On Schoolwork and the Struggle Against It*

As a student, and then as a professor, I have spent most of my life working within the institutions of education in the United States. Today, as a university professor, I work with students, with other professors, with non-teaching staff and with university administrators. All of these working relationships are shaped by the politics of higher education and of the capitalist system of which universities are an integral part.

Several hours a week, in class and in office hours, my work involves direct interaction with students. More intermittently I work with other professors in department committees (e.g., admissions, faculty hiring) or university-level gatherings (e.g., Faculty Council). Also intermittently I work with non-teaching staff (e.g., from secretaries and computer systems operators to custodial workers).

According to a tradition that comes down to us from the Middle Ages, we all live and work in an environment of supposed scholarly collegiality and cooperation. That tradition is constantly reinforced by an ever-renewed myth of community and rituals of school spirit. Within this context most of us try to deal with each other with mutual respect. Unfortunately, all too systematically our efforts are sabotaged by educational structures and administrative rules, regulations and policies that impose so much division, hierarchy and competition as to breed wealth and poverty, snobbery and envy, arbitrary power and fear, secrecy and alienation, sycophancy and rebellion.

I first confronted these problems as a student in the 1960s and early 1970s when the history and theory I was being taught failed to help me understand the events of those times - events in which I was sometimes a participant and always an observer: the Civil Rights Movement, radical movements on campus, the urban uprisings in places like Watts, Newark and Detroit, the anti-Vietnam War Movement, the Sixties' "cultural revolution" and so on. In search of understanding I reached beyond the courses that were available to me and took up the informal study of what was then called revisionist history and critical social theory. That study revealed the hidden histories of racism, imperialism and cultural manipulation that were absent from my textbooks. It also provided alternative perspectives and theoretical paradigms for confronting those histories and their legacies of repression and rebellion.

In this study I couldn't avoid noticing how virtually every critical theory I came across either drew upon the writings

* This essay began as part of a response to a critique of my book *Reading Capital Politically* by the editors of *Aufheben*, an English Marxist journal. I decided to detach it from that response and make it an open-ended document to which I add observations from time to time. When those additions are substantial a new dated copy is created and added to my website.

of Karl Marx, or juxtaposed its theory to his. Marx had been mentioned in one or two of my courses but for the most part the content of his work had been reduced to a few "prophesies" that were cursorily critiqued and quickly dismissed. Only in a graduate course in the history of economic thought had a substantive critique been offered and that had been limited to the standard objection that the labor theory of value couldn't provide the basis for a useful set of relative prices - something no real economist, we were told, could do without. Despite such well-worn arguments, the press of events and need for a theoretical basis for my doctoral dissertation goaded me into exploring Marx's own writings to see if there was, or was not as my professors claimed, anything there of use for understand social conflict.

One result of those studies was that as a professor I wound up teaching Marx because I did find, and continue to find, that the fundamentals of his analysis, although laid out long ago (1840s-1880s), and repeatedly distorted for vile political ends (by state capitalist, Soviet-style regimes and Marxist-Leninist parties), are still very useful in understanding and coping with today's world and its conflicts - from wars and battles over race, gender and the environment to school and the work of students and professors. Therefore, as one might expect, I have come to bring some elements of Marx's analysis to bear, not only on larger social issues but also on my own, and my students', day-to-day work and struggles.

My reading of Marxist theory suggests that the educational structures and administrative rules, regulations and policies that undermine collegiality and community within universities - and schools more generally - derive at least partially from higher education being structured as an industry and the university being structured and managed as a factory. Indeed, the university-as-factory is only one component in an even larger social factory. The whole of society can be viewed as a factory because its institutions, including those of education, have been shaped by businessmen and government policy makers to produce and reproduce the social relations of capitalism.

As early as 1904, in the midst of the so-called Progressive Era, the economist and astute social critic Thorstein Veblen recognized and analyzed how businessmen were building and shaping universities in their own image, for their own ends - and in the process dramatically reducing and poisoning the space for free inquiry. The processes that he observed have continued and intensified ever since.

