Quod Erat Demonstrandum · Jonathan Holden

ALL BEAUTY BEGINS WITH GEOMETRY. This is to say, simply, that it begins in imagination. Points, lines, circles—things which we refer to matter-of-factly—do not exist. The "plane" which a running back "breaks" when he scores a touchdown does not exist. It is ideal. The "strike zone" in baseball does not exist. The move of the Knight, in the game of chess, is an invention: one diagonal square plus one "straight" square forward or vice versa. The late poet Richard Hugo was poignantly conscious of the geometrical basis of beauty when he began his poem "From Altitude, the Diamonds":

You can always spot them, even from high up, the brown bulged out trying to make a circle of a square, the green square inside the brown, inside the green the brown circle you know is mound and the big outside green rounded off by a round line you know is fence. And no one playing.

To change the terms only slightly: the itch to play tennis is the aesthetic impulse which is the basis of all art. It is triggered by the beauty of an abstract idea, of a structure against which one is invited to measure oneself and thereby to define oneself. Like baseball or poetry, like carpentry or mathematics or music or even love, tennis is an art.

The art of tennis might be called the art of "Applied Geometry." Anybody who has played much singles knows what it teaches: how to wangle or force a geometrical advantage from your opponent and, in one quick prying motion, like breaking somebody's arm, use it. Except nobody gets physically injured. It's like feeling out with the tip of a wrecking bar, a crack, a point of leverage, and digging it in the crack and yanking to complete an idea. First comes the idea: then must come its physical embodiment. The idea alone, though beautiful, is easy. But though it is easy—in fact because it is easy—the idea alone is insufficient. Its embodiment is another matter entirely. Though it may look easy to the spectator, the difficulty of its physical enactment is almost indescribable. When the poet W. B. Yeats wrote "Adam's Curse," he might just as well have been

writing about the art of tennis:

I said 'a line will take us hours maybe,
Yet if it does not seem a moment's thought
Our stitching and unstitching has been naught.
Better go down upon your marrow bones
And scrub a kitchen pavement, or break stones
Like an old pauper in all kinds of weather;
For to articulate sweet sounds together
Is to work harder than all these and yet
Be thought an idler by the noisy set
Of bankers, schoolmasters, and clergymen
The martyrs call the world.'

I still, when stepping onto a tennis court and opening up a can of new tennis balls—Psssh!—as when pulling the tab on a can of soda-pop, sense immediate potential. The balls are so lively they're a family of yellow rabbits trying to tumble from your hand. You stroll out on the court as onto a stage, tuck two of the three rabbits in one pocket, and with a move that's so practiced it's no longer practiced, turn, pull the third rabbit out of your hat, and with a slight lifting motion release it politely over the net, tame. You're a boy again. The racket is weightless. You can make statements with it. You can reply with it. Everything you see in front of you is a good idea.

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In the late fifties, the sport of tennis was nothing like the sport that it is now. The tennis balls weren't yellow but an anemic white, like medical supplies. Except in St. Louis and Southern California, tennis was marginal, like golf. It was usually associated with country clubs, "field clubs," at least in New Jersey. Those were the days of wooden rackets, and I owned the best racket available, an amber-shaded, laminated Tad Davis Imperial—\$28.00 at Ken Mills Sporting Goods in Morristown, New Jersey.

Morristown High School had three cracked, macadam courts. The courts were slick, like slate blackboards—three sections of U.S. 22 across which a net had been stretched. The lines on these courts had been mostly erased through wear and had to be interpolated. Yet even the dim sketches that

remained suggested enough geometry to start anybody with a tennis racket leaning left or right, imagining pulling the ball crosscourt or slicing a low liner into the opposite field up the line. Tennis courts are like baseball diamonds or chess boards. Set them down anywhere, and in the midst of traffic, smog, even in the ugly, gray sprawl of a place like New Jersey, a small bright order is established.

The courts on which I learned to play were across town in a public park—Ledgerwood Field. They were called "clay" courts, but they were covered with a layer of greenish sand to the depth of a thumbnail. Wet and rolled, they were the slowest courts I've ever played on. It was on these courts that, after studying books from the library and trying to copy the few players with developed ground strokes who came to Ledgerwood, I and my best friend, Pat Burke, spent most of our summers between the ages of eleven and fourteen hitting and hitting and hitting and hitting and, sometimes, playing sets.

As with most initiation experiences, I can remember the time when we both, together, began to "get it"—when we began to return the ball to each other without arcing it—our strokes started to look the way strokes were supposed to look: time after time they barely cleared the net. I had learned how to keep the ball low on a single afternoon—it was like a revelation—when I discovered that if I positioned myself so that the incoming bounce had begun to drop slightly below my knees, and I hit it hard with my forehand (like throwing a baseball sidearm, the book said), I could rip it.

