Chapter 10: The Leaning Ivory Tower

While CBA was flourishing, I continued my affiliation at the University of Massachusetts. In addition to the classes I attended in the Computer Science and the Cybernetics Departments, I was also an assistant professor in the Department of Exercise Science and Computer Sciences.

The Exercise Science Department was headed by a gruff-speaking physiologist, Dr. Harry Campney. Dr. Campney was the head of the department and taught a statistics class as well. His brainchild, however, was the establishment of the first department of Exercise Science which he started at the University of Massachusetts in 1967. Dr. Campney was an educational visionary who hired professors from various disciplines related to human movement.

Although Dr. Campney had been trained as a classical physiologist, he recognized that the future for his students would be challenged by a narrow academic concentration. Future students would need to have more broadly based academic backgrounds if they hoped to find university employment or to find work outside of the university. They would need to be proficient in at least two disciplines. To that end, Dr. Campney hired professors with strong academic credentials in biomechanics, nervous system controls and integration, and biochemistry.

I had been Dr. Campney’s student when I pursued my Master’s degree and then, again, as a Ph.D. student. He had been Ann's mentor and served on her doctoral dissertation committee. He had always defended and guided us during our graduate programs. Dr. Campney was the most demanding academic professor as well as the head of the Department of Exercise Science and we were lucky to have him on our side. Ann and I place special value on his contributions to our educations and to receiving our Ph.D.'s.

One of the professors whom Dr. Campney hired was Dr. Walter Kroll. Walter P. Kroll was born in Chicago, Ill. on Dec. 11, 1930. He received his undergraduate degree at Northern Illinois University and then went on to earn a master’s degree at the University of Illinois and a doctorate at Indiana University. Following academic positions at Fort Hays Kansas State College from 1959-63, and the University of Texas from 1963-67, he joined the faculty of the founders of the Department of Exercise Science (now Kinesiology) at UMass Amherst in 1967, eventually receiving the honorary appointment as the first University Commonwealth Professor.

Dr. Kroll was a pioneer and always ahead in his field. Well before computers were in common use, he learned computer programming and applied it to implement multivariate statistical techniques to study questions such as the role of personality in athletic performance. He was best known for his achievements in motor integration, advancing the use of oscilloscopic electromyography to study the role of the nervous system in the timing of rapid human movements. Dr. Kroll
served as the Chairman of the committee for Ann’s doctoral dissertation. Ann was devoted to his work and his contribution to her own life’s work.

Another important professor whom Dr. Campney included in the Exercise Science Department was a biochemist, Dr. Dee Edington. Dr. Edington was trained in mathematics, kinesiology and biochemistry, received his B.S. and Ph.D. degrees from Michigan State University and completed his M.S. at Florida State University. He taught at the University of Massachusetts before moving to Michigan in 1976. During his professional life, Dr. Edington has authored or co-authored more than 500 articles, presentations, and several books. Dr. Edington was the most unique of the faculty hired by Dr. Campney at the University of Massachusetts because his background was on the cellular level while the other members were examining the human body as a total composite entity.

Dr. Stanley C. Plagenhoef was the third member of the Exercise Science Department hired by Dr. Campney. Dr. Plagenhoef’s area was biomechanics of motion and he, at that time, had developed a small computer program to facilitate the calculations of the kinematic characteristics to movement.

After I completed my Ph.D., Dr. Campney approached me about a teaching position, keeping with his vision for the Exercise Science Department as a progressive and multifaceted program for students. His goal was to introduce undergraduate and graduate students to the work I was doing in biomechanics. One of his concerns was that after students graduated, they would need to find jobs. Based on his experiences as well as on the trends at that time, there were fewer academic positions in pure fields such as Physiology only, or Biomechanics only. Dr. Campney was confronted with the need to educate and train students who would be sufficiently diverse to have dual academic appointments or even leave the university to find employment in business settings. He recognized that my experiences might open opportunities and he wanted me to teach classes which bridged the disciplines which was what I was doing in my life and business. I had, successfully, straddled the world of academics and of business.

