

THE PELOPONNESIAN WAR

“I gnosi choris katanoisi den einai tipota”
Knowledge without understanding is nothing”
(Thoukydidis, Thucydides)

CHAPTER ONE: THE DISCOVERY OF B(3)

Having arrived in Ithaca from IBM Kingston New York we were happily settled in the mythical island which was the end of the travels of Odysseus. We hoped that it would be the end of our endless travels and that we would at last be allowed to work in peace and harmony at the Cornell Theory Center, free of the petty ignorance and persecution I describe in the second volume of my autobiography on www.aias.us. The Cornell Theory Center had been founded by the Nobel Laureate Kenneth Wilson a few years earlier and it was a new building near one of the gorges of the campus of Cornell University. Wilson and Kalos had to keep lobbying Washington to keep it open, but it was eventually ruined by the Spartans, closed down a few years after I left. The Spartans have ruined every place I attended: Pontardawe Grammar School, the EDCL at Aberystwyth, Physics at Bangor, Chemistry at Swansea, the Cornell Theory Center and physics at UNCC. The only thing left standing is AIAS / UPITEC. The Spartans are now attacking my primary school in Craig Cefn Parc, mindless torries in London. Power corrupts, absolute power corrupts absolutely. We had found a home at 77 Lois Lane, Commonlands, the mythical street of Superman and Lois Lane among the woods of New York State. At Cornell, Man and Superman studied together. The Spartan supermen of physics were the standard modellers who lived next door to chemistry, once ruled by Peter Debye. The campus was built high above Lake Cayuga, one of the Finger Lakes.

IBM had started a unit at Cornell Theory Center which housed a supercomputer. As a visiting scientist I could use the supercomputer and my first wife had a job with IBM at the Theory Center. I was a Visiting Scientist at Cornell, appointed by Malvin Kalos, and Ithaca seemed like a remnant of the late sixties, when Campi all over the United States exploded against the Vietnam war. I should have stayed at Cornell as long as IBM had a unit there, but I made the mistake of going to Zuerich for a year because I wanted to be paid for my work and to help my best friend. We should have stayed at Cornell Theory Center, in our little house at 77 Lois Lane, despite the fact that I was not paid anything. This was often the case with me, because of my scientific views, based on objectivism and free thought. The military Spartans of the academic world do not allow free thought, it endangers their funding, a free thinking soldier is a threat to the bronze, dogmatic phalanx. Naturally I hoped for the dignity of being paid for my work. After all, this is the American dream, and rightly so. After a run of the mill year at Zuerich, where we were not very happy, we found on our return to Cornell Theory Center in about September 1991 that both our jobs had gone. We had no warning that this was going to happen. I was the most productive of the scientists at Cornell Theory Center during my time there and also produced a prize winning animation with Chris Pelkie, who was very sore at not being given first prize in the supercomputer competition for the U. S. and Canada. I sympathized with him because he is a brilliant animator who put a tremendous amount of work into the animation (now on www.aias.us). I was also the most productive scientist in the department of theoretical chemistry in Zuerich during my year there but my wife was uncomfortable because of the ingrown atmosphere of the Canton of Zuerich and shadows of the past which seemed to be dangerously near. Any free American feels like this about old Europe. If Cornell had one its intellectual duty and offered me a most modest research position and a microscopic salary, we would still be in the mythical island now, the Celtic Tir na n'Og or Land of the Young of the Greeks.

My first wife, Laura, and I were happy at Ithaca and hoped to stay there in the mythical island of Odysseus. She was always a great friend to me. My present wife Larisa is also a great friend. The Cornell Theory Center produced a quarterly report to the NSF featuring my work, this was found by my first wife, I had not been told about the Report. This was very typical of the Spartans of the time, the tenured academics, brought up from infancy on a deceptive diet of warlike dogma, the fanatical and destructive hoplites that the cultured Athenians avoided in the Peloponnesian war.

Like the historian Thucydides I had subconsciously developed from my earliest years as a post graduate student the philosophy of objectivism. I did not realize this until Ray Delaforce in 2007 pointed it out to me. It had been developed in parallel by Ayn Rand in her novels. Objectivism is the culmination of Baconian science, that a theory must be tested against experimental data, and not against another theory, otherwise it becomes a war between Athens and Sparta, The Peloponnesian War. Ayn Rand wrote that the Jeffersonian pursuit of happiness must manifest itself in productive creativity and free thought, unhampered by dogma and peer pressures to conform. These are anthropomorphic, and Ayn Rand took the Baconian idea of objectivity in the natural sciences and applied it to the wider world. In other words objective creativity in the arts and sciences is a form of beauty. Objectivism in the arts is the exclusion of transient society and its received and stale ideas, a poet such as Dylan Thomas locking himself in a writing shed. Objectivism in the sciences is the development of a method that is completely objective, for example one based on geometry, and a method which excludes all anthropomorphism. This is why rational or "Athenian" scientists such as Kepler based their work on geometry, or sensed that the universe springs from geometry. *Ubi materia ibi geometria*. Where is matter there is geometry.

Francis Bacon described the Spartan ideals as Idols of the Cave, locked in fanatical, military, mindless and dogmatic darkness from the earliest age, the opposite of the Athenian enlightenment and acceptance of endlessly productive new ideas. The Idols of the Cave are worshiped by dogmatists, to whom truly new thought is always anathema. The Spartans excommunicated the weak and destroyed all who opposed them. The Athenians produced the highest peak of civilization in the history of human thought. Compared with them our age is empty materialism. It produces very ugly buildings very deliberately, and very ugly ideas such as those of standard physics. The Spartans of standard physics have their own hoplites to keep the Athenians down. These methods are those of the gangsters of any age, the dark hades of the internet used to terrorize the innocent. As Thucydides wrote, the mindless masses follow dogma to hell. Even with the vast amount of free knowledge on the internet, they are as dark minded as ever.

Cornell could perhaps be compared with Periclean Athens at the start of the war with Sparta, a war that left Athens in economic ruin and ravaged by plague. It seemed that only the proud Parthenon remained of the golden age of Pericles. In one of my poems I write about "The golden Parthenon's brow". After returning from Zuerich I thought I had to scramble around for any paid job in academia but realize now that we should have stayed in Ithaca with my best friend. In November 1991 I inferred the B(3) field, which was later nominated several times for a Nobel Prize in physics because it proves the existence of photon mass. Part of my objectivist philosophy or "pursuit of happiness" was always the determination to work hard to capture new ideas and to be as productive as possible. So I became the most productive physicist / chemist in history. I realized as a first year post graduate student that this method ensures a steady stream of endlessly developing thought, something which ought to be completely natural, as in any creative thinker, but which often leads to a dangerous reaction among one's peers. This is also recognized clearly by Ayn Rand. They see themselves being outproduced, their careers threatened, and promotion blowing in the wind. I

could not care less about any career when I was a post graduate, and I have been capturing the ephemera of new ideas for forty seven years. Of course I was never a threat to any careerist because I worked all the time. I should have been locked in a fume cupboard and given a small amount of salary at Aberystwyth. Currently, the pseudoacademics of our times often pay themselves a huge salary and are trivially dull and unproductive. There are good, interesting and honest academics of course, but power corrupts, absolute power corrupts absolutely. Once you pay yourself half a million a year, you are intellectually turned to limestone, a stalactite in Plato's Cave, a piece of ossified dogma. My personal Peloponnesian War has therefore been a fight for freedom, not for power. The same thing has been written about that waster Dylan Thomas as he was often known in Swansea. Only recently has he been stuck on a pedestal by people who have never read a word of his work. Dylan and I are both very powerful because of ideas. One cannot stop the march of ideas but one can stop any phalanx by attacking it from the side.

I was immediately aware as an idealistic young graduate student that my free development of ideas caused resentment and deep hostility among the tenured Spartans of Aberystwyth, unproductive old men, comfortably salaried, who never read any of my work. Exactly as described by Ayn Rand, those who are most needed for their hard work, originality and honesty are those who are the greatest threat to the hoplite phalanx - to the organized dogma encased in bronze armour. No soldier in the phalanx was allowed to act independently. By November 1991 I had already been heavily persecuted and forced to work without salary. I had been forced to compete endlessly for post doctoral fellowships by those who would be given a quick job in a smoke filled room, without any form of competition. So I ran up a world record of post doctoral fellowships won against the best in the world. This deepened the anger and envy of the Spartans.

The idea of B(3) came to me after a lot of different methods had been tried out at Cornell and Zuerich on how to explain the magnetizing ability of circularly polarized radiation. These were to me over complicated and hampered by the then prevalent dogma which asserted that electromagnetic radiation must have only two planar and transverse senses of polarization. I was unaware of this dogma, fortunately, and came up with common sense, the B(3) magnetizing field that became the basis of my unified field theory, the essence of the Peloponnesian war between dogmatists and enlightened scientists of the post Einsteinian paradigm shift. This is the description by Alwyn van der Merwe of the early years of twenty first century physics. The B(3) field has split physics and has destroyed the power of the Spartans. They can no longer censor new ideas accepted literally by millions. The Spartans are trapped at Thermopylae by a formidable army, not of Persians, but of enlightened thinkers. I named the unified field theory the Einstein Cartan Evans (ECE) theory in honour of Einstein and the mathematician Elie Cartan. The inference of B(3) was to change physics but to me it was the trapping of an idea, encasing it in amber. I hit on the idea of B(3) in November 1991, working in a room that we had set up at 77 Lois Lane as a study. It is a simple idea based on the conjugate product then in use in nonlinear magneto-optics. The (3) simple means that the fundamental magnetic flux density B is aligned in the Z axis, in the same direction as the light travels. Electromagnetic fields can be observed if and only if they interact with matter. In this case B(3) produces the magnetization observed when circularly polarized light interacts with matter, in the simplest case one electron.

