## Polio Stories Mike Davis

Personal Memoir from the 1944 Kentucky Polio Epidemic Adapted from an essay in Polio, U. of Rochester Press, 1997 By Mike Davis From what I have read and heard from my fellow members of the Michigan and Southeast Michigan Post-polio support groups, my experiences with the disease aren't much different, except I had just turned 13 a few weeks before infection, whereas many "polios" I have met lately were infants when they were hit. And my affliction has not included impaired breathing or mobility. Further, unlike infant onsets, teenagers remember what happened as well as what didn't happen.

About 4 a.m. on a mid-July Thursday I was struck with a violent upset stomach, rushing to throw up in the bathroom. The vomiting, retching and nausea was accompanied for days with intense, throbbing headaches. My mother, an Army nurse in the First World War, tried to relieve my headaches with the traditional pre-chemical remedy: cold washcloths repeatedly applied.

I was moved into my parents' first floor bedroom with the downstairs bathroom just behind, and the kitchen around the corner, altogether a convenient arrangement for the hot-pack months to come.

As reconstructed more than five decades later, the intense muscular spasms and pain must have started on the second day, Friday afternoon. They ran all over my torso, arms, legs, neck.

By the time those racking pains hit so long ago, my 13-year-old mind had already concluded I probably had contracted the disease that so terrified everyone. Louisville was in the throes of a polio epidemic. The newspapers printed stories every day reporting on the disease's progress, which I read even in my sick-bed. Locations of new victims were identified on a map of the county. Despite my pain and nausea, I recognized the symptoms listed in the newspaper — "stomach upset, vomiting, fever, headache and stiff neck" — and compared them to my experience.

Early Sunday morning the fourth day after onset, I struggled out of bed to the toilet in the adjoining bathroom. My left arm seemed loose, uncontrolled, wobbly. By afternoon, I couldn't lift it. That was July 16, 1944, and I've never had full use of it since.

That surely confirmed the diagnosis of my disease, if it had been uncertain before. Reconstructing from old newspaper clippings, I calculated that I became the 75th polio victim in Jefferson County out of 264 registered that year, the worst such epidemic in Kentucky history up to that time. The number of victims jumped from 71 on Friday, July 14, to 88 on Monday, July 17 — 17 new cases in three days.

If any other boys from the YMCA camp or the adjoining YMHA (Hebrew) camp came down with polio that summer, I never heard of them. Nor did any other person with whom I had personal contact in the days or weeks preceding my illness. The terrible muscular pains must have continued for several days, but there is no clear memory of how long or how intensely. By that Monday evening, however, I was experiencing an entirely different and terribly discomforting pain in my belly. Dr. Buttorff was again summoned and quickly determined the problem: unable to void the bladder. Of course this was another sign of muscular paralysis. The ensuing catheterization — there were no numbing local anesthetics to apply in those days—was even worse than the racks of the muscular spasms and headaches.

Because of the intensity and rapidly rising rate of infection, the only two poliotreatment facilities, Kosair Crippled Children's Hospital and the city General Hospital, were swamped. The city county health director had declared a state of epidemic on the previous Tuesday. Kosair had only 100 beds for all crippled children, and those patients who weren't new polio cases now were moved to other hospitals to make room for the critical new paralytic victims.

Likewise, both hospitals a couple of years before had adopted the then still controversial Sister Kenny treatment for polio, but there was a shortage of technicians and aides who knew how to work with it. Repeated appeals went out for local volunteers to help, and the Red Cross and National Foundation sent in professionals from out of town. Only a month before, the American Medical Association had proclaimed it did not support the Kenny treatment, saying there was no evidence it prevented paralysis — an incredible non-sequitur since the treatment was aimed at alleviating the effects, not prevention.

The Kenny treatment was usually thought of as "hot packs," cocoons of boiled wool blankets wrapped around paralyzed limbs and torsos. Actually this was just the first, although often lengthy, phase. Subsequent stages included physical therapy to stretch shriveled muscles and educating a patient to learn how to use atrophied muscles or alternative techniques for performing normal functions.

The ideal treatment called for starting the Kenny hot pack applications as soon as possible after onset — both to relieve pain and to relax paralyzed muscles — but with the peak of the epidemic at hand, there was no bed available for me at either Louisville hospital. Even though my mother hadn't practiced as a nurse for some 20 years, and doubtless was exhausted by the round-the-clock care my illness had demanded for several days, there seemed to be no alternative but to start home treatments. Counseled by the Crippled Children people over the telephone, she went to a secondhand store to buy surplus army blankets, a rubber sheet and large wash boilers to heat on the gas burners of the kitchen range.