Some of my success was that I had surrounded myself with brilliant and hard workers. But a great portion of the credit goes to the fact that I had found a niche where the information I studied—Biomechanics, Engineering, Computer Sciences—were very much in need. People and companies wanted the benefits of what the CBA company and I provided to improve the efficiency of their products or their personal performances.

Unfortunately, not everyone shared Dr. Campney’s positive attitude and forward-thinking vision. For some peculiar reason, two of my professors in Physiology and in Biomechanics, Dr. Ricci and Dr. Plagenhoef, disagreed with Dr. Campney’s philosophies. These two professors were opposed to my academic-business connection. I had thought

I took this photograph of Dr. Campney with Ann in California where he retired 31 years after our studies at the University of Massachusetts
that the purpose of a university was to expose and teach students. Then, the students could use this knowledge and integrate it into their lives, or business, or become teachers. Dr. Ricci and Dr. Plagenhoef disagreed with my philosophy as well as Dr. Campney's.

Although I will never know where their animosity had its seeds, I had a surprising encounter with my advisor, Dr. Ricci. He summoned me to his office and told me that I needed to be careful about mixing business with my schoolwork. I responded that I did not see a problem since I was supposed to be learning how to build a successful life. For me, part of that life was to build a successful business, so I was confused how this conflicted with academia. The response that Dr. Ricci provided was enigmatic at best. “Think about it,” Dr. Ricci replied.

The issue and the meeting with Dr. Ricci confused me. I was aware that some departments, Chemistry, Physics, and Food Technology to name a few, could not exist without support from external financial assistance such as grants from industry. Significant portions of the salaries of my professors in the Computer Science Department were derived from similar grant monies. I could not see how academia was contaminated by grants and subsidies from outside the university. Even if one argued that a business grant might cause a researcher to be biased in any research findings, how could I bias myself? I had my own company which provided extra monies to some of my fellow student since our research projects could generate the finances to fund them. From that perspective, business was what helped our research center to thrive.

Furthermore, I wondered why Dr. Ricci condemned my business when Dr. Plagenhoef was doing the same thing. Dr. Plagenhoef had many outside business ventures and he merely pocketed what he earned. In addition, he used the university facilities as well as the students. There was a tongue-in-cheek joke that graduate students did the work and the professors got the money and the glory. At least at CBA, when we had students work on projects for which we were receiving payment, we paid them a reasonable amount of money for the effort they provided.

The next surprise came when Professor Ricci called Ann into his office. She had no idea why he wanted to see her, but since he was one of the older faculty members, he commanded attention especially from young, inexperienced graduate students.
"Your friend Gideon," he said, "is playing with fire by trying to combine business with academia. Our field is to help people by providing information. We are about education, not business. Our goal is to teach people, not to make money. Gideon needs to understand this dichotomy."

"Excuse me? What do you mean?" she responded with confused shock.

"Biomechanics is an academic study. He should not take this knowledge and use it to make money. It is an academic subject and should stay within the confines of teachers and students," was Dr. Ricci's answer.

Ann said, "Many people have created inventions from scientific knowledge and made money. What about the iron lung? Look at how Gideon is helping athletes and coaches and people with motor diseases such as muscular dystrophy. They need this information to help improve their lives."

"But he is profiting from it," Dr. Ricci responded. "We cannot have a mixture of profit with academic knowledge. It will sully and contaminate the field of education. This will be viewed as polluting the purity of knowledge and education."

Ann sat there quietly, confused, while pondering Dr. Ricci's statements. Were these rules written somewhere, she wondered. She believed that the purpose of knowledge was to contribute to society and that scientific discoveries were steps along that path. After all, DNA was discovered in a laboratory and that scientific information was being applied to research as well as business ventures. These thoughts were swirling in her head as she sat on the other side of Dr. Ricci's desk.