Simply keeping the ball low and flat and returning it without error is addictive, the pleasure so immediate, the rhythm into which one has fallen so compelling. Whock! . . . Whock! Suddenly, in our white shorts, our seriousness, we knew that we looked like men who knew what they were doing, men who had learned all the subtle economics of tennis, picking up a stray ball with one's racket by patting it lightly into life and scooping it up. When Pat's shots were "long," instead of breaking the trance of the rally, I'd drive them back on the volley or the half-volley. Formal lessons with a pro can impart expediently the fundamentals of good stroke production, but for a sense of place and anticipation on a tennis court and for all of the intuitive intangibles, like when at the net to pull your racket back because the ball will go out, there is no substitute for experience: thousands, tens of thousands of instances, of homemade "experiments."

In my senior year of high school, I played first singles for the tennis team. To be on the tennis team rather than the football, baseball, or basketball team was almost a dishonor. We were misfits. I was so skinny I looked like I'd escaped from a concentration camp. The Rubenstein boys, Billy and Richard, were overweight and wore glasses. We did not resemble the cocky, crew-cut tennis stars with California tans like Tony Trabert. None of us was an athlete or had ever set foot in a country club. None of us had ever had a lesson. Our coach, a kindly, stooped man named Mr. Wickes who taught shop, played like a retiree playing shuffleboard. Mr. Wickes's advice—good advice, actually—was above all to keep the ball in play.

At the ragtag, public-courts-level of tennis ("street tennis") where I found myself, the absence of tennis lessons was sometimes a kind of advantage. I was able to beat better players than myself, because they were locked into a narrow, somewhat snooty tennis decorum. To them, it was better to die honorably than to live like a rat, better to drive handsome but high risk passing shots into the net than lob; better to try a towering, high-kicking "American twist" second serve than dink it in or, as I did, take a little off while applying some spin. To them it was better to try for glamorous outright winners and barely miss than to let a point develop like a legal argument or a geometrical proof until the concluding step was so obvious that the final stroke wasn't difficult: it was self-evident.

In public, high school tennis, the strategy was crude—hit it to the guy's backhand and rush the net. Few of my opponents would use drop shots or lobs. I did. It wasn't their geometrical advantages that made them effective so much as their psychological advantages. It is infuriating to lose a point to a drop shot, and even more so to be sent stumbling frantically toward the net to shovel one out of the dust only to have the ball flipped neatly over your head. When, early in a match, my opponent would begin in a loud, whining voice to scold himself in public, I knew that I had all but won.

Our road matches found us in places I would have a hard time finding my way back to, places with names like Bloomfield, East Orange, Elizabeth, Westfield. They were all vaguely in the vicinity of Newark. It wasn't clear whether they were the names of towns, suburbs, or cities. They blurred together: the same pharmacies, Shoprites, package stores, auto showrooms; the same drab, Victorian-looking high schools, the same sooty railway stations along the Erie-Lackawanna Railroad.

Generally, we played in public parks. Some of them were concrete, with wire nets. By the end of a match, the ball would be gray and threadbare. One of our matches took place in a dustbowl. The cranks by which you raised or lowered the net were broken, their ratchets were missing teeth. The net on my court sagged to half the official height. My opponent was a tiny, prim boy-probably a freshman-with an accent that I thought must be Australian. When he hit the ball low, it would stall and slither in puddles of reddish dust. It was impossible to prepare for an orthodox shot. I soon realized that I would have to move up, play almost at half-court to reach his low shots. Our points were ugly. They came in spasms. I began to see that my intention of trying to maintain handsome ground strokes was perverse. It could cost me the first set. Out of frustration, I hit what we used to call a "chop shot"—an ugly stroke with a lot of backspin. It landed in a soft pool of dust and slithered under the boy's racket. He scowled. I began to hit more chop shots. Some of them seemed to speed up, to skid as they landed. Others simply died like slugs, in puddles of reddish powder. The boy would charge them, flail at them and miss them completely. The boy's primness began to look bitter. I took the second set 6-0. There was no pleasure in it, only a kind of relief not to have lost to a boy whose game was worse than my own. We had not been playing tennis. We'd been playing something else, something without structure, without clear boundaries. It was anarchic, forlorn. There were no line judges, no umpires. Whether a match would be farce or not was entirely up to us. Playing Chatham High, on our own Ledgerwood Courts, I encountered a boy who began to call "out" shots of mine that I could see were clearly "in." Midway in the first set, he sliced a forehand toward the center of the baseline. I prepared to play it. It barely grazed the back of the line. "Deep," I called. He fixed me with a stare of reproach. But he didn't hook me anymore.