Then came the visit of a true miracle worker, a man who was to change my life and those of countless others, never letting us become discouraged, always encouraging, always optimistic. His name was John Untereker, a strapping 32-year -old Swede from Minneapolis, trained at the University of Minnesota and the Kenny Institute, and head of the Kenny treatment department at Kosair in 1944. (In 1953, Untereker obtained his M.D. from University of Louisville and with that credential became a noted physical medicine and rehab specialist in New York City.) He bounded cheerily — his trademark — into my sickroom with a tape measure and a huge pair of shears, and proceeded to cut up the ingredients for a Kenny "sandwich," custom-fitted for me. He showed my mother how to build the layers of cotton sheet for my fair skin, doubled blankets, rubber sheet, and outer cotton blanket for each of my body and limb parts, and how to fasten them around me every hour with huge, diaper-like safety pins. Fortunately for my parents, almost immediately a bed opened for me at the Kosair facility.

The hassle then was finding an ambulance, because none of the commercial outfits would transport a contagious polio patient. But the American Legion would. Two volunteers, World War I veterans like my parents, and wearing Legion overseas caps, came in a 1939 Cadillac ambulance to cart me away. On the way to the hospital with my father hunched down beside me in the back of the ambulance, the Legionnaire at the wheel asked if I'd like to have the siren on — it wasn't necessary, he said, but they'd be glad to, for me — and I nodded yes.

Kosair's isolation ward for new polio "admits" was on the second floor of the Tudorstyled, three-story facility, and I was placed in the middle of three beds in a room on the sun-hot west side. The interior walls had glass panels above the waist level so that attendants could see into the rooms from the hallway and from room to room. Weak and lying flat on my back in an iron bedstead with thin mattress over thick board, all I could see — until I gained enough strength to sit up — were the white-masked faces of attendants moving back and forth, and the ceiling. One's feet were firmly placed against an upright board across the foot of the bed to keep foot muscles and hamstrings from shriveling.

As to sounds, for my whole two weeks in isolation there was the continuous wheezing and clanking of the iron lungs, the mechanical breathing machines, in a room across the hall. These stainless-steel cylinders on wheeled legs maintained — by air suction and pressure — the breathing motions of their torso-paralyzed patients, who were entirely encased in the machines except for their heads, lying even more helplessly prone than the rest of the polio patients. Only once did any of the machines cease their wheezing, during my third night in the ward when we were aroused by a flurry of activity by doctors and nurses across the hall. Subsequently we were told a twelve-year-old girl had died in the lung.

This experience, along with the relative conditions of my two roommates, taught me the greatest lesson of my life. To my right was a fifteen-year old boy from one of Louisville's poorer areas near the stockyards, where the epidemic fell heaviest. His throat and facial muscles were paralyzed so that he had to be fed with a tube and could not talk except for mumbles. To my left was Donald, a boy a year younger, whom I knew slightly from the ballroom dancing classes customary for 6th and 7th graders of our set. Donald had no obvious paralysis at all, nor was he as weak. Initially I seethed with envy. And then I came to realize the essence of that lifelong lesson: There is always someone worse off, and someone better off.

Because Donald could move about a bit, he was able to scramble to the foot of his bed and bring up the clipboard that gave our diagnosis and condition. "Poliomyelitis," he spelled out for me. We discussed whether this was the same as "polio" and "infantile paralysis." Finally we asked a nurse and had it confirmed. That was the first time I knew for sure that the dread disease had indeed got me.

Besides pain, sight and sound, the other vivid sense is smell, and for me the Kenny treatment indelibly associated polio with the smell of warm wet wool.

Long before synthetic fabrics like nylon and man-made down, we relied solely on wool and leather for cold-weather wear. It always got wet, either from rain, melting snow or ice. Winters were far more severe in the Thirties; I remember the Ohio River being so frozen over that people could walk across. And when you came inside, perhaps to warm yourself at an open coal-burning fireplace or a gas grille, the wool got warm and gave off a wonderful aroma. The smell used to be pervasive. Top coats were wool or leather. Caps were wool. Mittens and gloves were wool. Socks were wool. Trousers were wool. For me, since the summer of 1944, this wet wool smell has been the smell of polio. While there were the typical other sickroom smells, that of wet, hot wool has been everlasting.

