So boxing isn't an exact science, the calculations of perfect outcomes beyond plotted increments. And yet the metaphorical alliteration – the sweet science – sustains itself as poetic analogy, more than a hint of irony suggested in the compounding of sweet and science. What if we did indulge ourselves further, as if examining the fistic realm from the perspective of alternative science, formulas at the ready to try and put some of boxing's illustrious past – near and far – into something like an exact(ing) perspective?

Thee most basic mathematical formula which one might use to investigate the fistic realm would be force x speed = power. We don't necessarily think of George Foreman or Sonny Liston or Alexis Arguello or Archie Moore as being blessed with tremendous speed and yet their respective quotients of applied force, well, that's never been called into question. Weight transferred, aliened with neuromuscular contraction along honed motor muscular stability, the force point moving through the target. Good night and down goes Frazier, Patterson, Mancini, and Durelle. Indeed, our calculations are only intimations of the empirical, with determining proofs counting only in the record books. But we do remember how nearly perfectly power was applied to Ken Norton in Caracas, punching with impunity, the final uppercut by Foreman cementing him into boxing history as the wrathful spirit of his era in heavyweight boxing, title belt or not, Zaire or not.

Speed does kill, does transmute substance into style and back again as in the searching or scorching punches of Sugar Ray Robinson, or his named-sake Sugar Ray Leonard and certainly pristine prime Roy Jones Jr., aka RJ.J. At this point we might as well make allowances for another calculable illusion, speed. Speed – force = m (mass) a (acceleration) – is real and illusory, rendering time, as in an opponent's timing, a muddled insignificance. They have no time to defend, only a slipstream of movements to trace and paw after. The decisive moment of discovery and delivery are instances of received punishment, in multiples, disorientating or concussing. Ray Robinson made speed in a boxing ring up in lights, jazzed, cool. Willie Pep had made speed artful, dogging and reinventing definitions of mastery as defensive measuring. Muhammad Ali would make the signature of his telegenic speed applied transcendent, until Ray Leonard would make it the fashion statement of ultimate vanity, Macho Camacho and Roy Jones raving and rapping out speed as the ecstatic personification of over-the-top ego.

There was to all of them, save Robinson, more than a hint of denying the opposition anything, if at all possible, all the while living off flourishes of pure inject-able acceleration. We might digress to clarify this notion of acceleration by simply referring to Donald Curry or Terry Norris, the "Cobra" and the "Terrible" one, who made displays of instantaneous speed markers in time that Benny Leonard and Gene Tunney and Henry Armstrong would have recognized as part of their legacies to the sport they ennobled.

Average Acceleration = V end + V beg over time; indeed. The velocity from beginning to end could be calculated now, captured in high definition, near perfect resolution video telling us the launch point of a hook by Floyd Mayweather, with the aching velocity beginning only to end at

the sub-cranial endpoint or the made in Montreal jawbone of the king of New Jersey, Arturo Gatti. Splat! The math or science adds up, in this example to what looked like criminal intent, displayed as unadulterated excellence proving that this bonanza of a super-promotion was no real fight at all. All of that average acceleration by Mayweather careening of the only slightly better than average edifice of the loveable “Thunder” Gatti was, from beginning to end, pillar to post, the real formula for disaster. There really was more than a hit of Ray Robinson and Carl Olson about Floyd Mayweather and Arturo Gatti, except that “Bobo” never did photograph anywhere near as well as Arturo.

Think of Jack Dempsey or Joe Frazier or Felix Trinidad letting go with their famous left hooks. Technically we could invoke the formula A = V2 over R to trace something like arch of the arm as a hook understood as the speed of the arm squared in relation to the radius of the hook. No, we don’t for a moment think that kind of mathematical awareness would have helped Jess Willard or Luis Firpo or Bob Foster or Jimmy Ellis or Maurice Blocker or Fernando Vargas or Ricardo Mayorga avoid the individual fates that befell them. The athletic and all too human application of scientific logic punched out by the all-time greats of boxing looks so much like inevitability, at least after the fact. Perhaps, John Tate would disagree, even if he could remember that fifteenth round against Mike Weaver. He was, after all, just forty-five seconds away – over 14 rounds – from successfully defending his WBA championship. Not that we can use mathematics or the science of bodies in motion to determine exactly why Weaver should have reversed what looked so plainly as his looming fate.

And boxers and their chief trainers give off signals that they have made plans amounting to the calculus of successful engagement. Mostly, they try to avoid talking in details about their plans, their fight plan secrecy suggesting that calculation makes all the difference, their collective efforts something more approachable than just probability. When the best laid plans go wrong or entropy or circumstance or opposing genius denies a fighter the execution of his version of the sweet science, chaos reigns. We might remember the formidable Danny Lopez walking into the sharp-shooting hail of punching excellence from a twenty-one year old Salvador Sanchez. Sanchez proved yet again, that great fighters do make things happen, turning assets into determination realized as the ultimate in attainment.

How cruel the science of boxing when the mathematics of application are reversed, as speed becomes the sword of humiliation as with Terry Norris dispatching the legend of “Sugar” Ray Leonard. Power also seems to ebb and flow, alternating fortunes, stripping titles only to restitute championships as with Tony Zale and Rocky Graziano. The true heart and nature of those contests are beyond empirical or statistical measure, except perhaps to suggest that like with the figure of Joe Frazier bouncing up and down off the canvas in Jamaica, January 22, 1973 against the 22-year-old George Foreman we can suggest the speed of a falling body. If we ignore the factor of resistance as incidental, g = v for velocity as speed, yet again, = the square root of – is it? – 2gd… well, we are close, perhaps, only save in the knowledge of gravity as 32f/s squared. Though Stanley Ketchel looked like poplar tree felled with one enormous swing of Jack Johnson’s axe. Frazier seemed to almost defy gravity, his body never set to rest, despite the repetition of Foreman’s applied power. And seeing or remembering Foreman taking the world championship in Jamaica, is to relearn the form and formula for applied power.

Artistry and aesthetic totality can also be turned into what seems like mathematical certitude; no matter how often boxing can also deny its existence. Larry Holmes proved that by extinguishing the iconic figure of Muhammad Ali in Las Vegas, the date, the excruciating points of reference not really mattering, except in Shakespearian terms. Only the fact that Holmes was his master, turned from pupil to executioner need prove how certain the measuring of falling bodies can become for those who try to deny the laws of the knowable universe, scientific or moral.

Then again, in boxing, the only certain outcome is determined by more variables than could reasonably be calculated. Misrule and chaos can be tamed by discipline and excellence for one fight, then another, but not forever. It can even take the form of planes crashing 2 miles south of Newton Airport, the ring only a memory. Even if we knew, could know, a fighter's ultimate destiny such is the paradox no applied mathematics or scientific understanding can fully illuminate.

It's just that in that ring, under the hot lights, we tend to see things with either emotional partisanship or clinical scrutiny, things most of us can only approximate.