This is perfectly obvious, and made a pig's breakfast out of the Spartan dogma of the early nineties, dogma that is so obscure that it makes a dense fog look like brilliant enlightenment. I remember the discovery because I was looking out on the snow of November at the back of 77 Lois Lane, overlooking Six Mile Gorge near Ithaca. I used to do my daily three mile run in this snow and by that time I had learned to wear gloves because of the intense cold of the New York winter. I had been forced to work at 77 Lois Lane because I

was no longer allowed to work at the Cornell Theory Center, despite being its most productive scientist during my time there. This must have been due to someone “approaching” Malvin Kalos, probably an old enemy from the seventies or eighties, one of those described in the second volume of my autobiography. These obscure calumnies from which I often suffered illustrate perfectly the theory of Ayn Rand, which honestly puts forward the saddest facts about some parts of academia, that the hardest workers are often persecuted by envious mediocrities who have been appointed in smoke filled favouritism or by someone trying ruthlessly to build up power at the expense of meritocracy and logic. My first wife Laura’s job at the Cornell Theory Center had mysteriously disappeared by the time we returned from Zuerich, but she had the option of moving to another IBM Unit and was allowed to work on at the Cornell Theory Center. She had discovered that Kalos had submitted an NSF Quarterly Report dedicated to my work, for which I was not paid a penny. This Quarterly Report helped keep the Cornell Theory Center open for a while, but discontent with Kalos was already rife. So I worked from 77 Lois Lane in the snow of winter. Having made the obvious inference of B(3), three papers about it were quickly accepted by Physica B and are recorded in the Omnia Opera of www.aias.us. I recognized one of the referees of those Physica B papers, an expert on the obsolete theory of the inverse Faraday effect called Peter Atkins. It was easy to recognize his style and he was a former Oxford colleague at the Physical Chemistry Laboratory. Atkins’ output of papers is tiny compared with mine and he is mainly known for textbooks. He thought that B(3) was a natural thing, being a chemist uninfected with the dogma of physics.

So that was the opening shot of the Peloponnesian war, a Spartan spear delivered underhand in darkness, and hardly a glorious form of warfare. This was the same technique as described in the second volume of my Autobiography. In the words of Arthur Koestler it was “Darkness at Noon”, his novel about savage and bloody dictatorship. Just as the enlightenment of objectivism dawned I would be hauled over the dark coals by some ultra obscure mediocrity for nothing in particular, or working too much. It was just that they did not like my ideas, did not like me, and disliked themselves even more. They intensely disliked my dedication. They disliked science because all they wanted was money.

At about that time I edited the first edition of “Modern Nonlinear Optics” for Prigogine and Rice and wrote in long articles on B(3). The first and second editions are still selling now, and there have been no objections to the B(3) field for a quarter century. In late 1991 I scrambled around for a job that would give me the elementary dignity of pay, and by devilish bad luck, was interviewed at the physics department of the University of North Carolina Charlotte. Neither of us wanted to leave Ithaca at all, but we were forced to contemplate this unfortunate move and go out on the road again to a department that graduated one student every two years and which was later merged and effectively closed after I left UNCC. At the time I still thought of academia as my natural habitat, all that I needed was a small office and a tiny amount of salary, and the freedom to pursue objectivism. The discovery of the B(3) field is a clear example of the objectivist philosophy, it was based on experimental data which were explained in a revolutionary new way, without using the often ridiculous anthropomorphism that is the unscientific and ancient basis of dogma. Looking back in anger at UNCC, it is very clear that we should have stayed in Ithaca, and we would not have suffered the unethical pressures inflicted on us at UNCC. The latter did not want me, and I did not want UNCC. The latter was interested only in money, and not scholarship, least of all objectivist scholarship. Later on I found that I was listed among three of one hundred and twenty two candidates selected for interview and that the other two interviewed candidates took one look at the place and ran. We should have done the same. Instead I was promoted full professor with tenure.

The second attack of the Spartans was made before we were due to move to UNCC in August 1992. This came from an obscurity called Akhlesh Lakhtakia, who phoned me at Cornell Theory Center to ask for my support. Reluctantly and foolishly we made the long journey to University Park in Pennsylvania where he worked in an engineering department. As soon as I arrived I wondered what I was doing there, because he actively disliked what he thought were the British, and actively disliked what he thought were the Americans. He chain smoked, and things were very uncomfortable from the start. Apart from meeting the kindly and highly gifted Heinz Henisch the trip was a waste of time, the campus looked like The Ministry of Truth, with a huge football stadium designed by George Orwell being its main feature. It was mid winter and the place was as cold as the standard model. I gave Lakhtakia a chapter in "Non Linear Optics" and also offered him a book in "Contemporary Chemical Physics", because it has always been my custom to help those who asked me, for the sake of science. Lakhtakia talked bitterly about the Raj, and claimed that his ancestor was a Raja executed by the British. I have never been able to find a trace of this Raja. I was talking to a man at close range, one who could not hide his true feelings. Lakhtakia was the opposite of an objectivist, he took a strong personal dislike to B(3) and later wrote a ridiculous paper to "Foundations of Physics Letters" in which the B(3) field was described as "ghastly". The editor van der Merwe published this rubbish in order to give me the opportunity of demolishing it. I remember Lakhtakia slamming down the telephone receiver in a towering rage on two occasions. That was the way he debated. Penn State made appointments in a strange way, but later asked the Campus Police to investigate crudely abusive e mail messages that began arriving here in Wales after we had been forced to leave UNCC. We had traced them to within yards of Lakhtakia's place of work. I particularly remember being informed by Lakhtakia that I would be buried. Very kind of him to pay funeral costs for B(3), but he was premature. So the Spartans waved their hoplite spears at the Athenians because they did not like their enlightenment. Obviously Lakhtakia should never have been appointed to a prestigious University such as Penn State.

This display of strange and ugly petulance illustrates the way in which dogmatists of the worst kind confront the Athenian enlightenment, with rage. Later I found that the problem with Lakhtakia originated in the dogma that was prevalent in those days, that the photon is a massless particle which allows the existence of only two degrees of polarization out of four, the two transverse modes. The B(3) field goes completely against this absurd dogma, and B(3) is objectivist common sense, derived from experimental data at the outset and rigorously Baconian..

We reluctantly and sadly began to prepare for an interview at UNCC and flew to North Carolina together. From the plane it seemed to be all dark forest with the occasional sluggish river, unutterably dark and depressing. The people of North Carolina were friendly enough, but the physics department looked like an anachronism. It was being forced to expand. It could hardly do otherwise because it was down to graduating one student every two years. I was immediately confronted with a hopeless sense of being forced to be there by the exigency of academia. Any objectivist philosopher feels this way about the organization of thought by those who have no interest in thinking, only in student numbers. I gave a lecture on B(3) to staff and students of a few departments. There were no objections, only a few questions. The concept of B(3) was accepted as plausible. Nevertheless we were glad to return to Ithaca and to 77 Lois Lane where we should have stayed, and I never expected to be appointed at UNCC. When I received my letter of appointment as tenured full professor I was not in any way interested in it, and events at UNCC recorded on www.aias.us and are well known throughout the world of science and even among the general public. UNCC is best summed up in one phrase: "The powers of darkness are exalted", one of the condemnations by international colleagues on www.aias.us.

The theory of B(3) developed rapidly in 1992, so by the time I took up my new post it was already as well accepted as any new idea in physics. Warren Warren had written to me at Cornell from Princeton a couple of years earlier, expressing enthusiasm about my pre B(3) theory of magneto optics, archived in the Omnia Opera on www.aias.us. So we had driven to Princeton from Ithaca, and I gave a lecture at Princeton's chemistry department on the possibilities of optically enhanced, high resolution NMR, now highly developed. Wagniere had written to me from Zuerich inviting me to be a Guest of the University of Zuerich. My magneto optic theory was also developed in many directions with Wozniak and Wagniere in the University of Zuerich and I lectured to the NMR group of the Nobel Laureate Richard Ernst at his invitation. All of that was done with conventional theory and molecular dynamics computer simulation, but B(3) was radically new, like Rodin's Balzac or Stravinsky's "Sacre du Printemps" or van Gogh's shocking use of vivid colour. All of these ideas caused riots and savage hatred. The objectivist philosophy of Ayn Rand and others addresses the psychology of envy and hatred of the new. Early in 1992 I was not yet aware of the lurking spears of the Spartans, the dogma of the massless photon, and B(3) worked well in every application. Logically I had every right to expect a small job at Cornell on a very small salary, a research associateship, and we still kept hoping of that as August 1992 approached and we had to say goodbye to our friends at Cornell and at Commonlands in Ithaca. A full professorship was an illusion, and we all knew that. It was the result of an overambitious Dean called Lyons attempting to expand too quickly. UNCC is as obscure as ever, way down the university rankings.

