A Course on Bio-Social Problems and How I Came to Teach It

by Saul Slapikoff
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I joined the Communist Party in 1948 while a high school senior, a few weeks after the presidential election in which Henry Wallace had run on the Progressive Party ticket. Following four stormy years at Brooklyn College as a party activist and a brief stint in the Army (I had been discharged early as a security risk) I decided to become an "industrial concentrator" for the Party. I worked at a series of jobs on the railroads in the New York City area.

As an industrial concentrator I was supposed to become a part of the working class, be active in the local union, and maintain a generally low, but "progressive" political profile. After I worked for a while as a freight handler, the Party and I agreed that I should seek work in the operating crafts -- the elite jobs in the industry. The New York Central Railroad, Grand Central Division became my center of work and operations.

Railroading was fun. The work was out of doors, just dangerous enough to be exciting, yet not scary enough to upset me. The men that I worked with were varied, ranging from hopelessly depressed alcoholics to highly interesting self-educated working-class intellectuals. Since I worked as an "extra" most of the time, I had the opportunity of quickly getting to know nearly all of the switch tenders, brakemen, and conductors in the division. Given the men's diversity, the wide range in ages, the multiplicity of ethnic backgrounds, and wide variation in lifestyles, there was an unusually strong feeling of camaraderie and an amazing lack of nasty competitiveness.

The Grand Central Division may have been somewhat atypical among railroads. For example, during the depression of the '30s the Division voluntarily went on a six-day work week to spread the available work around. When I began working there, every other railroad in the New York City area, indeed the vast majority in the country, was still working a seven day week. The five-day work week was not introduced until late 1955 or 1956. I never was able to find out why the shortened work week had been adopted so early.

The only elements in the work that seemed to lead to the sense of camaraderie I felt were the danger, and the almost constant battle to slow down the shrinkage of jobs: the railroads were being devastated by an avaricious and dishonest management, and a public policy favoring the auto and trucking industries.

I readily got into my work as an industrial concentrator: I had gone fishing and drinking with some of the other workmen; had become a regular at meetings of the Brotherhood of Railroad Trainmen lodge; and had been rewarded for my efforts by election to the post of Chaplain -- yes, Chaplain! -- of the lodge. The year was 1956.

Only a few months after my election my Party group received its copies of For a Lasting Peace and a People's Democracy (the Cominform newspaper) which, together with the New York Times, reprinted Nikita Khrushchev's speech to the 20th Party Congress of the CPUSSR. The speech was a bomb shell. It criticized "the cult of personality," which had been developed around Stalin. It even detailed some of the repressive horrors Stalin had perpetrated against dissenters within the CPUSSR.

The effect on the CPUSA was swift and catastrophic. Many leaders and rank and file members quit the Party. Some, facing the criticisms the speech unleashed, opted for a more militant and dogmatic line and went on to form the Progressive Labor Party. Others, somehow, stayed on.

I found the speech devastating. For years I had led myself to believe that the things Khrushchev eventually detailed (only the tip of the iceberg, I'm sure) were lies concocted by the capitalist press. Any doubts I had I neatly interpreted as bourgeois weakness on my part.

To discover that my "weakness" was really the exercise of rational critical judgment, that in fact I had been lying to myself and others, was crushing to me. Soon after the initial discussion of the speech by my cell of five, I decided to quit the Party. My disillusionment left me thoroughly demoralized. I became cynical about all political and ideological questions; I distrusted all movements. The thought of further discussing any part of Khrushchev's speech, or the feelings it released in me, seemed so thoroughly pointless that I wanted out as fast as possible.

Though I quit the Communist Party, I decided to remain a railroad worker. I enjoyed the work and the company of my fellow workers. Despite my being "furloughed" for about five months out of the year, my wages, supplemented by unemployment benefits, proved more than sufficient to meet my needs. That fall, however, I was laid off nearly a month earlier than usual and was called back for only two or three weeks of the Thanksgiving-Christmas-New Year's rush period, rather than the usual six to eight weeks. I had gotten married before Thanksgiving and, given my changed circumstances, felt I had better plan some alternative to railroading, since my job might disappear altogether.

After a lot of thought and discussion with my wife, I decided to go back to college part-time to take courses in the sciences and math. I had been a Sociology-Anthropology major before working on the rail road. I changed my mind.