Professor Ricci began to rearrange objects on his desk so he understood that the meeting was over. Ann stood up and left his office. This Professor, whom she had respected, was telling her that we were not doing the right thing. This was not only completely illogical but was the opposite of what we had been taught about science and learning. The foundation of knowledge was to use it and spread it to others. How could what we were doing possibly be construed as contradicting this basic tenet of education. In her heart, she knew that we were doing the right thing. She came home that afternoon and relayed the detailed conversation of her meeting with Dr. Ricci. I, too, was upset, shocked, and puzzled.

Until today, I remain confused about Dr. Ricci's objections. Did he believe that it was wrong to benefit financially, had our academic discipline been tarnished by what I had been doing, was he jealous, or was there another reason? There was no specific reason nor obvious rationale that I could find in his objections. I just shook my head and told Ann, "The only thing to do is to continue. We will continue to do our work and our projects both at CBA and at the university and hope that Dr. Ricci's objections will fade."

I threw myself into work, as has always been my personality, by attending classes, coordinating CBA projects, teaching the Exercise Science classes, and involving many of these students in real-life projects associated with movement analysis. These projects enhanced the knowledge base of computer programming and applications as well as the actual problems confronting modern businesses. The students who participated in these studies were enthusiastic and derived many benefits from their involvements. Besides the learning value, they also made money and what student did not need money?

At the beginning of each new semester course, my standard entrance line was the same. I would arrive at the first class and announce, "Good morning, ladies and gentlemen, welcome to the logic of movement class. You will all receive an 'A' in the class. Therefore, you do not need to attend any of the classes if you do not want to or have something else you would prefer to do. I do not care if you come here or not since I have already received my Ph.D. degree. In addition, I am not going to teach you anything; rather, you are going to teach me. In this process, you will learn more than in any course you have ever taken in your life and you will never have another course where you will have so much fun learning."

To the best of my knowledge, I do not think a single student ever dropped out of my class or missed any sessions except for colds or the flu. They were dedicated students and we produced hundreds of studies and research for companies as well as for publications. Some students participated in on-going CBA projects. Other students created their own projects using our CBA equipment.

One young man, Avraham Melamed, used the force plate to study handwriting. He discovered that the forces used to write an individual's name, or signature, created a unique force pattern. The conclusion he reached was that a forger could not replicate the forces created when signing your name. It was possible to write on a piece of paper and have the name appear to be identical using a visual comparison. However, it was impossible for someone else to recreate the individual's force pattern. A bank, for example, could utilize a specialized pen for force pattern detection and, thus, eliminate fraudulent check cashing. It could also prevent inebriated people from signing checks! At that time, people actually had to handwrite checks and go inside the bank to a human teller to withdraw money. Of course, this was long before the electronic banking systems that exist in today's world. There were no ATMs or financial transfers that could be executed on your cell phone. Of course, there were no cell phones either!

Avraham Melamed was one of the athletes in the 1972 Munich Olympics. I shared a room with him one night be-
fore the massacre. It was a special time for both of us to have more positive and peaceful times for study and research at the University of Massachusetts.

When the semester ended, the students would share their research studies with their class members. They were dedicated individuals who excited themselves and each other by what they had learned. Each of them was amazed by the discoveries that they had made as individuals and by the superior quality of the research. All of us became better informed by the studies they conducted. Fortunately, my students secured jobs when they graduated from the university. Whether this was due to the foresight and planning for diversification of Dr. Campney’s Exercise Science program or my class is irrelevant to me. That they were all able to succeed was the most important factor.

The classes I taught and my teaching techniques were unusual and revolutionary. I knew it and they knew it. I knew that I differed from the norm with my attitudes and thinking. Dr. Campney had hired me to teach, precisely because I was uniquely different. But, I loved my job, the projects, the individual students, and their interesting and amazing progress. Companies came to CBA because my approach to problems was unusual and I was willing to risk alternative thought processes in order to solve a dilemma. I was a perfect example of what today is called “thinking outside of the box”. I had spent my entire life going against the trends, charting my own destiny, and searching for solutions to problems. It did not seem to me to be a flaw in my personality but rather an asset.

