## LESSONS MY MOTHER NEVER TAUGHT ME

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I am grateful that you have given me this opportunity to look back through the years and to try and identify some of the events that did, or should have, influenced me. So let me start at the beginning.

I was born in 1930 in Southport, a Victorian spa town in the Northwest of England on the Irish Sea. My parents kept a kosher home but made few other concessions to their Judaism other than attending synagogue twice a year and marching me off to Hebrew school at the weekend. I mention this not so much out of a sense of total disclosure but because it became important to the ultimate choice of my career.

When I was about seven or eight my mother asked if I was aware that Jews were being forced to leave Germany, losing their homes, their possessions, and their businesses. "But," she said "their education could not be taken away from them and the doctors and scientists will always find a place somewhere. That's why you will be a doctor." I was not a rebellious child and the decision about my career was made.

One afternoon a few years later I took my first step. I was attending the local grade school and we were all taken to the school hall to listen to a lecture. The speaker produced a large red disc and informed us that this represented a red blood cell, that there were millions of them in our blood, that they carried oxygen from our lungs to our brains and limbs, and without them we would loose our ability to think and move properly. "Now let me show you one that has been soaked in alcohol," he announced, producing a pale, shrunken and distorted version. "Do you think that if your blood looked like this your brain and body would function properly?" "No" we all shouted. "Then, when you go home," he replied, "make sure you tell your fathers about this and then send me an essay about the dangers of alcohol." I had never seen my father drink more than a glass of kosher wine (four at Seder nights) so I ignored the first instruction but did send him the essay instead. Several weeks later I received a certificate from the Lancashire Band of Hope and Temperance Union" for the excellence of my essay on "Alcohol and the Human Body." It was my first medical publication.

However, it was the following year that I encountered my first and most formidable hurdle, the Eleven-plus exam. In case you do not know, let me say a word about schools in the UK in the 1940s. Basically, there were two systems, the private or, as it was called, the public school system, and the state system. All children in the latter system attended the local grade school and at the age of eleven took the dreaded eleven plus examination. Passing this examination allowed entrance to the local grammar school, which provided a curriculum designed for possible entry into university, but failure to pass resulted in the child attending the local secondary modern school, which had an emphasis on manual skills rather than on academic subjects. Once a child was assigned to a secondary modern school it was virtually impossible to cross over to a grammar school. At the age of eleven, often in a large and lonely room, a child's future was being decided.

Luckily I passed and in the fall of 1942 was enrolled in King George V grammar school for boys. It was the third year of World War II. The masters of military age had been conscripted and, for the first three or four years at school, the bulk of the teaching was provided by older men, several having lost limbs in World War I. This, of course, changed after 1945, when a younger and more athletic staff returned to the school. As with many boys' schools there was an active culture of corporal punishment. This was finally made illegal but there was a different ruling for private and state schools. In 1987, corporal punishment was banned in all state schools and private schools with government funding. It was not banned in private schools in England and Wales until 1999 and even later in Scotland and Northern Ireland. Even then some church affiliated schools appealed against this ruling until 2005, claiming that their "freedom of belief," as protected by human rights legislation, was infringed because it was their belief that naughty children should be spanked.

I thoroughly enjoyed both the academic and athletic activities of the school. For five years we studied the usual basic arts and science subjects. In the fourth and fifth years, the focus was on preparing for the School Certificate examination, which was taken at the end of the fifth year. Much of the teaching was rote and ethnocentric. For example, in history, we knew the dates of all the relevant wars and battles, the contestants and the victors but were taught little about the social causes and consequences.

I took and passed the examination in nine arts and science subjects. I then had two further years at school but had to choose between an arts track and a science track. Aware of the requirements for medical school I had to choose two further years of science. At the age of sixteen, when many American children are preparing for a liberal arts college education, mine was over.

Two years later I obtained the Higher School Certificate in Physics, Chemistry and Biology and was accepted to the Medical School of Manchester University.

It has always seemed to me that one leaves a college not only with a degree in a chosen major but also, as if by osmosis, irrevocably influenced by the traditions and past glories of the institution. For this reason let me say a few words about the University of Manchester.