While we were quarantined in isolation, the hot pack treatments continued day and night, with changes every hour. We learned to catch snatches of sleep in between changes. After awhile we were hardly even awakened by the process of unfastening "diaper" pins, rolling us around, removing cooled packs and replacing them with those fresh from the boiler. Not only were the packs steaming hot, but Louisville had been in the midst of a heat wave and drought all summer. Temperatures were in the nineties, occasionally over 100, and there was neither air conditioning nor even electric fans for relief.

Even though I was lying between roommates and constantly attended, one of the worst things about being in the isolation ward was the loneliness. Not even parents were allowed in. The only familiar faces I saw in two weeks of quarantine were Dr. Buttorff's on his occasional, brief check-up visits, and once — out in the corridor, the closest he was allowed — that of the Rev. J. Wilson Hunter, our Episcopal church rector. Both men had youngsters my age, but braved the threat to their own families to carry out their respective duties.

Thankfully my right arm was free from the hot packs — otherwise I was wrapped from my neck to my toes — which allowed me, as I regained strength, to read the 25-cent paperback books (called "pocket books" in those days) my parents sent up to me. I accomplished this by holding a book overhead with my unparalyzed right arm locked upright, lowering it to turn each page with my right-hand fingers. It was tedious, but I was far, far better off than those patients who couldn't even do that. Being able to read was a huge relief from the endless boredom of lying helplessly flat on your back day after day.

After the quarantine period ended, patients were moved from the isolation ward to recovery rooms on the first floor. From my new place in the east wing at Kosair, I still couldn't see anything but treetops through the window to the south because I was closest to the hallway and still bedridden. Hotpack treatments were reduced so that one could sleep through the night, and I began to get stronger. Most of all, it was great to see my parents again!

Because my mother and a family friend were both nurses and took special Kenny training to care for me, in mid-August I was released early from Kosair after only a month of hospitalization, in order to free my bed for a more recent victim of the epidemic.

I'll never forget being wheel-chaired down a rear ramp of the hospital and spotting my Dad's 1941 Nash parked under a tree on the hospital driveway. It was Freedom, and with nurses and aides and parents trying to restrain me, I rose to my feet for the first time in more than four weeks and shakily made my way the two-dozen steps or so to the car. My legs, though far from perfect, seemed to be okay. From my point of view that was an important milestone of recovery. Soon after, the best thing about being able to walk and getting home was being able to use the bathroom toilet and not hated bedpans and urinals. Again, I was so very, very more fortunate than so many Polios patients, especially those in the iron lungs and those with shriveled legs. My weight loss was so severe that I literally could hold water in the hollow between the bones of my good right forearm. I dropped from about 120 to 90 pounds, at an adolescent height perhaps two inches less than my present 5'11". With good home cooking, that part of my physique recovered fairly soon.

Kenny hot-pack treatments continued over the next nine or ten months in my parent's bedroom around the corner from the kitchen stove's wash boilers. My mother and our family friend nurse worked out a schedule so neither would get too tired changing the packs every hour from early morning to nine or ten at night. When not undergoing these treatments, I carried my left arm in a cotton sling for many months. Specifically, the biceps, triceps, deltoid and trapezius muscles were significantly paralyzed and shortly began to atrophy, or shrink away. In addition, many other muscles in my torso, neck and legs had to be relaxed, stretched, strengthened or re-educated.

At first once a day and then three times a week I was driven to the outpatient clinic in the basement of Kosair, where John Untereker started my muscle re-education process. For example, over several months, I had to learn how to breathe naturally, not with just my chest but also my abdomen. Indeed, there were all kinds of involuntary muscles, previously unknown or unnoticed, that had to be re-educated. I had to stretch the shrunken hamstring muscles that ran from my feet up the back of my legs to my back. I had to learn how to swing my left arm consciously as I walked so that it would not dangle uselessly. And even though I thought I could walk okay, even that process required months of therapy.

Except for the left arm, fortunately all my other afflicted areas recovered over time to just about normal. My left leg is a tad shorter than the right, a fact tailors catch every time I'm fitted for new trousers, but otherwise is scarcely noticeable.