In fact, when Dr. Campney had hired me as an Assistant Professor, he admitted that he preferred to hire professors from outside in order to introduce new ideas to the students. He realized, however, that I was not the typical graduate student. By establishing my own company while still a student, as well as pursuing a second degree, I was clearly different. He perceived that I already had a plethora of unique ideas and was open-minded in my approach to problems. Dr. Campney was eager for the Exercise Science department students to be exposed to this type of thinking and these types of experiences. Dr. Campney expressed his considerations in a letter to the graduate school:

We are most interested in Gideon Ariel’s ability, his work, and his potential for contributing to a better understanding of how man moves. For example, I am attempting to secure a position on our faculty for Gideon for the 1974-75 academic year. However, there are a few obstacles in my way at the moment.

One of the obstacles was a lawsuit issued by Dr. Ricci against Gideon claiming that he was using University funds, technology, and ideas to develop his projects.

Due to Dr. Ricci’s allegations, the Department of Exercise Science was instructed by the Dean of the Graduate School to evaluate Gideon’s position. Their findings were:

“Based upon our elective faculty workload assignment scheme, Professor Ariel was assigned a 1-1-1 relative
distribution profile among the Teaching-Research-Service categories. The assigned nature of his workload was because he was on a one-half time appointment in the Department of Exercise Science. His second half was in the Department of Computer Sciences.

In the area of teaching, Professor Ariel carried 6.0 student contact hours; his grade distributions were high; his student evaluations were superior.

In the area of research, Professor Ariel had two refereed publications and several non-refereed professional articles. His involvement with research and professional presentation was extensive. I personally heard two of his professional presentations and felt they were well received.

Despite my efforts to operate a new and innovative company, teach university graduate students, and contribute to scientific knowledge, I rubbed some professors the wrong way. Sadly, this glowing document written by Dr. Campney and endorsed by the Graduate School became useful in a completely different cause. I had needed to hire an attorney to defend myself in a suit brought by the university. The university was less than enthusiastic but were forced into it by my own professors, Dr. Ricci and Dr. Plagenhoef. My attorney, David Burres, would now have to use this report as part of our first line of defense.

One of Professor Ricci’s complaints was that I had received an unlimited grant for use of the computer mainframe at the university center. At that time, everyone at the university was allocated computer time. I was not unique in receiving time and memory allotments. Teachers, graduate
and undergraduate students were assigned computer access codes and given time. The hours of use were billed in what was known as “funny money.” “Funny money” meant that the time, memory, and computing power were provided accordingly with charges enumerated by category. The financial information relative to the components was used by the computer science department for internal evaluations only. No one was ever presented with an actual invoice for the use of the university’s computer and expected to pay. Computer time was provided free to all university inhabitants in the same way that the library loaned books at no cost.

One of Dr. Ricci’s claims in this lawsuit was that I used more than ten million dollars of the university’s computer time. Dr. Ricci knew at that time that my computer usage had not only been authorized by Dr. Wogrin, who was the head of the Computing Center, but that Dr. Wogrin was aware that I was using the computer for my own private research and company. Nonetheless, Dr. Ricci seemed to find this use of the university’s computer to be inappropriate. He induced Dr. Plagenhoef, or perhaps vice versa, to convince officials in the University Center to sue me for this usage. In this way, the two professors had “clean hands” by making the lawsuit appear to have come from higher up in the university hierarchy.

The day came for the presentation of arguments in the District Court of Northampton. I was present with my attorney, but the two professors who were instrumental in bringing the suit apparently could not be bothered to be present at this momentous occasion. The judge listened to what the university attorney, who was effectively representing Dr. Ricci and Dr. Plagenhoef, had to say. Essentially, the university’s case was that I was using my biomechanical and computer knowledge for my own use.

My first witness was Dr. Conrad Wogrin who was the head and administrator of the Computer Science Department. I had taken several computer language courses from him in the Computer Science Department. He was an excellent teacher and receptive to new ideas and applications for computers. His attitude was that the computer was a new and exciting tool for students and faculty to use and would soon replace most of the paper-and-pencil situations of the past. He saw the future as a new frontier and the computer was going to be one of the primary vehicles for change.