Manchester, which was founded as a Roman camp, became the most successful city of the British Industrial revolution. With great foresight the local businessmen realized the need for an educated work force and in 1824 the chemist, John Dalton, together with Manchester businessmen and industrialists, established the Mechanics' Institute in order to ensure that workers could learn the basic principles of science. This was later to become University of Manchester Institute of Science and Technology. Around the same time, John Owens, a Manchester textile merchant, left a bequest for the purpose of founding a college for the education of males. This college was later granted a Royal Charter to become England's first civic university, the Victoria University of Manchester. In 2004, it merged with the Institute of Science and Technology to become the University of Manchester, which is now one of the largest in Europe with four Nobel laureates currently on the faculty.

Not surprisingly, the institution has always been strong in the sciences and I would like to give one short example. Around 1916-17, whilst Ernest Rutherford was in Manchester doing his most creative work on the structure of the atom, in a nearby laboratory a naturalized Polish immigrant, Chaim Weitzmann, had succeeded in producing acetone by bacterial fermentation. Acetone, which was in short supply, was necessary for the manufacture of cordite, a smokeless propellant developed to replace gunpowder and essential for the Allied war effort. This contribution did not go unnoticed by Arthur Balfour, the former Prime minister and a former Member of Parliament for Manchester, who at that time was the foreign secretary and a friend of Weizmann. Balfour was later to write the "Balfour declaration," which stated that "His Majesty's government view with favour the establishment in Palestine of a national home for the Jewish people." This became the basis for the establishment of the State of Israel, Weizmann becoming the first president.

The University had another feature, which I think is worthy of mention.

Emmeline Pankhurst and her three daughters (one of them, Cristobel, was a University law graduate) were Manchester women and driving forces in the English suffragette movement. In the University the social and athletic programmes are run by the student body through the Student Union. Influenced by the Pankhursts, the women students demanded that they alone should control their student life. As a consequence, until the 1960's the University carried this legacy of the suffragette movement, having separate student unions for men and for women.

The present Medical school sprang from the Manchester Royal Academy of Medicine, which was founded by Roget (of the Thesaurus) who served as the Surgeonin-Chief in the early years of the 19th Century.

I began my medical studies in October of 1949. It was one year after the introduction of the National Health scheme. Consequently, the entire faculty had entered the medical profession before the introduction of the health scheme. Most, at least at that time, warmly embraced the new system. Some decided to go along with the flow until retirement, but a distinct group was clearly resentful of a perceived change in their life style and made this clear to students and patients alike.

I really enjoyed medical school and developed a great affection for the patients, mainly industrial factory workers, miners, or farmers, who I found to be honest and hard-working.

Despite the bragging of individual medical schools, the curriculum and teaching material were pretty much standard. So let me mention some of the courses and teachers who have influenced me.

Looking back through the years, I remember the majority of the faculty as being wise and compassionate but there was always the odd sprinkling of the facetious or the arrogant. My fondest memory is of my professor of Medicine, Lord Platt, who was the President of the Royal College of Physicians. He was modest and gracious and I still remember several of his statements, which seem to resonate even more loudly today. Each time I hear one of the endless TV commercials from the pharmaceutical industry, usually ending, "Ask your doctor if this may help you", I recall Professor Platt's lesson. "In my career," he said, "I helped more people by taking them off medication than I ever did by putting them on." Incidentally, in 2010 the total cost of prescription medicines in the United States was over \$ 307 billion.

Sometimes the wisdom was wrapped in layers of jocularity, not always understood or appreciated by the patients. I remember a middle-aged man being seen in the clinic by the head of neurology. He complained of spots before his eyes, which probably resulted from "floaters," those small black dots which slowly drift across the field of vision and are usually of no significance. After a clinical examination, the neurologist provided the patient and students with the following opinion. "Laddie," he announced in a thunderous Scottish accent, "everyone has spots before their eyes. Only bloody fools look at them."