As the reluctant transfer to UNCC approached, I began to try to organize experiments and theory there from Ithaca but the group that I was supposed to lead at UNCC did not really exist, it was nowhere as good as the Hall of Fame group at the EDCL described in part two of my Autobiography and totally obscure compared with AIAS / UPITEC. It was made up of two or three new assistant professors who were being driven mercilessly to get tenure. In order to do this they had to stick to the Spartan dogma. I began writing papers on B(3) and attributing them to UNCC before we arrived there. These can be seen in the Omnia Opera on www.aias.us. The idea of B(3) was accepted as being plausible, the product of Athenian enlightenment.

2. CHAPTER TWO: THE BATTLES FOR B(3)

The world of objectivism is as remote as can be from the world of corrupt academia. The free development of ideas clashes immediately with the artifice of academic existence, the need to get tenure, student numbers and funding. I can just imagine someone like Dylan Thomas being dragged out of his writing shed to fill in a funding application to write an academic advert for cornflakes. He was forced to do things like that for the BBC, to write a broadcast script entitled "Is Your Journey Really Necessary?" at a time when petrol was strictly rationed by the war machine, another Spartan phalanx. This was at a time when his poetry was beginning to mature and become more transparent, wartime London. So he decided to write "Is your Ernie really necessary?" but the BBC did not broadcast it. Lately I have come to ask the question: "Is your Uni really necessary?" because pauperized parents are being made to feed unproductive Vice Chancellors with huge salaries in return for worthless degrees. With infinite reluctance we prepared to move to UNCC, which in retrospect was a terrible mistake. The illusory status of full professor was not worth the sadness it caused us. We were hoping not to have to wander around from place to anonymous place. This is the IBM disease, because its staff can never settle down before being pushed on again.

Having forced ourselves to leave Ithaca we did our best to settle down at UNCC but nothing had been prepared and I found that my so called research group had done none of the work that I suggested at Ithaca and Cornell. We had sacrificed a lot for this move, and my wife had left IBM but from the start it was all an ugly deception. We felt like returning to Ithaca, and should have done. Rumours were circulating that I had already been nominated for a Nobel Prize for the discovery of B(3) but I just had an empty office and a research group that was not a research group. There was no longer a supercomputer so I had to work on analytical theory. Having come across Ryder's "Quantum Field Theory" my knowledge of theoretical physics broadened and I began to realize that the physicists were hopelessly trapped in obscure dogma based on the idea of the massless photon. The inference of a photon with mass, first made by Henri Poincare in 1905, and taken up by Louis de Broglie, was censored from a textbook such as "Quantum Field Theory", and in my first few weeks at UNCC I was still not aware of it. However I was at last earning a salary so that I could look after us both, something that I had always wanted to do. It was clear that the old physics staff at UNCC knew nothing about the latest advances made at Cornell Theory Center, despite my interview lecture to them on B(3). So the atmosphere was the same as at the EDCL in my earliest days as a post graduate, I worked on my own instinctively driven to write up my findings and to use the objectivist method that had led to B(3) in 1991. However the inspiration of the early graduate days at the EDCL was completely missing. The assistant professors who were hired to support my new group were more aware of modern physics, so from the outset I did my best to kindle the spirit of the EDCL Hall of Fame group at Aberystwyth that won a world record of twenty open competition Fellowships, won by only three people: Gareth Evans, Mauro Ferrario and myself. This is like winning twenty international piano competitions.

I was dismally aware at UNCC that I was no longer at the EDCL or Cornell, despite all my contributions to science and to Aberystwyth, Oxford and Cornell. The assistant professors were sadder and unhappier, because they were inundated with teaching while designed to be a research group. The teaching was old fashioned dogma, the opposite of Objectivism, and they were on the treadmill to tenure. I was soon to be inundated by teaching, and despite this outproduced the entire department of physics at UNCC during three sordid years full of persecution by tiny minded bigots. The people who hired me at UNCC were not even aware that I was not tenured at Cornell, and that I had never taught before. No one had the common sense at Aberystwyth to give me the elementary support of a low paid research job. Ayn Rand would have written that this was deliberate and typical of academia, someone stepping out of the bronze clad phalanx to get room to swing a sword. The censors and bureaucrats were all highly paid themselves, and compared with my output, wholly unproductive. After almost half a century of hard but immensely rewarding work, this is entirely clear. The censors were censors and produced nothing of intellectual interest. My output is based on the Jeffersonian ideal in the Declaration of Independence - the pursuit of happiness. Thomas Jefferson, my distant ancestral cousin, meant by this the pursuit of happiness among Nations - peaceful coexistence. Being a serious minded Virginia Gentleman, and a multi faceted scientist himself, he did not mean the pursuit of trivial self indulgence. So the pursuit of happiness was written into the Declaration of Independence and given a new interpretation by Ayn Rand - to use what talent one had been given to the best of one's ability. As Ayn Rand recognized, this catalyzes deep hatred among the bureaucrats and dead wood of academia. In general this is true of human nature in any walk of life.

Nevertheless, I began to produce papers at UNCC in the second half of 1992, from August onwards in the oppressive heat of the North Carolina plain at Charlotte. I was at the peak of physical fitness at Cornell because of access to a tartan track at Zuerich, but the track at UNCC was in poor condition and the climate unsuitable for a middle distance runner.

We battled on in a small apartment, both wanting to return to Ithaca all the time. I kept fit to optimize my ability to think, mens sana corpore sano. Several papers on B(3) were published until a bronze spear suddenly slashed into my back. This type of thing often happened at the EDCL as described in the second volume of my Autobiography, so in academia it is a good idea to carry a shield and have your back well armoured. Attacks rarely come in single combat, nothing like Achilles and Hector. One of the first things I was told by a tenured and totally unproductive full professor at UNCC was that it was a pit of rattlesnakes, and in general all bad academic departments are somewhat reptilian. There is a lot of crawling and back biting. One would have to be lucky to find a department free of envy, but good academics do exist. These reptilian tendencies have been honed to a fine art by use of the hate mail blog or website, which is a cauldron full of anonymous venom poured over everyone and completely out of control of useless authority. A process saturated by lies. When we made the first experiments on the company net at IBM Kingston in about 1986, we did not have this revolting spectre in mind. We aimed to better humankind at IBM, with its respect for the individual.

When I pulled the spear out of my back armour I found that it had come from Laurence Barron from the group of David Buckingham, who was apparently a friend of my own Ph.D. supervisor, Mansel Davies, a friend who wrote Mansel a letter behind my back instructing him to tell me to stop “publishing too much” when I had just won the Ramsay Memorial Fellowship of University College London. This is one of the most prestigious Fellowships, won in the toughest of open and international competition. Mansel told me that I had won it by a furlong in a mile and a quarter and was greatly delighted. So was I because it meant that I could return to the EDCL and hope, once again, to be put into a fume cupboard - be given a tiny office and a tiny tenured salary. “But I was far deceived” in the “Paradise Lost” of John Milton. The Ramsay was my fifth prestigious Fellowship won in open competition, one of those jewels in the mitre always enough for tenure, but not in my case. I just had no support from my own department, the smoke filled appointments saw to that, and I was “publishing too much” for those who published nothing at all for years. A winner of five international piano competitions is given a contract with one of the big labels. Buckingham was sour, envious and utterly unethical but by that time ethics had vapourized and “publishing too much” was a favourite chant, like the one used to kill Piggy and Simon in “Lord of the Flies”. The Nobel Laureate Sir William Golding also realizes very clearly the objectivist truth about tribal human nature. Conform or die. When Piggy, blinded by losing his glasses, was killed by a rock that smashed into him from behind, the conch also smashed into a million pieces, and all order ended as at the fall of the Roman empire and often in our ultra savage times. The last vestiges of the public school choir trapped by accident on an isolated island were dissolved. Simon was the symbolic priest, and when he was killed, all humanity also came to an end. I remember studying “Lord of the Flies” at Pontardawe Grammar School. This letter from Buckingham arrived at the EDCL in about 1976, and Barron and Buckingham were still at it in 1992. How dare I be a full professor? By this time Barron had been promoted to a professor at Glasgow. I did find some of his work to be quite interesting, and he had worked at my old department at Oxford with Peter Atkins, the same Atkins who had accepted the first papers in Physica B on B(3).

Buckingham and Barron had however lost touch with reality and used the idea of “complete experiment symmetry” and had sent de Boer, the editor of Physica B, a paper applying this hopelessly incorrect idea to B(3). Later I found that Barron had also sent a copy to Vigier, behind my back in Spartan fashion. Vigier told me of this and as an editor of “Physics Letters” immediately rejected Barron’s argument. My reply to Barron is in the Omnia Opera section of www.aias.us and was published by Physica B. My reply used the usual techniques of symmetry in physics and pointed out that “complete experiment

symmetry” does not exist, no one uses it in theoretical physics. The equations defining B(3) all obey the accepted symmetry rules, strangely enough used by Barron himself. Without going into the technicalities these symmetries are C, P, T, CP, CT, PT and CPT. The rest of the scientific world never uses “complete experiment symmetry”. This missive from Barron was therefore an attempt to destroy, and not a scientific criticism. There may have been a danger of my winning a Nobel Prize with which the general public is fixated in an unhealthy way. It was an ugly attempt by Barron to destroy Vigier’s interest in my work. Instead, Vigier encouraged nominations for a Nobel Prize for B(3). It is known that Bo Lehnert, a Member of the Royal Swedish Academy, has nominated for B(3) himself and has mentioned several nominations. These were nominations from the Einstein / de Broglie School, which split from standard physics, or the Copenhagen School, at the 1927 Solvay Conference. Jean-Pierre Vigier worked with the Nobel Laureate Louis de Broglie for many years.