One of my ten wins that spring was against a boy named Roger Shepherd, of the Shepherd twins, who played first and second singles for Livingston High School. In our first match, Roger had beaten me in straight sets—6–3, 7–5. The loss had left me puzzled. He was so tiny that his serve had no force. It invited one immediately to drive a forcing return. A better player than I was—one with "real" rather than homemade strokes—would have demolished him, 6–0, 6–0. But Roger was a careful player, and his backhand was adequate. I was used to players who would give me points by

making mistakes. Bewildered, I watched the match slip away from me so subtly it was over almost before I knew it. How had it happened?

Early in our rematch two weeks later I noticed that the same thing was happening. I wasn't playing badly, yet Roger won the first set 7–5. Toward the end of the set, as Roger, after following the time-honored tactic of hitting it to my backhand, was dancing and feinting the net, I mis-hit my return. It floated toward Roger, higher than I wished; but as I gathered myself to scuttle for his return, something amazing happened. Roger was racing back to the baseline. The ball had gone clean over his head. I had forgotten how tiny he was. I hurried to the net at once and put his return away.

At around three-thirty my mother, Jaynet, arrived to watch. She was joined by my girlfriend, Beth. It was a hot, humid afternoon—eighty-five degrees in late April. Roger wasn't coming in to the net anymore. I was merely hitting lazy, arcing strokes to him, "moonballs" as they're called now. Occasionally, if one landed near the baseline, it would bounce so high that Roger would have to leap in the air to reach it. It was like playing a midget, Alan Ladd without his platform, without stilts. But Roger was determined.

By around five-thirty, commuters began ambling home across the park. Beth had long since left, bored by such egregiously ugly tennis. The rest of the Livingston team had left. There was only Jaynet, Mr. Wickes, and the Livingston coach waiting for it all to be over. Roger's strokes had completely broken down, and I was rushing the net regularly. I won the final set 6–2. The match had lasted three and a half hours.

I was so exhausted that my very being seemed to ache. Although I had strained no muscles, it felt as though I had somehow hurt myself. I knew this was how Roger Bannister must have felt after the final sprint in the first four-minute mile, collapsing into the arms of his coaches. Dragging myself back across the mown park grass toward the car, past the commuters straggling home with their briefcases, I wondered at myself a little. If this was what it took to win, I wasn't sure it was worth it. This kind of tennis was no longer fun. It was drudgery. At home, alone over the upstairs bathroom toilet, I retched. Nothing came up.

From that time on, in match play, I recognized immediately those opponents who, like me, in a supposedly friendly competition, *had* to win. They were like people dying of starvation, but—and this was what was

ludicrous—dying unnecessarily. Their anxiety was perverse. I felt almost sorry for them. I realized that to beat them would be almost like doing them personal injury and that, at some level which they themselves were partly aware of, they actually *banked* on this. They banked on your pity for them. Their desperation was like an odor they gave off which made all my hackles go up. I immediately hated them. They forced you to choose: either inhale the odor of their pain and use it for fuel—hate them back—or play ironically. Unless they were far worse than you were, you had to hate them to beat them.

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Even when I was a boy in high school, one of the highest pleasures I could imagine was, someday, to teach my son (That I would have a son I had no doubt!) to play tennis. I had already planned how I would do it. All I'd have to do would be to coax him onto a tennis court, place a racket in his hand, and give him enough instruction—get your racket back beforehand, move toward the ball—so that he could taste what it was like to hit it. A single taste was all it would take. Just one. Whereupon I would float it back to him at an optimum location and velocity. We would start slowly and work up. The aesthetic satisfaction of it would seduce him. The pleasure of hitting was what I wanted him to know. As for the bitterness of competition, I knew more than I wanted to know about that: how it can twist a person. I'd never push him into competition. He could find out about competition for himself.

My seduction of Zack happened exactly as I had planned, in fact better than I had planned. Whereas I had been born fragile and small, Zack had been born normal size and is now over six feet tall. His tennis developed so quickly that, by the time he was fourteen, we both knew that it would hurt his game to hit with me. An indoor tennis facility, Cottonwood Racquet Club, had been built in town. We had joined, and Zachary had taken lessons with the new pro there, a man named David Kosover. Kosover taught Zachary and Zack's tennis buddy, Aaron O'Donnell, a two-handed backhand which was so spectacular that when the two boys would be working out together the ringing of their strokes cast a sort of pall over the players on the other two courts, who would keep tabs on them covertly out of the corner of their eyes.