Occasionally, there were displays of total arrogance. My most vivid memory of this was of being at an ante-natal clinic. I was one of about six students and several residents examining the abdomen of a young woman, who was pregnant with triplets. In turn, each of us felt the plethora of heads, bottoms, knees and elbows and then muttered amongst ourselves about our findings and their significance. At one point the young girl quietly asked the nurse in charge, "How many am I going to have?" Her response was more of a reprimand than an answer. "That," she replied "has got nothing to do with you!"

As medical students, we spent quite lengthy periods resident in one or other of the teaching hospitals as sub-interns. The most popular rotation was obstetrics. For one month we observed, and then conducted, normal deliveries. In the second month we observed and then assisted at abnormal deliveries, and in the final month we were provided with a bicycle (it rains a lot in Manchester) and a street map and when called would pedal away to join a certified midwife to assist at a home delivery. All of the expecting mothers had all been carefully screened throughout their pregnancy, the midwives were all experienced and, mercifully, everything went well. However, in retrospect, the course from which I benefitted most was "Industrial Disease and Occupational Medicine." We spent time in hot, noisy, and greasy industrial factories of all kinds, in the cotton mills, where in some of the rooms people worked in a veritable mist of cotton fibers, and most memorably, down a coal mine. A trip down the mine shaft is only the beginning of a miner's day. In those days, to get to the coal he needed to walk or crawl to the actual coalface and then spend the day bent double breathing coal dust and silica, and fearing an explosion or roof collapse.

I learned more than just the cause of pneumoconiosis. That course taught me that there is a lot to be said for earning your living wearing a clean shirt and tie.

A month or so ago, at a Thursday lunch, Howard Spiro, making his last presentation to this Fellowship, spoke about the Yale Medical school and together with Jerry Burrow discussed the "Yale Way," an unstructured system without a defined reading course and without examinations, designed to encourage creative thinking in the medical students. This could not be further from the model of medical training in England in the 1940-50s, which resembled a long hurdle race, where the main object was to stay in the lane, not to knock down any of the hurdles and not to run out of steam before the finish. Examinations were relentless and essential to pass. In the final two years there were exams every six months, usually in two or three subjects. In each subject there were two three-hour papers, each consisting of three (no choice) essay questions, as well as oral and practical examinations. In addition, in pediatrics, obstetrics and gynecology, medicine and surgery we were examined on a variety of common and uncommon clinical findings. But in medicine and in surgery the most important examination was the major case. Here, you were left with a patient for about an hour at the end of which you presented to the examiner your diagnosis and treatment plan. These patients all had long-standing diseases with fixed and constant abnormal clinical findings and they were accustomed to the routine. It was the most exciting day of their year. They were proud of their disease and more than helpful with comments such as, "Don't forget to ask about my time in the tropics during the war" or "Did you feel my enlarged spleen or listen to my aortic valve?" If this sounded like a scene from "Doctor in the House" it was. This was the type of situation where Richard Gordon, the author, got his material. My final examination was on surgical instruments and technique. This took place in a large room with an enormous central table, covered with surgical instruments. Several groups of student and examiner were standing and discussing some or other surgical technique. John Charnley, who virtually single-handedly had pioneered joint-replacement surgery approached me, saying, "Let's see what we can talk about" and from the pile of surgical instruments picked out a small metallic cup. I immediately recognized what it was but was less confident about the answers to any of the likely follow-up questions like "Where would you make you incision? What vital structures must be avoided? When would you allow the patient out of bed? When would you let the patient weight-bear?" Charnley put the cup in my hand and asked, "What would you use this for?" I cut my losses and replied, "Mr Charnley, it is a prosthesis for a hip joint. I would use it for eating soft-boiled eggs". He smiled, put his arm around my shoulders and replied, "I use it for drinking sherry. Well done."

Several days later I graduated. My university days were over.

All that was needed was the mandatory six months internship in medicine and then surgery and I was free to be let loose on the general public. But not quite. I had been deferred from compulsory military service until I had finished my medical training and on the completion of my internships I was assigned to an infantry battalion, the Cameronian Scottish Rifles, as their Medical officer. Two years in the military provided lessons which were not taught in either grammar school or in medical school.