Upon release from bed confinement in order to start the physical therapy, I was also able to start visiting with the neighborhood kids and do kid things, like sitting around talking or playing hide-and-seek. Without consulting anyone, a couple of weeks after coming home from the hospital I wheeled my bike out of the garage and rode it a block away for a gathering. I was determined from the very beginning not to let this disease whip me! And, what the heck, I'd learned how to ride one-handed with my broken arm a few months earlier. When "Dr. John," as the other polio kids called our Kenny therapist, heard about this escapade, he laughed but warned me not to overdo, as it might cause a muscular relapse and setback. I sure didn't want that to happen; my freedom was valued now.

In the meantime, we pondered what to do about school. I should have been entering the 8th Grade that September. Public school openings were delayed a couple of weeks because of the epidemic but my own outlook was uncertain. The solution was enrolling at a private school, Rugby, situated in a turn-of-the-century Greek Revival mansion about a mile from our home. The private school could be flexible about my lessons and class attendance. By October, morning hot-pack treatments were discontinued, permitting me to attend school for a half-day. After January, treatments were reduced to late afternoons after a full school day and evenings.

This routine of smelling hot wet wool and being literally steamed out to relax the muscles went on for eight months or so with occasional relapses until I departed for college in the fall of 1949.

The outpatient physical therapy treatments continued three times a week for three or four years, then dropped back to once a week, then once every two weeks and finally monthly. After the initial attention to muscular re-education and strength, therapy concentrated on trying to reconstruct what could be done with the left arm and shoulder.

For two years, there seemed to be no improvement at all, and I became discouraged. My mother took me to the leading orthopedic surgeon who worked with polio patients, of which there were literally hundreds in Kentucky. "How long has it been since the paralysis?" he asked. "Two years." "There's never any improvement after that long," he bluntly pronounced. He then proposed an operation to install a steel pin fastening my upper arm bone to my shoulder blade, so that by hunching my shoulder, I could lift my arm perhaps 30° outward. Now I was really discouraged. I already felt like a freak and didn't want to look and act like one as well. Discouragement was soon displaced by anger and renewed determination.

We went back to see John, the lowly physical therapist and Kenny practitioner. He listened to our account of the surgeon's prescription, careful not to dispute a senior member of the medical profession, an M.D. "Well, let's just keep working on it," he said, flexing my arm and instructing me to concentrate on thinking of lifting, hoping to trigger some forgotten muscle strand to cooperate.

At John's prescription, my mother installed a sling with a pulley arrangement on my bedroom closet doorjamb. With this arrangement I could practice raising my left arm several times daily, helping the dormant muscles by pulling down on the rope around the pulley with my good arm while thinking "lift" to my left.

Miracles do happen, and under John's care, my paralyzed arm's function improved more in the next year and a half than it had in the previous two years. I actually regained some degree of use in the biceps and triceps.

I continued at-home exercises and, when I reached New Haven, a several-timesweekly routine at the Payne Whitney gymnasium. One day when I was doing my exercises at the Yale gym, one of the assistant football coaches, not really noticing what I was working on, came up and said, "Say, you've got sturdy legs. You play football?" I was flattered but this was one hurdle I knew I'd never be able to jump, if for no other reason than my left arm and shoulder were extremely sensitive to pain from impacts because there was little protective muscular tissue over the bones. But I did manage to cross some other barriers.

The ever-optimistic encouragement that John imparted to me, the ethic of never giving up, the determination not to become discouraged, infected many others as well. Some polio victims were able to buy into John's enthusiasm but, sadly, not all. From the beginning of my physical retraining, I learned to improvise. At the very simplest, I learned to put on a shirt or coat by pulling the sleeve awkwardly up over my left arm and up to my shoulder with my right hand, not pushing my left arm down into the sleeve. Rather than reaching out to grasp objects with my left hand, I learned to crawl with my left fingers across whatever surface was available to put the object in range. Or fasten my left hand onto my right, using the right to carry the left into position. Today I do this routinely, automatically, never thinking it odd or awkward. More complex adaptations were required for driving a car. As soon as gas rationing was discontinued at the end of World War II, many of my peers were learning how to drive, though underage for licensing. After some difficult driving instruction from my very nervous father, I tried