Barron was infuriated by a mere colonial daring to argue with Cambridge, and resubmitted the same paper to “Chemical Physics Letters”, edited by none other than David Buckingham. Evidently they like to keep things in the family, and no one has told them that submitting the same paper twice is completely unethical, and an insult to the prestigious journal “Physica”. Buckingham had never heard of fairness or editorial balance, and proceeded to block my reply about thirty times with this strange idea of “complete experiment symmetry”. Both Barron and Buckingham knew that B(3) was the end of “complete experiment symmetry”. These fax messages all landed on the desk of the secretary at physics, UNCC, so leaked to the attention of the over ambitious and political Sil Almeida, the then head of department who was about to retire. Almeida knew nothing at all about me or my work, and was being pressurized by the Dean, Schley R. Lyons, into getting ever more money. So they decided to impose an ever increasing teaching load, despite the fact that I was becoming very productive in research - more productive than the rest of the physics faculty combined. Most of the faculty had not published anything in many years. Finally I wrote to Mansel Davies and Buckingham caved in. As far as I know, no one has ever used “complete experiment symmetry” again. I have not been able to find anything at all about it on the internet in nearly thirty years. My best friend, my first wife Laura, helped me prepare clear overhead slides for the lectures I was obliged to give, and all my student assessments are on www.aias.us. Sometimes they were “excellent”, often “good”. Anyone who knows how students can behave would find that remarkable. There was nothing left for Almeida and pals to do but to hatch a plot to get rid of me. My wife and I could see it coming a mile off and wished more than ever that we were back at Commonland in Ithaca. I should add that neither Almeida nor Lyons were from North Carolina, and were not southerners. The real people of North Carolina seem to be polite and quiet mannered. After I had been booted out of UNCC on ridiculous charges such as “working too much at home”, Buckingham wrote that it was inconceivable that he had anything to do with it. Earlier at Cambridge, in about 1985, he had expressed considerable hostility towards the People of Wales while knowing nothing about Wales. This was done in the presence of John Thomas, whom Buckingham had brought to Cambridge from the EDCL in 1978. John Thomas, later Sir John Thomas, was not very amused but said nothing. Obviously, I still had no support from my colleagues and teachers at the EDCL, and this continued until the place was closed and the mediocrities scuttled away with their tenure. Never mind ideas, take the money and run. I had been hauled up to Cambridge from Bangor by these two self inflated beings just to be told, once more, that I was “publishing too much”. There is no doubt that van Gogh painted too much. I was always being warned by Mansel Davies not to dare compare myself with a great scientist like someone or other I have entirely forgotten. Mansel did not understand a word of special relativity so Einstein did not figure in his imagination. I once quoted the rather ridiculous sonnet by Alexander Pope to Mansel Davies (volume two of this autobiography):

“Nature and Nature’s laws lay hid in night:
God said “Let Newton be!” and all was light.”

He shot back: “Let Einstein be and all was darkness again.”, evidently a gossipy Cambridge saying during his time there in the thirties. At least Pope knew how to count syllables.

Just after arriving at UNCC a paper on B(3) by the ultra ambitious Farahi and myself was accepted for publication in “The Physical Review” no less. I had published many times in this self styled “best journal in the world of physics” so as a chemist I did not think very much about it. To me it was just another journal. Having a paper on B(3) accepted in “The Physical Review” was like cutting a new carving in the Parthenon Frieze, and Almeida was mighty proud and pleased. This could be a source of funding. The Spartans realized that the phalanx had been breached and quickly moved to plug the mistake with bronze. At this point ethics disappeared with Simon’s murdered corpse, floating out to sea, or with what was left of Piggy after he had been hurled over a cliff by a blow in the back. This particular missive was delivered behind my back from the editor of Physical Review Letters, the unknown Jeremy Malenfant, to Irwin Oppenheimer, the editor of Physical Review E. We had submitted a letter to Physical Review Letters and followed it up with a paper to Physical Review E. Malenfant found it all too imaginative, and in violation of editorial confidentiality, sent a message to Oppenheimer, who proceeded to “unaccept” the Physical Review E paper. This is the only paper that has been announced for publication in Physical Review and never published. The problem to those of the Copenhagen School like Malenfant and Oppenheimer was that B(3) was aligned in the longitudinal axis and this means that the mass of the photon must be finite. This completely destroys the standard model. Their dogma allowed only a massless photon. So after accepting the paper they rejected it in a very sordid way. That was twenty five years ago and by now over a thousand papers, reviews, books and essays have been published on B(3) and later developments of it.

I had found out that The Physical Review published only dogma based on the idea that the photon must be massless. Malenfant and Oppenheimer were not even aware of the scholarship that has existed since 1905 on the photon with mass, an idea proposed by Henri Poincare in 1905. The photon with mass allows the existence of the B(3) field. This presented a ghastly problem to the staff of the physics department at UNCC, and to members of my own non existent group, because if they wanted tenure, they must supplicate in the corridor to a massless photon every morning at 8.00 a.m. sharp. It also presented a problem to the students, because to pass exams, they too had to supplicate regularly, and that can be painful if one has been drinking and drugging in a Copenhagen fraternity into the early morning enlightenment of the Einstein / de Broglie School. After one Semester I was inundated with their idea of teaching, delivering classes to bored students. My idea of teaching has always been research, and the publication of that research. AIAS / UPITEC has refined that so successfully that we teach to millions in every country of the world, and have done for fifteen years. During this time Einstein Cartan Evans (ECE) unified field theory has flooded with light the darkness of Bacon’s Cave.

I resubmitted the B(3) letter originally submitted to Physical Review Letters to Physics Letters, of which Vigier happened to be an Editor. At that time I did not know of Vigier’s work because I was a chemist by training. I received a letter from Vigier early in 1993 accepting the paper for Physics Letters, together with intense enthusiasm for the fact that B(3) proves experimentally the existence of finite photon mass, through the inverse Faraday effect, and inviting me to a conference at Princeton. The technicalities are all on www.aias.us for interested readers of this third volume of my autobiography. Vigier was one of the foremost theoretical physicists of the twentieth century, having graduated from the University of Geneva. His father was a professor of English at the Sorbonne, and Vigier

became a Member of the Legion d'Honneur. After being in the French Resistance General Staff, and being wounded at Remagen in the French regular army, he was dismissed from his earliest post war employment with the Nobel Laureate Joliot-Curie because of his opposition to the French atomic bomb. Being from a Protestant Calvinist background he joined the French Communist Party, which is regularly elected democratically in France. He was invited by Albert Einstein to become his assistant at the Princeton Institute but Jo McCarthy and his drunken paranoia prevented that from happening. Vigier was refused a Visa, causing diplomatic strain between the United States and France because Vigier was a war hero. I think that a cooperation between Einstein and Vigier would have produced a lot of good work, it might have persuaded Einstein to adopt and develop the idea of finite photon mass (Henri Poincare 1905). Louis de Broglie proposed wave particle duality in the early years of the twentieth century and to de Broglie, photon mass was natural, electron mass was natural, particulate mass was natural. Einstein wrote that de Broglie had lifted a corner of the veil. Both were awarded a Nobel Prize. Arthur Compton was also awarded a Nobel Prize for proving wave particle duality in the electron. I do not think that Einstein ever rejected the idea of finite photon mass, and strangely enough the Copenhagen School keeps on looking for photon mass.

In the 1927 Solvay conference the Einstein / de Broglie School split completely and dramatically from the Copenhagen School. The two Schools differ fundamentally in many ways and what is called "physics" today is the empty detritus of imploded Copenhagen dogma. The ideas of the Einstein de Broglie School, to which AIAS / UPITEC is the successor, are censored carefully from the literature. I became fully aware of this disgusting mediaeval intolerance after reading the letter from Vigier. The letter is posted on www.aias.us and contained a few calculations and suggestions for further work. Then it happened all over again, a terminally obscure assistant of Vigier called Holland somehow prevented the Physics Letters paper accepted by Vigier, the Editor, from being published. This is one of those all time lows in physics, an unknown bureaucrat was allowed to censor the enthusiasm of one of the greatest of physicists, Vigier. By this time I had lost all confidence in the exigency of the physics machine, and by now have set up my own administration of enlightened physics. The censors are being ignored and forgotten as the knowledge revolution gathers pace. It is not known why Vigier did not dismiss Holland and publish the paper.

I felt sorry for my best friend Laura because we were trapped in a sharp fanged wilderness of small minded greed, intolerance and self seeking which had nothing to do with natural philosophy. There was no respect for the individual as at I. B. M., and the place was dark, threatening and ominous. In walking down any corridor I kept my back to the wall, exactly as at EDCL. The censored paper was eventually developed into five volumes of "The Enigmatic Photon" under the enlightened and generous editorship of Alwyn van der Merwe. I wrote and edited the volumes, and Vigier lent his name to them. My complete output of work on B(3) at UNCC is in the Omnia Opera on www.aias.us. It includes papers in Foundations of Physics Letters and Foundations of Physics, edited by Alwyn van der Merwe together with his well known book series of several hundred volumes. He became an emeritus professor at the University of Denver after being professor there for many years. He is another major figure in the Einstein / de Broglie School. He was later subjected to intense and illegal harassment by an unknown bigot called Gerard Bruhn, who disappeared entirely in 2008. Alwyn van der Merwe lost his journals. He was replaced by a dull and arrogant mediocrity called 't Hooft.