The regiment, which was on active duty, was preparing for a role abroad. We were stationed in Edinburgh at Redford barracks. It was always claimed (but never proved) that that the barracks' design, with high ceilings, open corridors and airy rooms throughout the main blocks was originally intended for use in India. It would have caught every last gasp of cool air on the plains of the sub-continent. It certainly caught the rain and gales that blew in from the Pentland hills and the Firth of Forth. This was my first, but not last, lesson in military planning.

The days in Edinburgh seemed to consist of endless and mindless drilling and marching, saluting (the classic other-ranks phrase was, "if it moves salute it, if it doesn't paint it") and automatically responding to commands that were played by the regimental piper. It was all mind- numbing, and it appeared to me that, in contrast to my previous experiences, we were being trained to do rather than to think.

In January of 1957, Iraq threatened to invade Kuwait and we were shipped to Bahrein in the Persian Gulf as a deterrent. At that time Bahrein was an extremely humid and hot strip of dirty sand with a large refinery and a small airbase. A sergeant offered this description. "The Persian Gulf is the arse-hole of the world and Bahrein is 100 miles up it." On arrival, I examined my medical equipment and my immediate thought was that it had all been borrowed from an exhibit at the Imperial War Museum on the medical aspects of the Crimean war. Luckily, Iraq had second thoughts and several months later, together with several companies, I was posted to Kenya.

But, before leaving Bahrein I took advantage of accrued leave to visit what was then Ceylon. Two things made this easy. The sister and brother-in-law of a fellow officer lived there, had a tea plantation in Nuwara Eliya and had invited me to stay with them. The second was that, together with fellow officers, I had become friendly with the military and civilian pilots using the airbase. It was not hard to hitch a ride. After years of grey skies and lots of rain in England, I was unprepared for the blaze of color and the fragrance of the flowers which greeted me. On arriving at Colombo, I stayed at the Grand Oriental hotel. I am told that it is seedy today but, in 1957, it was absolutely exotic with huge wicker armchairs, ceiling fans and a clientele resplendent in white suits and Panama hats. I thought that I was part of a movie set.

Then off to Nuwara Eliya, where I spent the days learning how the tea was picked and processed. Every evening my host made the same suggestion, "Let's have a drink on the terrace and watch the sun set over the plantation." I could have spent my entire leave just doing that but after a few days left with a younger brother to visit the temples and ancient sites on the island. At that time the island was a real paradise.

In 1972, the island became an independent republic and changed its name to Sri Lanka. Sadly this heralded almost three decades of bloody and violent ethnic conflict, resulting in 100,000 deaths and leaving some 300,000 people displaced. Paradise was lost but now it appears that it is starting to be regained.

Kenya was as glorious as Bahrein was miserable. We were stationed in Gilgil, which was almost on the equator but at an elevation of 6000ft. It was hot, dry and sunny during the day but we would often have a log fire at night. In the 1940s the site had been a British internment camp for members of the Irgun, a Zionist military organization, but it was now a base for the campaign against the Mau Mau, which was an anti-colonial conflict dominated by the Kikuyu. This had originated in 1952 and by 1957-8 had almost died out, but it helped set the stage for Kenyan independence. When we arrived, we had little to do other than train, which was really a euphemism for going on safari, and enjoying the spectacular scenery and climate. We did have to show the flag by hosting endless parties for the local farmers and plantation owners, who did their best impersonations of Kenya's Happy Valley set. In fact, during the 1930s, some members of the set actually lived in Gilgil. The alcohol was all duty free. The tonic in a gin and tonic cost three times the price of the gin. The officers had to be "hospitable" and there was real trouble from the commanding officer if you were seen not to be drinking or holding an empty glass. I soon learned to order my own "special gin and tonic". By the end of a heavy evening I was still on my feet and stone sober. No surprise. The whole night I had been drinking tonic water with a slice of lemon.

I had learned another lesson, that there is no limit to the amount of alcohol that the British military and their guests can consume if it is cheap enough.