The boys resembled stars. Watching them hit was like watching two strangers. They wore remote expressions. The public decorum of tennis is all understatement—to act as if the spectacular were routine. In the words of Yeats:

Yet if it does not seem a moment's thought Our stitching and unstitching has been naught.

The two boys were thrilling to watch. And they knew it. They were far more beautiful than I had ever been or could ever hope to be. That was the way I wanted it. Isn't it the ideal of most of us in the middle class that our children do better than we have done, take advantage of opportunities that had been closed to us? Years later, I wrote a poem about watching Zack hit with Aaron:

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My son, 14, juggles himself lightly on his toes, pivots, steps into a forehand, idles again on his toes, loose and waiting,

his manner insolent, almost bored as he leans down to accept it, like a lion ambling beside a zebra,

collecting its timing before launching on the back of the straining neck. I think of the flared nostrils of stallions,

the impersonal, casual brutality of a famous clean-up hitter swashing his bat, waiting, expecting to score.

As a boy, I already knew, playing First Singles in high school, that one could be this way, poker-faced, lazy, as if negligent, as if it meant nothing to dispatch the diagonal winning volley,

the affair were beneath one, unworthy of the faintest grimace, merely one solution to a chess opening,

the Queen your overhead, the rook your forehand or backhand up the line, the bishops cross-court, and always both knights poised,

for a drop-shot. The court was a clean page of possible lines, its four right angles

balanced me. A geometry problem. The final stroke in a point meant Q.E.D. and something I couldn't have known then—

the insolence of my body.

When Zack was twelve-going-on-thirteen and just starting his lessons with Kosover, our games were, for a brief moment, equal, but I never challenged him to a set. Even then, he would have been hard for me to beat. I was pretty sure I could, though, by following the drop shot/lob strategy that I had against Roger Shepherd. I didn't. I would have had to try too hard. I would have had to hate him while we played, and he would have smelled it. It would have spoiled everything. It would have introduced to our friendship that same hackle-raising odor, that same despair which I could remember from my high school matches when I had to win. I could remember too well how much it hurt to lose. It would wound him to lose, especially to me. Let other people wound him, but not his father.

We did, once, when Zack was thirteen, while waiting for Aaron to show up at Cottonwood, play out a few "points" without keeping score. I had a nasty spin serve, made all the nastier because I'm left-handed. I tore one in his direction, taking off behind it toward the net. His return was past me before I knew it. He'd handled it effortlessly with his forehand, crosscourt, yards out of my reach. On the deuce court, I spun a better one, to his backhand-like a curveball low and away over the outside corner. He stretched slightly, chipped it up the line. I caught up with it in my backhand corner, chipped it toward the middle of the court—a semi-lob—and regained position on the center of the baseline. If Zack took my return at the net, he could dispose of it with no effort at all. But for some reason he was still dancing at the baseline. This point could develop into something interesting, into a possible idea. What would he add to it? Zack hesitated, uncoiled with his backhand, sharply crosscourt. The ball dove and slithered, and quick as a frog's-tongue was gone. It was no contest. I found myself giggling. He smiled too, tentatively. We played a few more points. Then Aaron came. I shook Zack's hand. "Wow!" I said, thinking how much I liked being beaten by him.

Around the age of fourteen, Zack began to spend entire summers playing in junior development tournaments around Kansas and in qualifiers for a league known as The Missouri Valley. The various tennis parents in town got together and car-pooled. Watching Zack, with his perfect cracking ground strokes, play in tournaments brought back to me sharply all my years of playing competitive tennis, and I began to derive intense vicarious satisfaction from his victories. I hated his opponents just as blindly as I had hated the kids I used to play in high school, and I relished Zack's decorum on the court, his poker face, how woodenly, insultingly polite he was, and the way he would lean down to accept the first practice ball, the gesture so routine that it looked almost weary. "Some more overheads?" Was there something almost calculated in his willingness to oblige? Was it patronizing?

The spectacle of his confidence seemed to release the spoiled child in me, an imperious, sneering anger at the whole world, a bitterness I'd never known I'd had, because it seemed groundless. What could it go back to? All I could guess was high school. In high school, I knew that I was doomed—cursed with a scrawny body I despised even more than the girls who, watching me as a baseball pitcher, used to screech in chorus, "Hey, Skinny!" During class changeover times, I would slide discreetly like a mouse between clusters of kids, careful to avoid eye contact with the

athletes shouting to each other, slamming lockers, trooping up the hall in twos and threes as if they owned the building. It was safest not to be noticed, not to be singled out as different, even though I was different. Maybe it went back to an aesthetic arrogance I'd kept guarded like a dirty secret even from myself. Had it been defensive? I thought of the supreme disdain which bellboys and waiters hide from the people whom they are serving, and remembered caddying at the Golf Club in Basking Ridge, New Jersey, how the rich old ladies would address me as if I were a door: "Caddy? Caddy?"