The sciences seemed attractive to me. I had enjoyed my high school biology and chemistry courses, and had found my introductory biology and chemistry courses stimulating. I had majored in Sociology-Anthropology, rather than biology or chemistry, because the latter took too much time to allow me a full political life. Besides, the social sciences were obviously value-loaded and ideologically challenging, while the sciences, it appeared, were relatively value free.

Given my cynical state of mind after quitting the Communist Party, the sciences seemed like the only direction for me. I had had my fill of ideologically loaded work. I felt that I could not trust my own judgment in anything to do with ideology or politics: the mere thought of my years of self-deceit made it impossible for me to consider anything but the sciences.

I did recognize that the sciences were heavily in the service of industry. Therefore, I came to reject the notion of majoring in chemistry. I had read about the "thrill" of discovery in chemistry in Bernard Jaffe's book Crucibles while in high school. But even from my relatively uninformed perspective, it was all too clear that chemists either worked...
in industry or trained other people to go into industry. The intent of the curricula approved by the American Chemical Society was too obvious to miss.

Biography seemed to be another case. As a field, it did not appear to have the same ties to the production of profit as chemistry. Biological research, I thought, was directed toward the improvement of the human condition through, for example, the enlargement of crop yields by plant geneticists, or the discoveries promising to improve medical care for the masses. In retrospect, I can only marvel, given my wariness of capitalist institutions derived from eight years in the Party, at the naiveté that my science education, abetted by the reading of books like De Kruif’s Microbe Hunters, had instilled in me.

In the spring of 1957, I went back to Brooklyn College to take one course in biology at night. Over the next two years I did work equal to more than half a B.S. degree, taking courses in math, physics, chemistry, and biology. For the next year and a half work on the railroad continued at a diminishing level. Finally, in the spring of 1959, I quit to become a research assistant on a cancer research project at Beth Israel Hospital in New York City. Not much later the hospital workers went on their first strike against New York City’s private hospitals. Refusing to cross the picket line, I joined a small supporting picket line of professionals and was fired.

Fortunately, one of the principal investigators of the grant paying my wages decided to protect me. He was on the Brooklyn College faculty, where in the 40’s he had been a stoolie for one of New York State’s red hunts into the teaching profession. His conscience must have bothered him. Though he was pissed at my action, he hired me to teach at a National Science Foundation Summer Institute for high school teachers, then got me back my job at Beth Israel that Fall.

These were, for the most part, the most demanding years of my life. I worked thirty to forty hours a week on the railroad or on research; took four courses a semester whose contents took hours to master; and often needed to relearn material that I had not studied or used for seven or eight years. Meanwhile, my wife and I, trying to develop our relationship, did not see each other for days on end, especially when I worked the night shift on the railroad.

Despite these demands, or possibly because of them, I thoroughly enjoyed those years. I was learning an awful lot very fast, and was getting ready for my next step -- graduate school. Biochemistry, I decided, was the field I wanted to enter. It seemed to sit in a pivotal position between chemistry and biology, both of which I thoroughly enjoyed. Furthermore, biochemistry would provide an excellent foundation for movement into a wide variety of research areas.

Graduate school was not quite what I had expected. I was in the biochemistry department of a medical school with six or seven faculty members. The department was like a feudal kingdom, the chairman the feudal lord, the other faculty his vassals. The chairman’s power derived from his success at grantsmanship and research. The signs of his power and success were everywhere to be seen. Forty to fifty percent of the graduate students, all of the postdoctoral fellows, and half of the research space were his; the department secretaries served his needs first; etc. Other faculty members had clear limits placed upon their ability to grow or increase their power within the department, since their space, facilities, number of graduate students, postdocs, and technicians were all limited. Research empires such as the chairman’s were never to be theirs as long as they stayed on. On the other hand, as long as they produced something in research, and did some (not too much, to be sure) teaching, they could look forward to a degree of security and to protection from the chairman. The competition among them for the leavings was intense and often took the form of dumping on another faculty member’s graduate students. None of these relationships were lost on the graduate students. In fact, we mimicked them by developing an obvious pecking order among ourselves. Since I worked hard, did well in my courses, had some luck in my research and quickly exploited it, and was a student of the second most powerful member of the department, I was able to complete the requirements for my Ph.D. in little over 3 1/2 years. And so I went off to do postdoctoral research in one of the most prestigious departments of biochemistry in the world.