We did have a training exercise in Northeastern Kenya near the Ethiopian border. It was a combined mortar exercise involving all the battalions of the King's African Rifles. "Your main problem," they told me, "will be gun-shot wounds and snakes. Do not worry. You will be equipped with the relevant anti-snake venom." I didn't worry until I reached the camp and went through my medical equipment. Indeed, they had provided the snake venom, Surprise! the label clearly read, "For use with West African snakes." Kenya is in east Africa. After more than twelve months in the military, I should have expected this.

It didn't take too long for the authorities to realize that we were no longer needed in Kenya and I was posted to the British Military Hospital in Dhekalia, Cyprus. Dhekelia had been one of the camps run by the British government for the internment of displaced European Jews who had attempted to immigrate to Mandatory Palestine in violation of British policy. Ironically, I had been posted from one former Jewish detention center to another.

However, it was in Cyprus that I learned my most telling and most frightening lesson about the military.

Cyprus, which had a Greek majority and a Turkish minority, was in the midst of a struggle to obtain independence from the United Kingdom. EOKA was a Greek Cypriot resistance organization that was fighting a violent campaign for the end of British rule of Cyprus, and for union with Greece (Enosis). During this period a sizable number of young, mainly Greek–Cypriot, men were arrested, probably for no greater crime than wanting national independence, and were held in detention camps. It was in one such camp that I had an experience that has never left my memory. One of my periodic duties was to conduct sick parade in one of the camps, which consisted of a number of small huts, each holding about 18-20 men. The orders were to examine two men in each hut. Almost everyone wanted to be examined.

I have mentioned how easily one could fall into the mindless acceptance of military life. This was even easier when accompanied by two armed guards, lots of barbed wire, endless check-points and all to the rhythm of boots marching in unison. On the first day, although others wanted to report sick, I followed my orders, saw two and, when I had visited each hut, I returned to the hospital to while away time until lunch.

It was the same process the following day. This time, as I drank my gin and tonic, I asked myself what on earth I was doing. I didn't go to medical school to deny medical care and laze about in the bar instead. The next day I saw all the detainees who wanted to report sick. I bring this up not to defend or condone the actions of a soldier following orders but to point out just how easily one can be programmed and almost seduced into such actions.

By this time I was due for some leave and I left Dhekelia to sail to Israel, in so doing reversing the voyage that those displaced European Jews had made some dozen years earlier. I was in Israel for a month. With barbed wire and Jordanian guards limiting access to the Old City, it was not the city that we know today.

Within a few weeks I was back in the Middle East. Faisal, the young king of Iraq, was assassinated in a military coup. There were fears that Hussein of Jordan would be next and a small, hopefully protective, British force was dispatched to Jordan. One medical officer was needed to join them by sea, travelling through the Suez Canal. I had less than two months of military service left and was happy to volunteer. This time it was an experience to stand in Jordan and look over the barbed wire into Israel.

Shortly after my return to Cyprus my military career was over.

On returning to civilian life in England I had no idea how I wished to spend the rest of my medical life. I started a residency in internal medicine in my old teaching hospital to update my medical skills and to tread water until I knew more clearly what it was that I wanted to do in the future. In those days a residency was exactly that. The residents lived together in the hospital, took all their meals together in the hospital, managed to get out of the hospital one half day per week and the occasional weekend.

One lunch-time a fellow resident announced that he was driving to Liverpool and asked if anyone wanted to join him. I was off that afternoon and was glad to get away. In the car he told me that he was going to be interviewed for a position in the Radiology residency at Liverpool University. I had come to realize that I was more interested in the making of diagnoses than in the management of patients. Diagnostic radiology seemed an ideal choice. I asked him if he would see if I could be interviewed. He did. I was. I was offered and accepted a position. Suddenly, I was training to be a Radiologist.

In the late 19th Century, Liverpool had been one of the wealthiest cities in Europe. In fact, the Tate gallery and its collection was a gift to the nation by a Liverpool industrialist. By 1960 the former glories were starting to fade but the city was still hanging on to a lively passenger and mercantile sea trade. In addition to an initial grounding in my specialty, I did take away one great lesson. We would often lunch in the park overlooking the river and watch the vessels, large and small, set sail for distant lands. It soon became obvious that the world was a very large place and, if you were unhappy with your current situation, you were only bound by your own inertia.