"Yes Ma'am."

My two summers driving Zack around Kansas to various tournaments, fetching and carrying his supplies, keeping him stoked with Big Macs, Whoppers, and fries, and sitting sedately with the other parents in lawn chairs watching the boys toil in monotonous ninety-five degree heat seemed in many ways a forlorn reprise of my senior year in high school. The quality of the tennis was much higher than in 1959, and the equipment (Zack's three graphite midsize Princes made even my wonderful, old Tad Davis Imperial look and feel like a club) was improved. The balls were no longer a fast-fading white. They were now yellow, or two-color. The boys' attire was shiny. But the marginality of the tennis world seemed, if anything, even more oppressive. Part of this sense of marginality was Kansas itself. The small towns we visited—in which the literal center of social life was either McDonald's or Pizza Hut—seemed, in the faded sunlight and the humidity, almost apparitional, like dilapidated stage sets from another century. But the people were different.

The "higher" one climbs in the haute bourgeois world of young people's tennis, the more desperate the competition, the more spoiled and imperious the children seemed to be, and the more snooty and ostentatious their parents. When Zack was fifteen, at the height of his tennis development, in one Father/Son tournament I was his doubles partner. It was Parents' Weekend at the expensive co-ed prep school which my daughter had been attending. There were eight teams, and two of them—an investment banker and his son Brad (a freshman), and a surgeon and his son Seth (a junior)—apparently took the tournament too seriously. In the first round,

Zack and I played the surgeon and his son. Uniformed like frogmen in glossy nylon warm-up suits, laden with multiple racquets, they conducted their warm-ups in an edgy, slightly pedantic manner as if all their lives they had had to endure playing tennis with people beneath them, who were not in the right club, people who were ignorant of even rudimentary tennis decorum.

At length everybody decided he was ready, and the surgeon tendered his racquet: "p or d." Zack said "p." It was "d." Zack would receive. I waited tensely at the net. The surgeon served stiffly, a three-quarter-speed spin serve to Zack's backhand, and charged the net. Crack. Zack had socked it flat out as hard as he could. Nobody could touch it. Love fifteen. The surgeon served to me—to my backhand—and started toward the net. I tried to lob it over Seth, but he got a racquet on it and dinked it into the middle of the court. Zack seemed to coast into it. It was gone between the two of them up the middle. By the second game, they had figured out that if they hit it to Zachary, the point would be over. They would have to hit it to me.

It was humiliating to be the weak point of our team. It was like being assigned to right field in grade school. But the humiliation which Seth and his doctor-father were about to suffer was going to so much greater than mine it would be well worth it. Soon the surgeon had begun, in a peevish voice, to give Seth instructions. "Keep your eye on the ball, Son."

Two strategies had emerged. Theirs: to keep the ball away from Zachary, at all costs. Ours: for me to lob and charge the net. If I couldn't reach their return, I would wait at the net, racket poised, for something from behind me to go whistling past my ear, sending Seth or his father lunging to reach it. By the third or fourth game of the first set, they knew they were going to lose. Seth's thick-lipped, pubescent face had a bland expression that was part resignation, part pout. It seemed to suggest something like, Aah, fuck it! Late in the first set, Zack and I were up 5–3, the score was 40–15, and Zack was serving to Seth: set point. Zack's sliced second serve tugged Seth like a marionette into the doubles lane. Seth reached and lobbed it over me. The ball came back past me to Seth again, but it was alarmingly shallow. At midcourt, Seth wound up and pasted it straight at my face. I ducked, then turned automatically to register the result.

"Long," Zack called in the bored voice one uses to indicate a fact that is so obvious, so routine that it might as well go without saying. Seth wasn't so sure. Nor was I.

But that was the set. We took the second one 6–0. Although I've never beaten up another person, it went as I imagine a fight would go between a street fighter and somebody with a black belt. It was totally unfair. While I stood by, Zack dispassionately beat them up. Zack was going to teach them a lesson—a lesson in the aesthetics of Applied Geometry. They wouldn't admit it, but they were going to end up admiring the source of their defeat. He was going to force them to admire it against their will. We were going to make them respect Beauty.