driving on my own when my parents were away on a business trip, starting up the Plymouth that my mother had inherited a few months before and, over a couple of days, teaching myself the basic skills. When my aunt, a retired teacher who was staying with me, asked my parents if doing this had been okay, my father was so relieved from not having to teach me that there were no retributions. Teaching myself to drive was especially challenging in an era when cars had "three-on-the tree" manual transmissions, steering was not power-assisted and manual left-arm signals predated electric turnindicator lights. While shifting gears with my right, I steered by holding my left arm in my lap, fingers gripping the wheel, nudging the arm up with my left knee as required; to get leverage, I crawled my fingers up the circumference of the wheel where gravity of the arm's dead weight could be used to pull it right or left. For signaling turns and impending stops — as required by law — I would first reach across with my right arm to crank the driver-side window down. (Power windows were far off in the future.) Then I would hunch my left forearm onto the window sill. For a right turn, I would crawl my fingers up the front of the window frame until I could catch the wind in my palm and flip the forearm back to an upright position where I could lock the elbow joint at a right angle; for a left turn, I would let the wind fling the arm straight out, locking the elbow straight. Signaling a stop was easy, as all I had to do was drop the arm down alongside the door. These signals required a degree of planning because the car had to be moving to create the wind pressure necessary for the motions.

My stubborn refusal to "give in" to polio has continued for many decades. Although popularly priced cars began to offer automatic transmissions in 1950, I didn't succumb for my personal car until 1991 and still drive a "stick" as readily as an automatic. However, as soon as electric, self canceling turn signals became available as accessories around 1950, I mounted one, and I compromised in the late Seventies by finally ordering power steering and power windows. Another option I readily accepted was the mechanism to adjust outside mirrors by remote control from the instrument panel. Today, all these one-time options or accessories are standard equipment. I still steer, unconsciously, one-handed much as I learned over 60 years ago, with left arm in my lap, fingers guiding the wheel from the bottom of the rim. Curiously, my oldest daughter steers the same way. I suppose she observed me during her formative driver-learning years. Nevertheless, drive-up ATM's, parking garage ticket-dispensers, curbside mailboxes and such are still sources of frustration, requiring me to reach across with my right arm to use them. Further improvisation became necessary when another psychological aspect of my recovery manifested itself — a need to prove my manhood. It is hard to explain how inadequate a teenager afflicted with polio feels. In the 9th grade I managed to earn a letter in soccer, a little known sport in those days in Kentucky, mainly because I was of a good size for my age, had regained full ability to run hard — and having only one good arm didn't matter. Two years later a pair of miracle workers came my way. The school had hired two young war veterans to coach basketball. One day at recess, they came up to me and the hefty blond one said, "Why aren't you out for basketball? You're tall and fast on your feet, and we could use you." "Oh, I can't play basketball, I've only got one good arm," I replied. They looked at one another, and the slender dark-haired coach said, "Look here, I caught a German shell in my arm during the Battle of the Bulge. I have full disability." He took my sleeve and tugged me over to his new Pontiac sedanette. "See the special steering wheel and the

Hydramatic transmission? The Government paid for those, for my disability. I learned how to play basketball again, and we can teach you, if you'll give it a try." I couldn't say no.

And they did teach me, how to shoot one handed, how to move the ball around, how to use the plays and one-on-one tactics to my advantage.

I wasn't the greatest player, but I did win my letter. I had the satisfaction of being a good ball-stealer because of my speed, height and ability to anticipate competitor's moves.

There were other barriers to be overcome: ROTC, National Guard, intramural softball, private pilot's license. I imagine every Old Polio has his or her own list. My career as a journalist– author-lecturer has been unaffected by polio. Only in recent years—later than most Polios-- have I become afflicted with Post-Polio syndrome symptoms like fatigue---or could it be the 80-plus years on the odometer? My main frustrations/annoyances are new-found difficulties in fastening shirt buttons and tying shoelaces or a necktie (therefore I mostly wear pullovers), holding a dish in only one hand at buffets, carrying a tray in cafeterias and placing carry-on luggage in airline overhead compartments.

Until recently I played a hacker's golf game, rarely breaking a hundred, but enjoying the exercise. I've never blamed my links mediocrity on polio; I think I'm simply not that well-coordinated. I played for years with some colleagues who were surprised to learn I had a paralyzed left arm.

Indeed I've had acquaintances for decades who, noticing me pulling on my coat or perhaps not swinging my left arm fully when I walk, ask if I "just" hurt my arm. "Yeah, years ago," I tell them. When I explain, they more often than not will comment, "Well, you really came out all right, didn't you." "There's always someone better off and someone worse off," I tell them.