School-as-factory is designed to produce what Marx called "labor power" - the willingness and ability to work - and also, at the university level, research results of direct use to private industry and government. Despite long standing ideological claims that schools aim at personal enlightenment and the crafting of citizens capable of taking part in the democratic governance of society, the reality is quite the contrary. From Kindergarten to post-graduate studies, schools seek to transform human beings into workers - narrowly trained people who are disciplined to do what they are told, the way they are told

to do it, for the rest of their lives and to believe they are living in the best way possible. Naturally, many resist. Therefore school-as-factory is like other factories: a terrain of struggle and Marxist analysis is helpful in understand those struggles and in deciding how to participate in them.

In what follows, I focus on the work of professors and students and their interactions. I first describe and analyze what I and other professors are supposed to do, what students are supposed to do, what our relationship is supposed to be and some of the negative consequences that we suffer. In other words, as Marx does in *Capital*, I lay out the nature and dynamics of work according to the logic of capital that dominates the way the university is set up and structured to operate. Afterwards I discuss how that logic can be, and often is, ruptured, as we - professors and students - struggle against it, struggle to craft alternative uses of our time and energy and struggle not to lose, or to create, our freedom and autonomy.

Professors at Work

University professors work for their wage, or salary, in several ways: teaching, doing research, writing and publishing, and carrying out administrative tasks. I want to begin with teaching because it is touted as our most central and important kind of work. After all if we didn't teach we'd hardly deserve to be called "professors" would we?

"Teaching", or Professors and Students

Both university "professors" and school "teachers" generally pretend to "teach" and administrators pretend to be able to differentiate "good" teachers from "bad" teachers. All three groups thus embrace an illusion. But while that illusion may be functional for administrators dedicated to dividing, dominating and managing their "teaching" staff and students, it is deadly for those of us who actually try to teach. For in reality no one can teach, the best that a university professor or schoolteacher can do is to help students learn. We can raise issues in lectures, provide materials on various topics, ask openended questions and generally try to create an atmosphere in which inquiry, analysis and alternative approaches are encouraged, but whether or not students learn anything from those lectures and materials depends on students' own attitudes and efforts - and those attitudes and efforts are often as crippled by the institutional structures as our own.

Many of the frustrations of "teaching" derive from this illusion. Professors gather materials, prepare a syllabus and present lectures and are then appalled at how unresponsive students are and how poorly they do on tests. As a result some professors believe they are failures and take their frustrations out on themselves in the form of self-doubt and low self-esteem; others, probably most, blame students and take their frustrations out on them in the form of impatience and contempt.

For learning to take place, students (just like the rest of us) must integrate new knowledge and understandings

into their existing fabric of knowledge and understanding. They must take what is new and see if it fits with what they already believe they know and understand. If it fits, they must figure out how it fits - metaphorically it is a bit like fitting new pieces into an evolving jigsaw puzzle. If it doesn't fit then they must figure out what needs to be adjusted: what they thought they knew or understood, or what they have just discovered.

In one-on-one situations those presenting new information, ideas, approaches, etc., can, with experience and care, craft their presentations in the light of what they understand about the individual student's knowledge and understanding. Even so, ultimately, only the student can do the comparing, contrasting, evaluating and integrating necessary for the new knowledge or understanding to become part of their grasp of the world.

But in large classes it is impossible for any "teacher" to do this. They can evaluate their "audience" and try to gauge their lectures to it, but most of the time they will be presenting things using words and in ways that do not fit with the particular needs of most individuals. Schools are not organized to take this situation into account; on the contrary they are organized in ways that undermine any effort on the part of professors to help students learn and whatever efforts students make to learn.

Having repeatedly found myself in just such impossible situations, I have been forced to ask, "Just what am I and other professors supposed to be doing vis-à-vis students?"

Given the "teaching" framework within which I am expected to operate, I have become acutely, and uncomfortably, aware that the most fundamental aspect of the job that I am paid to do vis-à-vis students is not at all "helping them to learn" but rather imposing work and its discipline on them. The ultimate vehicle for this imposition is grades. The expectation of university officials is that I give high grades to students who work hard and low grades to students who don't, including failing those who refuse a substantial portion of the work they are asked to do. In the language of Marx, as a professor I am supposed to produce and reproduce labor power.