The Department, chaired by a Nobel Laureate, was almost like a communal paradise -- a marked contrast to the one I had graduated from. The faculty, post docs, and graduate students showed mutual respect for and interest in each other’s work; their willingness to cooperate was remarkable. Exceptions seemed to derive from personality traits rather than status. Even the support staff -- secretaries, technicians, glassware washers -- were treated with more respect than I have ever seen elsewhere.

In that environment, where friendships and high-quality science flourished, I spent the happiest years of my career in science. It was not that the competitiveness and power-seeking that characterize most of capitalist science had been wholly eliminated from the department’s lexicon, rather, their focus had been directed almost entirely outward. Here was a base from which the philosopher-kings could do battle with the world. The benefits of high status, memberships in study sections of the National Institutes of Health, editorial positions on leading journals, and so forth were constantly being exploited for the advantage of this elite. How could a scientist at Podunk U. ever hope to compete?

My post-doctoral fellowship came to an end in August 1966. I moved on to Tufts as an assistant professor of biology. During the ten years since I had quit the Communist Party I had done nothing politically. The civil rights movement, the beginnings of the New Left, and protests against the American involvement in Southeast Asia were occurring at a distance from my universe. I would read about them, feel a degree of sympathetic satisfaction, and guiltily send off a check responding to one or another appeal. But I could not allow myself to be personally engaged. The thought of becoming involved in a political organization or movement was so unsettling, I would not consider it. Instead, my energies had been devoted single-mindedly to mastering my field, and preparing myself for a career as an independent scientific researcher and teacher. It had been a lot of hard work. The rewards came from the satisfaction of
participating in an exciting human endeavor, the deep pleasure in knowing I had helped to unravel some of the secrets of nature.

It was with a sense of eager anticipation that I assumed my new position. Upon arrival at Tufts I discovered that the lab I had been promised had not yet been built. Thus my first six months left me with more spare time than I had anticipated. By then a growing Students for a Democratic Society, the beginnings of a significant draft resistance, and a more vocal anti-war movement had begun to make greater demands of my conscience.

In the Spring of 1967, the Fifth Avenue Parade Committee announced a major anti-war demonstration for New York City. When no publicity for it appeared on the Tufts campus, I felt compelled to do something. A young postdoc and I, fearing both financial and political disaster, decided to put up money for chartering a bus from Tufts to New York City. The response to our advertisement proved great enough to allow us to charter a second bus.

I was excited by the sheer size of the demonstration. However, I was moved at some deeper level by the sight of a group of young men sitting on the Sheep Meadow in Central Park tearing up or burning their draft cards. So, soon after, I signed the Call to Resist Illegitimate Authority, pledging to support draft resistance and other forms of civil disobedience to the war. However, I could not bring myself to become involved with any organizations.

The completion of my lab in the Spring of 1967 found me hard at work doing research and teaching. I felt challenged and excited by both. Preparing a biochemistry lecture course for the fall took much of my time. In the lab I often worked till midnight, enjoying the opportunity to do research on my own, sparing no effort to achieve some success.

There was to be a march on the Pentagon in the Fall of 1967. When I heard that it was to be preceded, a day earlier, by a draft card turn-in at the Department of Justice, I felt a strong urge to attend. The Friday of the turn-in was one of the most unnerving days I have ever spent. From the time I boarded my plane in Boston, until I went to bed late that night, I spoke, with one brief exception, to no one.

A kind of controlled bedlam raged at the church where people gathered prior to the march. Functionaries, often near hysteria, their voices much too loud and nearly incomprehensible, tried to explain what was to happen and what we were to do. Outside, on the front lawn of the church, sat a group of draft resisters, sharing some bread, cheese, and milk. They talked with quiet animation, exuding a warmth toward each other that was truly moving. What a contrast to the mad scene inside the church!

Throughout these preliminaries and the events that followed, I allowed myself to speak to no one, for to break my isolation would be to make some commitment to joining the movement, rather than just being there and observing.

That night I walked the streets of Washington feeling as alone and disconnected as a character in a Daliesque nightmare. I knew I would finally have to overcome the fears of ideological and political commitment I had carried since leaving the Communist Party in 1956.

