops over the lip of flame, reading the combustion's signature through the slit of a cheap prism tube. The tip of her hair sparked as Martone tipped the burner toward, what turned out to be, a sulfuric something or other. Martone damped down the crawling flicker with his hand, his fingers flouncing the hairs that wove themselves into a now ratted cap, a nest, and for a moment it seemed that the whole canopy would ignite, enriched by the addition of fresh air. Martone was left holding this halo of fire, a hat from hell, a melodrama of oxidation, when, just then, the teacher pulled them both in to the emergency shower where they were doused and, just as suddenly, engulfed in wet smoke and sodden hairy ash. Martone never did find the combination of compounds to create the clock reaction in his school colors. He remembers poring through old manuals his teacher gave him with pages of tables listing reactants and products and their shades of colors, valences and radicals, ions and elements, metals and base. He wandered through the old laboratory's closets looking for odd specimens in ancient glass bottles stopped up with moldy cork or decaying rubber stoppers, the forgotten chemicals undergoing their own unsupervised and unrecorded experiments, reactions oxidizing into clumps of rusty rust, bleached stains, inert crystalline sweating salts, the paper labels foxing, the beakers mired in viscous goo, and the wood racks gnawed at by some now long gone acidic lick. Helping to clean out the closets in anticipation of the renovation, Martone garnered extra credit to offset the disappointment and possible average grade for his disappointing independent study. In the mess he found the apparatus used through the years to create the famous Old Nassau clock reactions for succeeding classes—the tinctures of iodine, the compounds of starch, the granules of potassium, and the etched graduated cylinders set to deliver the proper quantities of chemical ingredients for the demonstration of time all that time ago. Years later, Martone is on the phone to his classmate from those years whose hair he set on fire during an experiment meant to identify certain chemicals by the spectrum of light they

emit when set on fire. Martone has taken to looking through his past lives, has found many of his former class-mates by employing the emerging electronic technologies on line. He lives now far away from Fort Wayne, in Alabama, and finds it difficult to return home for the sporadic reunions, and when he does, others from back then now live even farther away or seem to have disappeared altogether. He thinks of it as a reconstitution, as hydration, this telephoning, and admits that his efforts redoubled after the collapse of the towers in 2001. That collapse seemed to be a kind of boundary, a membrane, a demarcation as narrow and fine as the hair fused in glass on his slide rule, of before and after. He found her, the woman whose hair he set on fire in his high school chemistry lab, living in New York teaching organic chemistry, of all things, at Columbia University there. The irony was not lost on them. She explained to him that she now was attempting to isolate low-molecular-weight chromium-binding substance in human urine. It had something to do with diabetes and insulin and iron in the blood. It was late at night and they had been talking on the phone for a while about the past and chemistry and what they had both been doing separately at the same time during all those years when suddenly Martone heard band music. It was past midnight. The music, even diminished by the telephone, was distinctively brassy and rhythmic, shrill and thumping. Martone identified it as “The Horse,” a favorite of their own high school’s pep band years before. “Oh that,” she said. “It’s Columbia’s marching band. A tradition. They spontaneously appear on the night before the orgo final and march around the Upper West Side.” No one will believe this, Martone thinks. After all these years, no one will believe such coincidences of time and space. He learned long ago in the sciences classes of his high school that there were these things called constants. Gravity was one. The speed of light, he remembered. And time—time was constant too.