Having no teaching experience I decided to lecture and follow it up with a tutorial session of one and a half hours of self learning, in which the students would write up and study the preceding lecture. I had two official lectures a week of one and a half hours each,

one was delivered with overhead slides, the other was a tutorial. They could ask me any questions they liked at any time. The student assessments were often excellent because we prepared overhead lecture slides which were prepared at our own expense. These gave the students a clear, readable set of notes and they liked this method. It gave them time to digest the long lecture of about one and a half hours. I was used to the British system in which lectures were forty five minutes, only half the length. The lectures at the EDCL were so awful that I had to spend hours in the library writing them up. My lectures at UNCC were already written up as a good set of notes for the students, who liked the fact that I was able to deliver the lecture entirely without notes while they studied the overhead slides. They could have a copy of the slides if they wished. This presented the panicking UNCC administration with another thudding headache, not only had a rank heretic been promoted accidentally to full professor, but the students actually liked his radically new teaching style.

This had to be brought to an end and a missive from on high was delivered by a remote and unknown Dean called Schley R. Lyons to the nervous and panicking Sil Almeida, who could hardly speak with fear of the Dean. It was forbidden to use enlightened teaching in the Ministry of Truth. All lectures had to be lectures, and facts stuffed into the noses of the students so that they learned nothing and lobbied for good grades. This made my stomach turn over towards the end of my first Semester at UNCC. Lyons had already forgotten that I was appointed to be essentially a research professor, and not a teaching professor. Even UNCC was forced to give me excellent research grades, and strangely enough, good to very good grades for teaching and being on catatonic committees. Here was a blatant breach of contract by UNCC and the first sign of a dirty little conspiracy all described on the UNCC Saga on www.aias.us. When I was appointed, UNCC staff had not read my CV, and none of my papers. It was thought that the glitter of Cornell would bring in money and student numbers. Scholarship had become a deleted expletive and universities today are slot machines on Aberystwyth pier. The tiny bureaucrats loot the tax payer and sleep all day on golden cushions. It looked as if this Dean had dictatorial powers. He could close a department at will, so Sil was very frightened. I became fully aware of the truth about UNCC, it was a dictatorship in which committees could be rigged. This was made clear to us in late 1994 by an attorney whom we had consulted. He let slip that Lyons had assassinated people several times before.

I found an advert for this house in Wales in 1992 and used my hard earned savings to buy it outright as a safety measure. We should have just gone back to Ithaca and walked out of UNCC. The latter had breached contract almost immediately, I was not to be allowed to become a research professor in optics as advertized, no apparatus was to be granted to me by UNCC, and my advertized research group did not exist. There was no supercomputer and no interest in my work. It had become clear that Copenhagen or standard physics was empty dogma which covered up the work of the Einstein / de Broglie School. It appears that the delightful Lakhtakia was working behind the scenes. The visible result of this ugly natured hostility appears in Omnia Opera 430 on www.aias.us, my reply to Lahktakia received on July 21st 1994 at "Foundations of Physics Letters" by Prof. Alwyn van der Merwe. That was the third Spartan attack on Athens, aimed at destroying its civilization, the third Battle for B(3). The first was the attack by Barron, the second was the attack by Malenfant. As the first Semester at UNCC crawled to an end in the Spring of 1993, we flew here to this house in Wales. We should have gone back to Ithaca as my best friend wanted.

This house was a safe house for me, but it had been completely changed from the house I remembered. Communications were restricted to mailing, so the large number of publications produced in the summer of 1993, and dutifully attributed to UNCC, were produced in this way. These included books in my "Contemporary Chemical Physics" series, and the first edition of "Modern Nonlinear Optics", produced in three volumes. There was no

interest in these publications at UNCC, but plenty all over the world for a quarter century. This strange psychosis exactly repeated the pattern at EDCL from 1971 to 1983. At one point I mistakenly took some samples of the books into a committee meeting to show to my colleagues, but the books were just ignored completely. By now they have gone into a second edition and have sold many thousands of copies. Obviously UNCC was just not functioning. Physics had no common room, and no library, no place to display books by staff members, nowhere to read them. So I tried displaying them at this meeting and did not make the same mistake twice. I naively thought that these books were what I was appointed for, research and the production of new knowledge, scientia, or science. The physics department at UNCC had no interest in physics. In the immortal words of Lyons: "You're not at Oxford now".

During the summer break of 1993 we set up a computer here and later an internet link to the outside world. The village of Craig Cefn Parc had degenerated terribly since I had left in 1968 for Aberystwyth. This house was meant to be a summer house, an escape from the neurosis of UNCC but it had been terribly damaged. Since then it has been restored but it was not the warm house where I was born in 1950. I felt that we could be kicked out of UNCC at any time, because it was a dictatorship. The Omnia Opera on www.aias.us shows that I was as productive here as anywhere. We bought an ancient car so that we could travel around a little. My work was communicated by mail. "The Photomagneton in Quantum Field Theory" was published at about this time in my series "Contemporary Chemical Physics" and it became clear that B(3) had been accepted by the physics world. The attacks on B(3) had been essentially ignored and my work expanded into gauge theory and in many directions described in the Omnia Opera. The output of that era, produced in this house during the summer of 1993, was published in late 1993 to about early 1995. I gradually found that photon mass and B(3) change physics completely. In 1993 the Welsh speaking family of my youth were still here, and I felt a sense of great relief in getting back alive from the ideological gulag at UNCC. However the village had been almost completely destroyed by over development and deliberate and greed crazed land and house price inflation, a dark and evil process. The coal miners had been shovelled into cheap council houses. The children of the coal miners, my Welsh speaking contemporaries, had been pushed out of Craig Cefn Parc entirely, and replaced by anonymous and illiterate strangers with money. These viruses were known as "developers" and spread the plague. Very ugly houses had replaced the houses built by the coal miners, including this one. "Pant y Bedw" had been utterly destroyed by a hideous development, the little farm had become a second hand suburb built on a potholed dirt road. When we were at "Pant y Bedw" we kept the road in much better condition. All around were signs of decay. There were cars stuffed into every corner of the village, and very little of the culture of the twentieth century was left, the culture built up largely by my own family. The school had been anglicised to oblivion and only one shop was left. The Post Office in that shop has just been closed.

Pontardawe Grammar School had been shut down and replaced by a tacky tacky comprehensive. In 1993 there was nothing left of the Grammar School except for empty corridors full of the ghostly voices of the past. There were desolate schoolyards and empty classes and blackened walls. The brilliant community that the school had once been had been deliberately destroyed by vandals in government, mindless bureaucrats who hid on the back side of the moon and knew nothing of and never saw the human race. At the time of writing in October 2018 they are trying to rip apart what is left of Mawr by closing its remaining two primary schools. No absolute dictatorship could do worse. The small schools built up by the honest Welsh speaking generations will probably be stolen by foreign, monoglot developers and turned into disgusting mansions at a time when the human race faces extinction due to over development. They will probably make themselves extinct because nature does not tolerate a humanity transfixed by greed. This is a process that feels very much like the decline

of Rome, its Parthenon like buildings surrounded by illiterate nomads. We had seen the same appalling process at work in Swiss cities, towns and villages from the autumn of 1990 to the autumn of 1991. Georges Wagniere, a Dean at the University of Zuerich, railed helplessly against it and told us that the Swiss used to be poor and hard working but were now decadent hotel keepers and bankers, rich slaves to outsiders and no longer their famously independent selves.

We decided to drive the ancient vehicle to see Gareth Evans and take a look at the vandalized shell of the Edward Davies Chemical Laboratories (EDCL), utterly destroyed by Spartan bureaucrats in about 1988 (second volume of this Autobiography) . Gareth took us to see the gaunt ruin of enlightenment, described in my sonnet “The Wild Geese” in my book of collected poetry on www.aias.us. My books of poetry and first two volumes of autobiography have been read in essentially all of the world’s countries, and the condemnation of the bureaucratic vandals is complete. They are condemned to a dark age all of their own making, camped on the back side of the moon. The EDCL was a shocking ruin, a new building completed in 1963, and well equipped, had been ripped apart by vandals, both governmental and the detritus of the streets. The new lecture theatre where I had sat as an undergraduate was strewn with shattered glass from smashed windows, and its seats had been slashed to shreds. There were gaping holes in the windows. All the facilities of the EDCL had been destroyed in an act of terrible malfeasance. Our own laboratory in Room 262 had been gutted of all apparatus, books, chemicals, and archive papers, and was an empty shell. Every single laboratory and classroom had been similarly ripped apart and everything looted. The link between the old building and the new building had disappeared entirely, the library had been obliterated, and thousands of books had disappeared. This process is being continued today - small libraries and schools in Wales are being utterly destroyed by the London Government, which has isolated itself from Europe and from much of cultured humankind.