The next week I contacted an acquaintance working with Resist, a support organization for draft resisters. I returned to organizational political activity by raising money for Resist in the Boston area. Later I became active in the New University Conference, an association for radical academics.

During the next few years, the demands of my political work placed a sharp limit on the intensity with which I could pursue research. It was not that I no longer enjoyed research: the excitement and sense of adventure were still there. But since I felt an obligation to my students to continue doing my best at teaching, something had to give: it was the research. I had long-since been stripped of any illusions I had about the relationship between science and scientists and the drives for profit and power characterizing our society. Academic scientists often do operate with autonomy in their choice of research interests. However, they are channeled into certain areas by the lure of more easily available grants and of fashionably "hot" fields where fame and power might be more readily attained. Scientists respond to priorities set by others, even when the pursuit of those priorities does not reflect their own best judgment.

The return to political commitment had sharpened my perceptions of the scientific enterprise. Having attained such understanding, I felt the need to integrate my teaching with my politics. Unfortunately, the curricular demands of such technical courses as biochemistry leave little time in which to explore the relationship of science to the social and political institutions within which it functions. I wanted a forum inside the curriculum to explore this relationship.

So about six years ago I began to teach a seminar titled "Contemporary Bio-Social Problems." The course was originally intended for biology majors: given their relatively narrow technical education, I thought they would benefit most. As a result of student pressure, however, any junior or senior who has taken one course in biology is allowed to register. At present about half the students in the course are biology majors.

Tufts is an expensive place to go to school: the tuition is among the highest in the country. Most of the undergraduates are from middle- or upper-middle-class families. There are few blacks. However, about half the students are women. Competitiveness is the dominant spirit, most students spending much of their time worrying about their futures as professionals. The biology majors are mainly pre-meds. Clearly, this is no fertile ground for the development of radical consciousness. At the height of the anti-war movement left wing politics had dominated the
Tufts campus; currently only five to ten students are visibly involved.

To encourage maximum participation, I limit the class to eighteen students. Consequently, I have on occasion taught as many as three sections a semester. The seminar meets once a week for three hours. During the first two meetings I introduce the areas of discussion for the semester and go over the requirements for the course. For each of the next nine weeks two students are responsible for leading discussion on a particular issue. A week before they conduct their seminar, they announce its subject, and assign readings they have placed on reserve. Seminar subjects and readings are selected after consultation with me; they are within bounds I have previously set.

By "leading a discussion" I mean that the students have ten to fifteen uninterrupted minutes in which to develop the main arguments on which they wish the class to focus. Following this period, all members of the seminar are free to interrupt with questions and comments. My role is to keep the discussion focused and to raise issues which I feel have not been adequately considered either by the seminar leaders or by the class. This format demands that the students learn to extract the key issues from an area, thus hopefully focusing discussion in a productive way. Group participation in the discussion of controversial issues is maximized, rather than students being subjected to a one-sided lay-on.

In addition to leading a seminar, the students are required to write a term paper. I tell them to imagine they are editors of a collection titled Readings in Contemporary Bio-Social Problems. They are to read articles, chapters of books, poems, stories, etc., dealing with one area which is to constitute a section of the volume. After choosing the three to five selections they want to include, they are to summarize them in a paragraph or two and then defend them. I urge them to adopt one of two editorial stances: use the readings to advocate a particular point of view or ideological position; or choose the selections that best represent varying attitudes toward an issue.

The students must then write an eight-to-twelve-page introduction to their section of the imaginary volume. I urge them to write the introduction from a specific ideological, ethical, or political perspective, their objective being to convince the reader of the correctness of their stance. In arguing their own position, the students must, however, take account of competing views. I will not accept a traditional research paper in which the arguments and conclusions of others are merely catalogued, followed, at best, by an assertion of personal opinion. The students are told that they are responsible for a rationally argued point of view.

The term papers are due early enough to allow everyone to read them all. Then during the last three meetings they are discussed and criticized by the whole seminar. In addition to this collective evaluation of the term paper, I give each student my own in writing.

Virtually everyone who has taken the course, though commenting on the difficulty of doing the paper, has agreed that he or she learned a great deal from the assignment. Very few of the papers have been wholly successful. The eight-to-twelve-page limitation may be severe, but I insist on it not only for logistical reasons, but also because it keeps the students from rambling, forcing them to make their arguments tighter and to give them more thought.