At this point I would like to mention how the training program worked in the UK in the 60s. Unlike in the United States, a trainee did not complete his education in one program. Rather he or she progressed through the ranks of Senior House Officer, Registrar, and Senior Registrar before finally becoming a Consultant. These positions were competitive and often entailed moves from city to city before the training was completed.

By the time I had completed my initial training in Liverpool, Elaine, who was from Newcastle, and I were married, and when a Registrar position opened up in Newcastle I was lucky to get it. It was, and still is, an outstanding department and I was fortunate to be mentored by two outstanding physicians The chairman, Charles Warrick, had been a highly successful orthopedic surgeon only to develop severe psoriasis, which meant he could no longer operate. Rather than becoming embittered and jaded, he trained as a Radiologist and delighted in sharing his vast knowledge of bone diseases, an area in which I was particularly interested. He was probably the greatest influence in my career.

Whately Davidson was the former Chairman and a world authority on the radiology of thoracic and cardiac diseases. He was the President of the Royal College of Radiologists and had been President of the British Institute of Radiology, President of the Radiology Section of the Royal Society of Medicine, had been a member of the Standing Medical Advisory Committee of the Ministry of Health and was a major and influential figure in the British Medical Association. This makes him sound a powerful figure and he was. But he was kind and approachable.

As a special treat he would allow me to join him at the Regional Thoracic Centre in Shotley Bridge, County Durham. This was considered quite an honor. But it was in the middle of the moors, nearly an hour's, usually rainy, drive from Newcastle and I had to meet him at six in the morning. There, we discussed the post-operative chest x-rays. I was allowed to dictate them under his supervision and, after commenting on the status of the heart and lungs, would end with the phrase, "There are rib changes and sternal sutures as a result of surgical intervention." This phrase would be fine for a number of cases but periodically Dr Davidson would correct me. "Do not say intervention, say interference." I had no idea why and I finally asked him which term he used and when. The instant answer was straight-forward but illustrated his power in the medical community. "I use interference if I dislike the surgeon."

Two years later I took and passed the Fellowship examination of the Royal College of Radiologists. Dr Davidson was an officer of the College and was present when I was physically admitted. Following the ceremony he took me to lunch at his London club, the Athenaeum, and afterwards we walked through St James' Park. Just as we were parting he gave me one last piece of professional advice, "Lawson," he said, "if you want to get on in Radiology go and buy yourself a good hat." I didn't take his advice. I had successfully applied for a fellowship in pediatric radiology. Elaine and I were heading to Cincinnati and didn't think that I would need one.

But why Cincinnati? I had developed a particular interest in the radiology of musculoskeletal diseases and when I was offered the chance to work with one of the leading experts in this field, who was at the Cincinnati Children's Hospital, I jumped at it. Our time in Cincinnati was a great success in every possible way.

At the end of the Fellowship we returned to Newcastle to await an opportunity to apply for a suitable consultant position, which, once obtained lasted until retirement. Things happen in strange and unexpected ways. Within a month of my return, the chairman of the department had tragically died, leaving a vacancy on the staff. I applied for and was selected for the position. It appeared that I had reached the end of my radiology journey. But, as we all know, the initial points on a graph do not reliably predict the position of the later ones.

At that time there was an extreme shortage of radiologists in the United States. Just to have worked there put you on the equivalent of "Facebook". Occasionally, I would be contacted by some or other radiology department, asking if I was interested in returning. Initially, we paid little attention to these calls but gradually, as we began to miss the States, we started to take them a little more seriously, at least by trying to decide on the type of town in which we would prefer to settle. We had enjoyed Cincinnati but did not like being land-locked and preferred a small town but within easy distance of a major city. I was in Germany when Elaine got a phone call from a colleague, who was leaving the Hospital of St Raphael, suggesting that I may wish to apply for the position. This time we decided either to apply or never think about returning to the States again. I applied, was accepted, and several months later, with two small children, we sailed to New York.