The images of destruction coalesced in my mind into a desolate landscape, Koestler’s “darkness at noon”. An entire educational mechanism had been destroyed in my absence in the United States and of this education all that remained was what I carried in my mind. I became more than ever determined to pursue new knowledge from the old, and not to leave it in desolate ruin. It seemed incredible that a so called “Government” would allow this to happen. The most devastating metaphor was the disappearance of an entire library that was only twenty five years old when it was closed. It was a fine departmental library which I had used constantly from 1968 to 1983, when I had saved the EDCL from destruction by fire. It had been destroyed not by fire, but by the wholesale failure of society known as “development”. The wind seemed to howl on a darkened sunny day, howled across the wilderness created by some unknown and monstrous machine, the exigency that has enslaved humankind. The ruined classrooms of Pontardawe, and the ruined lecture theatre of the EDCL were interlocked images of savagery - the remains of a barbarian raid, or the remains of the earth itself after a nuclear war, or the landscape of the Somme. The people responsible for this had run away, leaving some technical staff to redundancy, the wasting away of life. One technician was found hanging in a garage and he is commemorated in my long poem “Jim”. He is commemorated as Pericles commemorated the war dead in the first year of the Peloponnesian War. Thucydides recounts Pericles. I recount the lathes, electronics and glass blowing apparatus that had been ripped out of the workshops at the EDCL, and everything that at Pontardawe lay in the ashes of an air raid loaded with napalm.

No more desolate a decline of Athens could be imagined, meritocracy had been destroyed by those who had been trusted to keep it alive. The only thing left of the Grammar School and the EDCL are my own reminiscences in the first two volumes of this autobiography. The school choir had become the savages in “The Lord of the Flies”, its harmonious ideal had become an ugly death chant. After looking around at this ominous

wasteland for a while, the three of us slowly turned for home, the Parthenon lay in ruins behind us. We stopped for some food at Aberaeron and forgot that it was getting dark and late. We tried to hang on to the very last rays of memory and enlightenment, but it was getting dark. Gareth turned for home, a small cottage between Aberaeron and Aberystwyth, and Laura and I took the road to Ciliau Aeron and Lampeter through the towering dark trees that guarded the road to light.

3. RETURN TO UNCC

We had to take the long, tedious flight to Charlotte, where some books of mine on B(3) and O(3) electrodynamics were beginning to appear. Alwyn van der Merwe had commissioned the first volume of “The Enigmatic Photon”, which we worked on here in this house, my wife Laura doing the typesetting to a high standard. The gaunt Ministry of Truth lay baking in the Charlotte summer, my existence there was an air conditioned cell next door to an empty office. The corruption at UNCC allowed the inner circle indefinite paid leave, empty offices were kept for them. By this time my teaching load had been increased so UNCC had unilaterally forgotten its contract, which was to hire me as a research professor. Time has shown that if it had kept its word it would have benefitted, many books and papers would have been accredited to it. This dismal dishonesty is recorded in pungent detail in the UNCC Saga on www.aias.us, read tens of thousands of times around the world. The idea of B(3) had also become a problem for UNCC, because funding depended on Spartan adherence to dogma and the true role of a professor was that of cashier at a small town post office or bank, doling out money in the summer heat. In summer, Charlotte could bake for an entire month in a hundred degrees Fahrenheit, a heat that reminded me strongly of Atticus Finch shooting a rabid dog in “To Kill a Mockingbird”. I was the mockingbird, the dogma a rabid dog, staggering and foaming at high noon.

So in August 1993 I began to look for a job that would allow me to think. This is a contradiction in terms when a system is trapped by dogma. Any kind of enlightened thinking outside the bars of the cell would mean no money. In the seventies and eighties at the now ruined EDCL at Aberystwyth I brought in a lot of money and apparatus, but I had run into the putrid corruption described in volume two of this autobiography. At UNCC I was never given the opportunity of starting a research group because of the teaching load. My best friend Laura and I slaved away at producing overhead slides for bored students, one or two of whom reminded me strongly of Jo McCarthy, or Jo Stalin his twin. The poet Mandelstam described Stalin as the grubby fingered peasant slayer with yellow eyes. Denouncement or complaint was a favourite pastime, a note of complaint about triviality could end a career. An administration fixated by cash could amplify and resonate a trivial student complaint and get rid of Athenian thought - turn off the enlightenment. I had not learnt to do my athletics training early in the morning so in the afternoons ran in the one hundred degree heat among hundreds of lightning strikes on a track full of potholes. I dumped my athletic gear in the office until we could take it home in our car.

I was denounced as an enemy of the people or possibly a communist spy when one malicious specimen dropped a note of “student complaint” to the perennially nervous Sil Almeida about “body odor” in my office. Instead of telling the student to go away permanently, the sweaty and odorous Sil, baking all day in his office, saw his chance of building up a file against me and amplified the complaint to the best of his ability, probably informing the Dean as much as he could. The “body odor” soon became a chemical laboratory in which stench was perennially prevalent, the corridors filled with fumes of pyridine, one sniff of which would cause any standard modeller to become rabid. I was doing very well in research despite the heavy teaching load, and even in administration I kept

awake long enough to get assessed as “good”. So student complaints of stench became very useful to get rid of a heretic who was good at all his work, research, teaching and administration. By this time the stench was so powerful that no one except a chemist could enter the physics building without a respirator. I was used to a system at the EDCL where there were no student assessors and no student complaints, but plenty of stench. That system allowed tenured staff to stay on forever, well paid and doing nothing, but freed a department from the tyranny of immature minds. Having written that, my student assessments were “excellent” down to “good”, despite having never taught before. As it turned out, Sil’s inner circle were all odorously conspiratorial despite the air conditioning. In contriving that false and very ugly accusation, the student forgot about air conditioning but saw my athletic gear in the corner. The air conditioning would have wafted away any smell, and no one else noticed any smell. Miss Harper Lee of Alabama also wrote about false accusation in her best selling novel “To Kill a Mocking Bird”. Atticus Finch was the small town lawyer who tried in vain to stop the lynching. There did not seem to be anyone from North Carolina on the physics staff at UNCC, and for years before Schley became dictator, lived in a quiet backwater graduating no one in particular, I heard that it was one student every two years. Obviously they should have thought a bit and turned it into a research department, or just shut it down.

One or two members of my non-existent research group also began to look for other jobs, we used to trail miserably into the dusty library looking for adverts. We were all coned together. Despite the ominous shadow of the guillotine I tried to arrange for an inverse Faraday effect experiment but it was a hopeless case. The B(3) field was mixed up with a magnet, so I was asked why a laser did not attract iron filings. The one bright spot was meeting a theoretical physicist, Justin Huang, who laughed out loud at Barron, the high priest of “complete experiment symmetry” of which no particle physicist had ever heard. It became obvious that Sil had no idea about the inverse Faraday effect. So the sick hypocrisy of EDCL had just reestablished itself across the Atlantic at UNCC. Those who thought for themselves in that system were enemies of the Spartan phalanx, a boring wall of spears and bronze and the true nature of academia became apparent. One assistant professor called Yassin Raja became so frightened that he claimed that the inverse Faraday effect did not exist and made a fool of himself. I had managed to get a material for an experiment by Raja, then an assistant professor desperate for tenure. In Omnia Opera 456 on www.aias.us I extract a Spartan spear from my back armour, placed there by my own UNCC group. They had been involved up to their eyebrows in the UNCC Saga and had published an attack on B(3) without my knowledge. I replied to it in “Foundations of Physics Letters” as recorded in Omnia Opera 456. So I had been speared in the back by my own group so that they could get tenure.

I telephoned J. P. van der Ziel, sometime of the Bloembergen group at Harvard, who discovered the inverse Faraday effect following predictions by Piekara and Kielich. In the award-winning “Modern Nonlinear Optics”, which I edited with Kielich for Prigogine and Rice, an entire review is dedicated to the inverse Faraday effect. In this telephone conversation with Jan van der Ziel I mentioned that Rajah had denounced the inverse Faraday effect as an enemy of the people, so van der Ziel exploded. At about the same time as Rajah’s spear the B(3) field was beginning to be nominated several times for a Nobel Prize. Rajah had deliberately “not found” the inverse Faraday effect because B(3) did not fit in with standard model dogma. Something that was rational common sense would endanger tenure, and that sums up standard model physics and Bacon’s Cave. The massless photon is worshiped as an idol of standard physics deep in the recesses of the Cave, hidden among stalactites and ancient shibboleth. The Lord of the Flies was another idol of much the same type, worshiped by a public school choir reverted into murderous savages. My own mythical

group set about murdering the B(3) field in much the same way as the choir murdered Simon and Piggy in the best selling novel by the Nobel Laureate Sir William Golding.

More than twenty years after UNCC, B(3) has developed into the first successful unified field theory in the history of natural philosophy, and has split physics into dogmatists and an invisible college of rank heretics who consult my work by the millions. These enemies of the people exist in all the best universities. Raja got his tenure, being a friend of Sil, but became completely unknown. After the explosion by van der Ziel, M. Y. A. Raja suddenly found the inverse Faraday effect after all, in the terbium gallium garnet that I had got for him. This paper was published in 1995 but I was never even informed of it. I had been chopped as an enemy of the people (or possibly a communist spy) in late 1994 as described in the UNCC Saga on www.aias.us. Committees had been rigged in preparation. The B(3) field that I had inferred at Cornell in November 1991 had been confirmed by my group at UNCC, but my name was left off the UNCC paper in the same way that Trotsky was left out of that photograph with Lenin. Trotsky had become an Orwellian “unperson” and had never existed. His ghost was later murdered by Stalin. So my own group speared me in the back armour, confirmed the inverse Faraday effect after trying to deny its existence, and left me off the paper. With colleagues like that who needs Spartan hoplites on your doorstep. They were deceptive, disloyal people. Currently Raja has an h index of 15, and even now that is barely enough for tenure. Twenty years ago Raja had nowhere near enough of an h index for promotion from assistant to associate professor.