In the language of George Caffentzis' essay on <u>"The Work/Energy Crisis and the Apocalypse"</u> I am expected to play the role of "Maxwell's Daemon": sorting low from high entropy students - giving high grades to the former because they have demonstrated their willingness and ability to make their energy available for the work they are assigned and giving low grades to the latter who either can't or won't. My provision of this information about their levels of entropy is the final, end-of-semester element of the work that I am expected to do vis-à-vis each set of students in each course I "teach".

Although it happens that grades can be based to some degree on class participation, for the most part they are based on the performance of specific tasks, e.g., papers and tests, but that performance is assumed to reflect prior work done without any direct supervision or evaluation (study, research).

Because the imposition of potentially punitive evaluation and grades is absolutely unavoidable - in the sense that if I refuse to give grades I lose my job - I do this. But at the same time, I am acutely aware of how this key component of my work - and much that follows from it - gives this work traits characteristic of what Marx called "alienated" or "estranged" labor. In the section on estranged labor in his 1844 Manuscripts, he outlined four kinds of alienation, all of which are present in my "teaching": the alienation of workers from their work, the alienation of worker from their product and the alienation of workers from their "speciesbeing."

With respect to the first of these, I am alienated from my work to the degree that its form and content are imposed on me. With respect to teaching - I'll discuss other aspects of professors' work shortly - there are two obvious impositions: first, the imposition of curriculum or the particular sequence of material and courses to be taught, and second, the imposition of grading.

Although professors as a group, in each college or department, have ostensible control over curriculum and are confided the job of crafting "degree programs" make up of particular course sequences, such crafting is actually subject to two important constraints: the habit of intervention by higher authorities - including boards of regents and even legislators for state universities - to impose a general set of course requirements on undergraduate curriculum around which we must work, and the competitive pressure to take the curriculum practices of higher ranked schools as models.

The general requirements imposed on the undergraduate curriculum include such courses as those in the basic structures of government that are deemed necessary for students to function as "citizens," i.e., to have enough of a understanding of the stage and actors of the spectacle of formal, professional politics to play their proper role as observers, kibitzers and, from time to time, voters. While the imposition of such courses is aimed at students, it is also an imposition on professors; what students have to study, professors have to teach. Obviously, such requirements fall more directly on some professors than others. If basic courses in, let's say, English, history and government must be taught then the task will fall principally to professors in those academic fields. Professors in all fields, however, must subtract the time that students must devote to such courses from the time students will have available to meet the requirements in particular fields of studies.

In the design of "degree programs" for particular fields of study, competitive pressures almost invariably force professors to reproduce what are generally viewed as the standard "core" courses and sequences in their fields. As a result, with a few and scattered exceptions, the core courses of curriculum formalized in degree programs become almost everywhere the same and individual professors find themselves forced to teach one or more of such courses regardless of the degree to which they agree with the content. The same forces shape most of the more

specialized or applied courses that make up sub-fields within each department. Their content too has also tended to become standardized across universities. As a result although professors can usually teach one or more courses within their own chosen specialty and are "free" to design their courses according to their own proclivities, in reality here too the forces of competition shape the usual content and sequencing of materials.

Within the framework of all these exterior (though often interiorized) constraints professors, if they have enough initiative, are sometimes permitted to craft unique courses entirely of their own conception. In such cases, the degree of alienation from their teaching is obviously substantially reduced. Not surprisingly such courses are often taught with more creativity and gusto than more standardized ones.

The second major imposition on my teaching - testing and grading - contaminates everything that occurs in my relationship with students. Here, as in the case of imposed curriculum, I am not engaged in a self-determined activity. As with most other workers I am not only told what to do (teach such and such material), but how to do it (impose requirements like tests or papers that can be evaluated to produce grades). Although I am left some leeway in deciding the details of "how" to grade, grade I must - upon pain of being fired. This is, of course, better than the situation of some professors who teach one of a series of standardized courses and must give standardized tests. Yet it is still an alienating imposition.