The philosophy of Dr. Wogrin and the University Computer Center was to make this amazing tool available to any and all university “citizens”, regardless of their status. Professors were usually granted more “funny money” than students, but everyone had access to the computer and its powers. Graduate students were also high on the list of people who were encouraged to use the computer.

Dr. Wogrin knew that by using the computer, I did not affect the CPU of any other users. In addition, Dr. Wogrin had frequently expressed admiration for the work I was doing and the creative ways that I was using the computer. His testimony in court as one of my witnesses included that he “wished all of his students were as creative with the computer as I was” and that he “would provide as much time as necessary to any clever and inventive use of the computer.”

My lawyer argued, as a legitimate student in the Exercise Science Department as well as my other scholastic involvements, coupled with the endorsement from Dr. Wogrin, that I was doing exactly what a creative and scholarly individual was supposed to do. I was an excellent example of what students should be learning and performing at a university.

The judge retired to his chambers to ponder the arguments and the evidence presented by the lawyers and witnesses. As this was not a jury trial, the judge would evaluate the laws and testimonies and make a judgment. When he returned to the courtroom, he announced his ruling: “If Dr. Ariel owes money to the university, then the university owes money to Isaac Newton. Case dismissed!”

Many people in the courtroom began to cheer and clap after the judge announced his verdict. Although they were happy for me and I was relieved and thrilled by the outcome, it had seriously impacted my life to have been sued by my own professors. In spite of my vindication, I was bothered that neither Dr. Ricci nor Dr. Plagenhoef had come to court. Obviously, they had no respect for the court or for their own convictions. They were disrespectful to the system of justice,
which they had used to fight their own petty battles and then they were too cowardly to accept their loss in public. Their and their behavior disgusted me.

I returned to the university euphoric at having won the case and visited friends and colleagues up and down the corridor. Suddenly I saw Dr. Ricci walking nonchalantly down the hall. I walked rapidly down the hall in the same direction that he was going and fell in beside him. With an elevated voice, I told him what a coward he was and that he did not even have the guts to show up in court. Furthermore, he was a disgrace to the university and to all humanity!

Of course, Dr. Ricci immediately filed another lawsuit against me. This one was for Sureties to Keep the Peace, which is less than disturbing the peace, but the only one his lawyer could find to file a suit against me. I was victorious in that case as well, but realized that this kind of nonsense was fun for Dr. Ricci but a waste of time for me. I resolved to stay as far away from him as I could and proceed with doing good and worthwhile things. Entertaining Dr. Ricci in the gutter was a thing of the past for me.

Despite any discomfort I felt, the local newspapers in Amherst had found a conflict that they could print any number of articles since the story had at least two sides. The lawsuits and negative publicity provoked the university into seeking an outside evaluation of the Exercise Science Department. The goal was only slightly veiled with public statements that all the departments were to be evaluated in efforts to determine status, areas for improvements, faculty depth, and other reasons. Nonetheless, it was a chance for people on the outside to look at the department and make independent assessments.

An independent panel of evaluators was appointed by the university to evaluate all departments on campus. However, it was interesting to discover that only one other department...
was subjected to an extensive external evaluation. Later, there was one other department which was merged with a larger one but the primary focus appeared to be the Exercise Science Department.

In 1965, the University of Massachusetts Amherst created the nation's first Department of Exercise Science (now called Kinesiology) under the leadership of visionary researchers and academicians in the field of exercise science. Originally part of the School of Physical Education, the Department later joined the School of Public Health and Health Sciences in 1993 to better realize the department's mission of attaining optimal human health and well-being.

The independent evaluation of the department of Exercise Science examined a number of important criteria including teachers, students, equipment, and research projects. The school's laboratory equipment and supplies impressed them. They indicated that the school needed to more vigorously pursue government and private funds for research support. They found most of us, including me, to be serious and competent researchers. Only two men were found sorely lacking as noted in the report, as follows:

"...The publication record of neither Dr. Ricci nor Plagenhoef is impressive. Their research output is not at a level expected of those holding graduate faculty status. According to the information provided to the Committee, Dr. Ricci is currently not directing any Ph.D. research. Dr. Plagenhoef has directed one Ph.D. dissertation and is presently directing a second dissertation. Judging from Dr. Plagenhoef's vita, the Committee has some concern for the quality of his research..."
search, since so little of his work has appeared in refereed journals.