The Radiology Department at St Raphael's had its own residency program and was also actively involved in the teaching at Yale. Members of the department regularly attended the Yale Department of Radiology weekly "Grand Rounds" either presenting or discussing interesting x-rays. There was an active voluntary clinical faculty at Yale and I received appointments to the clinical faculty of both the radiology and orthopedic departments. In addition, I had become involved in both local and national medical societies, but these were more focused on the standards and quality of practice than they were on the scientific and academic aspects.

In the late 1960s the American College of Radiology was campaigning for a change in contractual arrangements between a hospital administration and the department radiologists. At that time, the most common arrangement was that the radiologist worked for a salary. The College was recommending a new arrangement, namely that the radiologists (like most other practicing physicians) should bill the patient for their services and hope that the bill would be paid. This arrangement is now the standard practice in most hospitals in the United States but at that time it had not yet been introduced in Connecticut. It is not a more profitable arrangement -in fact, it is a big headache-but it takes the radiologists off the hospital payroll and gives them a greater independence from the administration. After three years at St Raphael's I was approached by the administration of the Griffin Hospital, Derby to become chairman of their radiology department and informed them that I would only take the position if the members of the department could send out their own bills. They agreed and I chaired the department for close to ten years. Throughout this period, I continued to teach both the radiology and orthopedic residents at Yale and organized a successful elective in radiology at the Griffin Hospital for Yale medical students. When my second contract was completed the administration announced that they intended to employ the radiology staff on a salary. Several of my colleagues chose to stay. I decided to try my hand in a private office. I soon found out that I didn't like this type of radiology practice but was rescued when I got a phone call from Yale asking if I could possibly help out by working part-time as a pediatric radiologist. This was not a game changer. It was a life changer.

A few months later, the Yale chairman asked me if I would consider joining the department full-time as head of the section of section of musculoskeletal radiology. It took me no time to decide. Just before my fiftieth birthday, and reversing the long established pattern of remaining in the medical school until a suitable opening appeared in the community, I gave up community practice and became a full time faculty member of Yale University School of Medicine and started the happiest phase of my professional life. In the previous years I had developed a comfortable working relationship with many of the clinicians so it was an easy transition.

However, by this time my personal trajectory and the trajectory of my chosen specialty, diagnostic radiology, had begun to diverge. Starting in the 1970s many new imagining techniques, including nuclear medicine, ultrasound, computerized tomography and magnetic resonance imaging had been introduced and incorporated in to the existing radiology departments. To such an extent that, although it is now over 100 years since Roentgen noted the properties of x-radiation, about 90% of the techniques which are now utilized in these departments have only come into clinical use in the last few decades. X-radiation no longer plays the sole role in these departments, which have now changes their names to Department of Diagnostic Imaging.

Unquestionably, the introduction of the newer techniques has resulted in many diseases being diagnosed more rapidly and more accurately but this has dramatically increased the staffing of the departments and the ultimate cost of providing services. As I thought about this I recalled Professor Platt, nearly sixty years ago, reminding his students that in those cases in which he was able to make a diagnosis, over 85% of the time he was able to do so by listening to, and carefully examining, the patient.

And how did all of this affect my own trajectory?

Whilst the radiologists in the community hospitals continued to perform and evaluate all of these varied examinations, this was not the case in the University departments where the faculty was encouraged to become expert in a single organ system or imaging technique – in my case, the musculoskeletal system. Not only did my clinical focus become more academic but my society involvement also changed when I was fortunate to be admitted to a number of national and international societies involved in the study of musculoskeletal diseases.

Publishing in their journals brought the customary rewards of invitations to lecture, to participate in symposia and instructional courses, and to be offered visiting professorships in the US and abroad.

When I became eligible for phased retirement I decided to repeat my previous pattern of doing things back to front. Having been provided with an honorary Yale degree, I thought that it was now time to obtain a Yale education. By auditing courses in Yale College and its graduate schools I have now been able to continue the process of a liberal arts education, which had been interrupted at the age of sixteen.

I would like to close with one final lesson from the past. Because I had spent years in private practice, which was very unusual in the department, residents looking for a position in a community practice would frequently ask my opinion about their job offers. I repeated to them the most important lesson that I had learned through the years. I learned that, in life, it is not so much a question of making the right choice but of maximizing the choice that you have made.