There was a conspiracy between my mythical group and Akhlesh Lakhtakia, who is demolished in Omnia Opera 430 on www.aias.us. We were told by Lakhtakia that the B(3) field is “unknowable”. This is not science at all, it is an expression of anthropomorphic animosity, an attack by the Spartans on the Athenians. This episode stench as badly as pyridine, and the entire sordid farce was criticised heavily, notably by Vigier, who denounced it outright at Vigier One in Toronto in the presence of many distinguished colleagues. In my opinion the way in which Raja pretended not to find the inverse Faraday effect, then suddenly found it at his political convenience, showed that he should not have been awarded tenure. His h index shows that he was not ready for tenure twenty years ago. Raja, Lakhtakia and Farahi were in it up to their eyebrows together. In assessing Farahi for promotion to tenure, I felt that he was not worthy of tenure in 1993 or 1994, so voted against it. Farahi therefore had a motive for behaving as he did, crude revenge. This vote against Farahi catalysed the conspiracy. At the time, the Hirsch index was not in use, but the h and g indices of Farahi now are still mediocre, most of the citations being for work carried out by him before he arrived at UNCC. So I did not think he was worthy of tenure as associate professor.

This decision of mine, made after a lot of study of Farahi’s record, put me outside the small club that runs any academic department, I had ruffled their plans. The h and g indices of the members of staff at physics at UNCC are abysmally poor, difficult to find with an electron microscope. So in the immortal words of my Ph. D. Supervisor Mansel Davies, it was a club like any other, and honesty in lieu of politics is not welcomed. Mansel Davies also described the Nobel Prize process as a club like any other, and he was a politician of chemistry. UNCC was the EDCL transported across the Atlantic, and all academic departments are riddled by what they call politics, or crude and often ruthless rivalry. At the beginning of the second semester at UNCC in August 1993 we still had the ghastly image of the gaunt, ruined EDCL in our minds, my best friend and I, and it was already clear that the physics department at UNCC would be closed or merged. In my first year at UNCC I had out produced the entire physics faculty combined, and had received excellent “research” grades from the department chair, and good to very good for teaching and administration. Similarly at Cornell Theory Center I had out produced the rest of the Theory Center faculty combined, and from 1978 to 1983 my group had out produced the rest of the EDCL faculty combined.

So the sullen Spartans sharpened their spears and closed the phalanx around mediocrity. They snuffed out the candle of enlightenment as Salieri did in "Amadeus", and shortly later Salieri snuffed out Mozart. This is an illustration of the law of mediocrities by Ayn Rand in her objectivist philosophy, or to put it more cuttingly, the scum rises to the surface. Salieri is portrayed in the film as the high priest of mediocrity. In historical fact Salieri was a prolific and fine composer, far from being a mediocrity, but the film is a vivid portrayal of what happens in court, the idols of the time and place producing marble as an end protect. In the film, Mozart puts this more pungently and shocks the court but not the enlightened Emperor.

About this time the ancient mariners of the virtually unknown Dielectrics Society held a conference at which the ruined EDCL was not mentioned, doublethink par excellence. By now the EDCL has never existed, it is an edited photograph of Trotsky, later murdered at the order of Stalin. This conference was chaired by one of the men primarily responsible for the EDCL fiasco, Graham Williams, who ran away to Swansea in 1988 using an unheard of "transfer of tenure", in other words using gross corruption in a smoke filled room. By 1993 the EDCL was a shattered ruin, but the people at the Dielectrics Conference of 1993 behave as if the EDCL had never existed and pat each other on the shoulder in a display of obscure vanity. This remarkable hypocrisy is described by Orwell in "1984" as doublethink. Those who seek the truth in academic departments are often intellectually dishonest, or "political". In terms of objective history, eliminating the propagandist doublethink, the reason why the EDCL became uncompetitive can be found easily in terms of a contemporary impact analysis and the way in which appointments were made. The most telling analysis is at the ultra competitive international post doctoral level. Distinguished post doctoral fellowships are advertised in the media and can be competed for in order to make the transition from post graduate student to post doctoral fellow. My own group at the EDCL won twenty distinguished fellowships in open competition. I won a world record of thirteen, and was awarded two honorary post doctoral fellowships in protest at UNCC by the University of London and the University of Lancaster. These fellowships are recorded in my CV on www.aias.us: 1) SRC; 2) ICI International; 3) NRCC; 4) Junior Research Fellow of Wolfson College Oxford; 5) Ramsay Memorial Fellowship; 6) SERC Advanced Fellowship; 7) University of Wales Fellowship Bangor; 8) University of Wales Fellowship Swansea; 9) IBM British Fellowship; 10) Pilcher Senior Fellowship Swansea; 11) Humboldt Foundation Fellowship; 12) Leverhulme Trust Fellowship (1984); 13) Leverhulme Trust Fellowship (late eighties); 14) Honorary post doctoral Fellowship University of Lancaster; 15) Honorary post doctoral Fellowship Royal Holloway and New College London. My first graduate student Gareth Evans won three prestigious post doctoral fellowships: 1) University of Wales Fellowship Aberystwyth, 2) Sloan Foundation Fellowship; 3) SERC Advanced Fellowship; and my first post doctoral assistant, later Prof. Mauro Ferrario, Director of CECAM, won one prestigious European Fellowship. We won more of these "international piano competitions" than all the rest of the staff at the EDCL in its entire history. So by the law of Salieri we were destroyed. If Stalin had run the place we would have been shot as enemies of the bronze phalanx. The objective history of the EDCL goes as follows.

I am the most productive physicist and chemist in history, having produced about two thousand items of various kinds in thirty seven years of unbroken productivity. This work is well known to be making a vast impact and has been nominated for a Nobel Prize about half a dozen times. My Hirsch index is $h = 50$ with a g index of 100. My Ph. D. Supervisor, Prof. Mansel Davies, won two Fellowships and has a Hirsch index h of 30 and $g = 51$, with 2,800 citations. He built a group of which one member, Jeremy Jones, won a University of Wales Fellowship. Jones currently has $h = 18$, $g = 31$, a total of about 990 citations compared with my total of about 14,000 conventional citations. Dr Stephen Evans won an SERC Advanced Fellowship, and has $h = 9$, $g \sim 17$, a total of 412 citations. He was appointed lecturer by

Jeremy Jones, who told me to “go to hell” in a corridor when I applied for the same lectureship. Stephen Evans was a decent man but resigned after only one or two years as lecturer. None of the other people at the EDCL won a prestigious open competition Fellowship, but were all tenured mysteriously without any form of competition. Such a ridiculous system was bound to collapse as being uncompetitive. Prof John M. Thomas was appointed as a lecturer at Bangor after a year in industry, probably without advertisement, and without winning a competitive Fellowship, and to Professor at the EDCL in 1969, probably without advertisement; Prof. Mansel Davies was appointed as lecturer in about 1948 without advertisement. Thomas currently has $h = 76$ and $g = 128$. His M index is much smaller than mine because he is essentially the manager of a large number of researchers working in a popular field. Prof. G. Williams was appointed as lecturer in 1966 without any advertisement and without winning an open competition Fellowship. He has $h = 33$, $g = 67$, 12,159 citations. Dr Cecil B. Monk was appointed lecturer without advertisement and without winning a prestigious post doctoral Fellowship. He is currently $h = 21$, $g = \sim 36$, total of 1,550 citations. Mr A. J. S. Williams was appointed assistant lecturer in July 1950 at the same time that he graduated B. Sc., an entirely random appointment without any form of open competition. He did not even graduate Ph. D. His current h index is 4 and g index is about 2, indicating essentially no research output at all. Yet he was allowed to remain at Aberystwyth for years after retirement on full salary. A. J. S. Williams was a terrible lecturer, who unloaded half his course on our class of 1971 in the final lecture, a matter of two or three weeks before the finals began. He simply handed out a thick wad of outline notes and walked out, leaving the students to learn everything themselves, and leaving half his course untaught. There were no student assessments at the EDCL. Once appointed to tenure, lecturers could do what they liked for many years, so they began to think that they owned the place.

It is already clear that the EDCL was a closed shop. Similarly physics at UNCC was a closed shop, tenured members of staff were allowed to remain there for many years without producing a single research paper.

Prof. W. J. Orville-Thomas was a Welsh speaker who appreciated my work but again was appointed to tenure without advertisement and without winning a single prestigious post doctoral Fellowship in open competition. He currently has $h = 31$, $g = 70$, a total of about 4,200 citations. He designed much of the new wing of the EDCL, including room 262 in which I laid the foundations for three world records: number of prestigious Fellowships in open competition; youngest recipient of the D. Sc. under modern rules; total number of publications and similar for an individual scholar in the history of physics and chemistry. After only twenty five years (1963 - 1988) the carefully designed new wing of the EDCL was a gaunt ruin as described already. The tenured members of staff behaved as if the destruction of the EDCL had never occurred. For example the Dielectrics Society of 1993 convened as if no history had transpired, and the College at Aberystwyth has turned EDCL into an “unhappening”, the inanimate equivalent of Orwell’s unperson in “1984”. The government of the EDCL was therefore appallingly poor, the entire EDCL was used for the personal gain of self seekers, all at public expense.