In view of the above, the Committee has some questions regarding the graduate faculty status of Drs. Ricci and Plagenhoef. It is proposed that the departmental faculty is subjected to periodic reviews of Graduate Faculty qualifications by the Graduate School."}

After all of the attacks on me, some subtle and others more public, I was thrilled to read the report of the Graduate Program Review, especially since it had been prepared by a completely independent review committee. I had learned about the report when I was called to the office of the new head of the Exercise Science department, Dr. Dee Edington. He told me to read the report while he went to lunch. I read the report in the deserted quiet of his office and then hurried down the hall to the office to make a quick copy of the report. I left the original report on his desk with a note that it was interesting reading.

About a week later, I traveled to Kentucky to a conference, which was also attended by several other faculty members from the Exercise Science Department. While I was out of town, a miracle occurred! The “Graduate Program Review” was printed in its entirety in both local newspapers. Finally, at last, it was revealed to the entire local population who were the contributors and who were the failures. The heading in one of the newspapers was: “Tenure, who is protected?” In the second newspaper, the title was “Who is Qualified?”

*Article published in the Amherst Record*
Ann had stayed in Amherst to attend her classes and work at CBA while I was gone. Suddenly, she received a frantic call from Dr. Edington. He was desperate to determine if I had published the report in the newspaper. Ann told him that I was in Kentucky and could not have been the one responsible for printing the report. She assured him that she was not the one either and had not even seen a copy of the report. She concluded that there must be another individual who wanted the world to know the details printed in the report.

Despite having their professionalism questioned, these two professors continued to attack me but their attempts became subtler. Rather than focusing on their own research or academic subjects, they concentrated on finding loopholes in mine and attacking me in any way they could find. They continued to launch accusations and, fortunately for me, to lose. It was a waste of money and brainpower. The end came when we moved to California. I guess we needed an entire continent to keep us apart.

There was a poignant irony to all this. In 2006, thirty-six years later, the Department of Exercise Science, which by that time had changed their name to the Department of Kinesiology, selected me for their “Graduate Student Achievement Award.”

At the beginning of the ceremony, the Head of the Department, Dr. Joe Hamel, called me to the podium to receive this unique award. I walked briskly to the front with a joyful heart and a big smile on my face. As I stood there listening to the flattering things Joe had to say, I looked out into the audience. There were a few old teachers, Robert James, Dee Edington, Dr. Wogrin, as well as many of my fellow graduate students, and even a few of my previous students. All of those attending the ceremony were aware of the history of my time in Amherst and the subsequent successes which I had experienced. After Joe’s commendation, I was given a chance to say a few words. I began my appreciation comments as follows:
It is an honor for me to receive this award for my accomplishment as a student in the Exercise Science Department. Unfortunately, you had to wait for two faculty members to die before you could invite me to this ceremony! However, it is a real honor for me to be present at this occasion tonight and to be given this wonderful award. I want to thank all of you, teachers, colleagues, and students who have honored me by your presence here tonight. It means a lot to me and I sincerely appreciate and thank you.

After the presentation, I was surrounded by many of my friends. They were happy at my successes in life and for the award which they all believed was late in coming. It was a special thrill to be reunited with Dr. Wogrin and for his continued joy at what I had accomplished. I will always remember his inspiration and friendship.

Despite the difficulties, which fortunately were small in number when compared with the extraordinarily large number of positive things that happened to me during the same years, I had loved my years at Amherst. I had thrived on the projects, the students, the excitement, the opportunities, the learning. I had received my doctorate, met Ann, and started a successful and flourishing business.

Yet, I was soon to discover that pettiness and jealousies were not restricted to academia, but existed everywhere. Now I would have to fight the exercise machine wars and these were as strange as they were robust.
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