The specific subject matter of the seminars and term papers has varied from semester to semester. Some of the topics have been environmental issues, including strip mining, pesticide use in agriculture, air and water quality and cancer; population and resources; health and health delivery, including abortion, birth control, death and dying; implications of genetic engineering; women in science; race and intelligence.

No text I have used has ever really satisfied me. Therefore, I now place a substantial number of articles and books on reserve. The students are encouraged to do the same with worthwhile materials they come across. (A short list of books I have used is appended at the end of this essay.)

While each seminar and paper focuses on a specific concrete problem, I try to make sure that some wider questions get explored. Here are a few:

- Are there technical solutions to biosocial problems, or do the solutions lie in political and social action?
- Who decides what scientific questions are to be asked and explored?
- Why are certain kinds of questions asked and not others?
- How are "solutions" to problems proposed and turned into policy?
- What kinds of "solutions" are proposed and who ends up paying for them?

In addition to posing these questions, I try to explore the possibilities for a democratic, non-elitist science. There are no well-developed democratic models appropriate for our society, pre- or post-revolutionary. However, I do present the experiences of the socialist countries, especially China, as well as some ideas of anarchist writers such as Murray Bookchin. Reflection on these discussions leads me to conclude that there is no current theory or practice that clearly points the way toward a democratic non-elitist science. Only the successful struggle for an egalitarian society will allow us to create models for a democratic science. Yet conflicts over science policy will continue to be part of the larger struggle.

My evaluation of the course is positive: students are challenged to think about problems in ways they have rarely done before; participation in discussion is reasonably high; the relationships between science, scientists, power, and profit are explored sufficiently so that, hopefully, my own naivete upon entering a career in science will not be replicated; finally, the hope for pursuing knowledge and usefully applying the secrets of nature in a just and egalitarian society is held up as a viable goal.
The greatest weakness of the course lies in its abstractness. Tufts at present has no viable movement capable of engaging significant numbers of students in the struggle for a democratic, egalitarian, socialist future. This eliminates, for the short run at least, the opportunity of testing in practice some of the goals developed by the course. Another difficulty, the subject of some student criticism, is my tendency to dominate discussion, somewhat stifling exchanges between students. This latter difficulty can easily be corrected; the former -- the absence of an active movement on the campus -- finally depends on forces larger than my own will.

Some books used in the course:

- Barry Commoner, *The Closing Circle*. A thoughtful left-liberal analysis of the causes of the environmental and energy crises. Commoner points his finger at the capitalist drive for short-term private profit, rather than long-term social need, as the underlying cause of the energy and environmental crises.
- Paul Ehrlich and Anne Ehrlich, *Population, Resources, Environment*. The authors see population growth per se as the cause of the environmental and energy crises. The book is an excellent source of statistics (misused) and fallacious arguments. Too bad it is so expensive.
- Barry Weisberg, *Beyond Repair: the Ecology of Capitalism*. This book is a more radical analysis than Commoner’s. It unfortunately suffers from the serious defect of uncritically and incorrectly asserting that the socialization of the means of production in the Soviet Union, North Korea, and China, for example, has led to a more sane and effective environmental policy than that of the U.S.
- Mahmood Mamdani, *The Myth of Population Control*. This book is a beautifully clear analysis of the big birth reduction campaigns in India and, it is fair to assume, other agrarian countries. Mamdani shows that they are doomed to fail in the absence of concrete conditions that would make it pay for people to restrict their family size.
- Health PAC, *The American Health Empire*. An excellent radical critique of the health delivery system in the U.S. Although parts of the book are somewhat dated, the analysis presented is still much to the point.
- Joshua Horn, *Away with All Pests*. A fascinating view of the Chinese approach to health care and health delivery by a British surgeon who spent many years in post-revolutionary China as a participant in the health delivery system.
- Richard Wertz, ed., *Readings on Ethical and Social Issues in Biomedicine*. This excellent anthology features some thought-provoking essays by the editor, as well as an excellent collection of readings.

In addition to the books listed above, three magazines that have proven to be useful sources of articles are:

- *Science for the People*. Published by Science for the People, a radical organization
- *Social Policy*. A left-liberal bi-monthly.
- *Science*. The office publication of the American Association for the Advancement of Science (the establishment organization). It is useful for its News and Comment section, as well as for its articles.

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