Of the early staff at the EDCL, Mr. J. B. Bowen was a decent Welsh speaker but again was appointed without advertisement without a Ph. D. His h index is 2 and g index about 1, with a total of 2 citations. So he was a teacher all his life, and did essentially no research. Staff are expected to be committed to teaching, research and administration. Dr. G. Morrison was not a pleasant man at all, and his h index is now $h = 4$, $g = 6$, a total of 42 citations. He did not win a prestigious Fellowship and it is unlikely that he was appointed by open competition. His lectures were incomprehensible and on one occasion he suddenly fell over sideways. He told the class that he had deliberately fallen over when he felt his kneecap cracking. This made the class feel deeply angry, why were we being subjected to such

eccentric rubbish? For some reason he was allocated two permanent laboratory assistants, but in many years produced nothing, $h = 4$, $g = 6$ is abysmally poor. The same kind of deadwood existed at UNCC, and again they were allowed to keep tenure, producing essentially no research. In the end Morrison was forcibly evicted from his laboratory by J. O. Williams but by that time the EDCL was about to close. J. O. Williams appreciated my work and was a decent man, a fluent Welsh speaker, but again won no open competition Fellowships, the acid test of real ability. He was probably appointed to tenure at Bangor without any form of advertisement, and was appointed at Aberystwyth in 1969 by J. M. Thomas without any form of advertisement. His current h and g indices are $h = 24$, $g = 34$, a total of 1,500 citations. This is fairly good but barely enough for full professorship by contemporary standards. Eurwyn Evans again was a decent Welsh speaker and was appointed by J. M. Thomas in 1969 to tenure without any form of advertisement. He later resigned and returned to Gwynedd. He is currently $h = 15$, $g \sim 25$, a total of 741 citations.

Of the middle era, Dr. S. H. Graham was appointed to tenure without winning a prestigious post doctoral Fellowship and probably without advertisement. He is currently $h = 6$, $g = 7$, a total of 252 citations. So he was a teacher who did little research and who designed the new organic chemistry laboratory at the EDCL in about 1963. Again by 1993 this laboratory had been badly damaged, and was closed in 1988 and left to deteriorate into a ruin by a grossly incompetent administration. Dr. Graham was a good lecturer and demonstrator but turned very nasty in the corridor when I refused the sordid corruption of the Swansea job. Shortly later, he died suddenly. A lot of things at the EDCL happened in the corridor, including several verbal common assaults. The Swansea job was given to me via Mansel Davies over the telephone but was at the same time advertised publicly. Candidates were called to interview by J. H. Purnell to give the impression of fairness. I suspect that this malfeasance and corruption went on in the University of Wales all the time, so the once proud People's University deteriorated into an unhappening and was filtered from history. Dr. Graham was capable of doublethink - capable of ignoring corruption to protect himself. He had been my teacher from 1968 to 1971, but now turned on me for being an honest idiot. So my overall objective assessment of him is not very high. When I think back to the EDCL now it gives me the creeps, it was full of arrogant mediocrities determined to ignore meritocracy. This was also the opinion of the Principal, Sir Goronwy Daniel, who as an outsider to academia could naturally appreciate my work without becoming manically envious. Dr. Alun H. Price of the middle era was a student of Mansel Davies and was appointed to tenure without winning a prestigious Fellowship and without advertisement. He is currently $h = 7$, $g = 13$, not enough for tenure according to the Hirsch index. He was friendly enough on the surface, a fluent Welsh speaker who went to my Grammar School, Pontardawe, but would always protect his own career in the last analysis. So he turned up at the Dielectrics Society in 1993. At about the same time in 1993 I was confronted by the appalling ruin of the new wing of the EDCL. By doublethink, those responsible for this ruin were not bothered, nothing to do with them as long as their tenure and pension were intact. The administration was prevented from destroying the old building of the EDCL because Gareth Evans had it listed with CADW. None of the tenured staff tried to save it. If it had not been listed it would have been sold as a bed and breakfast bonanza. I am not sure whether it was vandalized, but now its original purpose had been entirely wasted by turning it into an art department.

Exactly the same pattern repeated itself at UNCC, it was full of obscure mediocrities determined not only to ignore meritocracy but to destroy imagination. In the later era Prof. H. G. Heller and Dr. P. Cadman were appointed just before I arrived at the EDCL in the autumn of 1968 as a freshman undergraduate. Cadman probably arrived with Sir Aubrey Fiennes Trotman- Dickenson, Winchester and Balliol College Oxford,

whose early career paralleled mine in that he won an NRCC Fellowship in 1948 and an ICI Fellowship in 1950, shortly later being appointed as lecturer at Edinburgh. That shows clearly that I should have been appointed as a microscopically paid research associate with tenure after winning three internationally competitive post doctoral Fellowships when I was still a student. He was appointed the Head of Department at the EDCL in 1960, and left in about 1967, Mansel Davies becoming temporary Head of Department. Cadman was part of the gas kinetics group of Trotmann- Dickenson and was probably appointed lecturer without winning a competitive post doctoral Fellowship, and probably without advertisement. Cadman is currently $h = 4$, $g = 6$, a total of 615 citations. This is another dismal performance, not enough for tenure by today's standards. Cadman was a terrible lecturer who told me as a freshman that "it's all politics". Who am I to disagree? He seemed to be in a permanent state of depression, and it took hours to make sense of his lectures in the EDCL Library. By 1993 this Library has been obliterated, there was just a large gap where it once existed. It had become an unlibrary. Prof. H. G. Heller did not win a competitive post doctoral Fellowship but this time he was probably appointed as a lecturer in organic chemistry as the result of an advert. Heller was arrogant and unpleasant, telling me that I would never make a chemist when one of his badly designed experiments failed. He is currently $h = 21$, $g = 35$, a total of 1,848 citations. That is just about enough for associate professor or lecturer by today's standards. Mansel Davies once manically informed me that Heller was going to make the EDCL very rich, but obviously he didn't. He scuttled off to Cardiff in about 1983, and I still remember the shock on Jeremy Jones's face when Heller told him he was leaving. I had just been worked over by Jeremy Jones and Graham Williams and told repeatedly to go to Oxford or anywhere because Purnell was going to mutilate the EDCL if I stayed. This sordid corruption is described in volume two of this Autobiography and I felt sick for a long time afterwards. Dr. Colin Young was another sixties appointment. He was educated at Cambridge and was a lecturer when I started in 1968. He did not win an open competition post doctoral Fellowship and was probably appointed without advert. He resigned from the EDCL and worked in France in later career. He is currently $h = 7$, $g = 8$, 1,188 citations, the overwhelming majority with his French colleagues after he had left the EDCL. This is not enough for tenure by today's standards. Young often seemed to be unhappy in the EDCL but was a decent man.

In the later era and final years of the EDCL appointments to tenure were made almost exclusively to bolster the group of J. M. Thomas, notably Bill Jones to staff demonstrator, David Parry as tenured lecturer or research associate and John Adams. David Parry "took his tenure" to Swansea in 1988 and is currently $h = 15$, $g \sim 24$, 1,077 citations, just enough for assistant professor. He was appointed at dead of night and in darkness and woke up to find himself permanent and enlightened. He did not win a prestigious international Fellowship and was appointed without advert because J. M. Thomas wanted a theoretician. Again, David Parry was a decent man, and I had shared the same digs as his brother Andy Parry as a first year graduate student. David Parry told me that he was just very lucky, so did Cecil Monk, and Stephen Evans and others were very uneasy at my treatment by the abusive and incompetent Jeremy Jones. Many had been on the receiving end of tirades of expletives in the corridor. By 1993 the corridor itself had disappeared. It is obvious that such a random system should be replaced by a system in which a candidate is given tenure automatically after winning one or two prestigious Fellowships in international open competition. That would remove the corrupt power of an out of control head of department and would be a civil service type system which came naturally to Sir Goronwy Daniel, a Civil Servant and awarded two knighthoods. John Adams also woke up to find himself permanent and was appointed without advert and without winning a prestigious open competition Fellowship. He

appears to have resigned in 1988, when the EDCL closed, and is currently $h = 6$, $g \sim 11$, 221 total citations, not enough for assistant professor in the contemporary system.

This dismal pattern was repeated at UNCC and if I had known about it I would never have gone there. The difference is the staff at UNCC were not very nice people, they were Jeremy Jones clones.

The EDCL was destroyed completely by the smoky appointment of Jeremy Jones in 1978 as described in volume two of this autobiography, now a classic read tens of thousands of times. I applied for the job given to Jeremy Jones but was forced to withdraw my application by Mansel Davies. That was an act of illegal corruption but there was nothing I could do about it. Jeremy Jones won one University of Wales Fellowship in open competition and used it to work with Herzberg in Canada. He was appointed lecturer at Cambridge. I do not know whether that job was advertized. He is currently $h = 18$, $g = 31$, about 990 citations, just enough for assistant professor. He subsequently appointed Phil Freedman to tenure without advertisement. Freedman resigned shortly later, did not win a prestigious open competition Fellowship and is currently $h = 7$, $g = 7$ about 163 citations, not enough for assistant professor. Again Freedman was a decent man and was obviously very miserable at Aberystwyth. Jeremy Jones deserted in 1988, making no attempt to save his department. His appointment was an obvious disaster from the start.

So my room 262 group of Gareth Evans, Mauro Ferrario, Colin Reid and guests massively out impacted everyone in terms of prestigious Fellowships. The grotesque corruption that destroyed our group could easily have been avoided by a change in the system a change that ensures that tenure is awarded to people who have won two or three distinguished Fellowships in open competition. Gareth mentioned to me in 1993, when I was miserably working in Bangor, that we should be given two personal chairs. The same is true now. The system is still too corrupt to recognize merit, so we had to work without the system, AIAS / UPITEC being the result.

4. THE CONSPIRACY.