With respect to the second form of alienation - that of worker from worker - I am being pitted against my students from a superior position in an artificially created power hierarchy. Despite the mythology of the "academic community of scholars" the grades I must impose gives me considerable power over students' academic standing and thus their future. Regardless of the pressures on me (with respect to the courses I teach and their content), from the students' point of view I determine the makeup of the syllabus. I choose the books and articles they are required to read. I assign the topics for papers and draft the questions for tests. And, above all, I decide their individual grades and where they will fall within the grade hierarchy of the class. They know these things, and, naturally, many resent my power and their powerlessness. I discuss various aspects and implications of this alienation below.

The third form of alienation - that of workers from their product - might seem, at first glance, irrelevant to teaching. Yet the university-as-factory is structured in such a manner that our teaching is actually supposed to produce a "product": the labor power of our students. We "process" students in ways that resembles the processing that goes on along an assembly line. There is no physical assembly line, of course, students walk from class to class, exam to exam, but they are increasingly hurried along and at each work site we are supposed to impose work and test their ability and willingness to perform that work. At the end of this process, if we judge that they have done enough work, they "graduate" with a certification of just that willingness and ability to work.

THAT is our (and their) "product". But is it really "ours", or "theirs" for that matter? No, because within capitalism labor power is neither for us, nor for our students. It is for capital. It is something that they will sell to capital, to their employers who will make use of it by putting them to work.

Most professors, hopefully, don't think about their teaching as "processing" but rather as helping young scholars along their way. Sometimes they may be quite proud of their students' accomplishments. They feel they have taught well and as a result of their teaching their students have gone on to achieve great things. The professors who supervise graduate student dissertations, for example, may take pride in one of their protégés getting a good job in a "highly ranked" university. But that pride is, all too often, the pride of a craftsman. It reveals precisely how they believe, consciously or not, that they have had a hand in crafting a successful "product" that is now selling well, in a good market, at a high price.

Fortunately for professors, the contemporary convention that graduating Ph.D's should not be employed at the school from which they receive their degrees means that this "product" will not be used, immediately and directly, as a competitor for the proud supervisor's own job! Down the road, of course, if the "product" proves as successful as expected, it may indeed emerge as a competitor - either in the university where it was produced or in the same job market as its producer.

As professors, we sometimes have other "products", such as research results and publications that I will discuss below, but when it comes to teaching our students-cumworkers are our principal product and they are definitely alienated from us. They are alienated in a dual sense: first, they go from us to prostitute themselves in the job market just as we have done, and second, their labor power, that we have helped create, will be used by business to create further products that will be used against us, just as they are used against other workers. Used against us? By putting a price on products business forces us to work for it to gain the money to buy the things that we have collectively produced. Moreover, those same products have been shaped, by the shaping of the work that produced them, in ways that help them to structure and control our lives. There is a considerable literature analyzing these relationships.

Finally, in the case of alienation from species-being, Marx is talking about the subordination of workers' wills to capital and the way that disrupts the free interaction of our wills. (He believed that what makes the human species distinct is the presence of a will.) As professors we experience both of these things, the former most obviously in the alienation from our work and the second most obviously in the impossibility of free interaction with our students.

In all these kinds of alienations associated with grading there is a further component that for me is more important than it was for Marx (for whom one's *attitude* toward alienating work was a secondary consideration): I would never choose to grade my students; I don't like it and I resent it. Further, I know that some students also resent the situation and that resentment stands between us. Therefore, I experience these alienations psychologically quite negatively. They not only poison my life, they poison how I feel about my life.

Now I am well aware that some professors have no objection to grading. Indeed some revel in it. In such cases they do not feel these alienations as a poisoning of their lives. That is to say they are neither repelled nor resentful of these impositions. Indeed, they embrace them and rationalize them to themselves and to others.

Among those rationales are the following. One wellintentioned argument reasons that evaluation can help students in discovering what they have learned and what they have yet to learn. Another, more common and "practical" argument evoked in this age of neoliberal capitalism points out that grades are necessary to facilitate student entry into the labor market. A degree from a school that doesn't give grades, some say, would be meaningless to the average employer. (The argument ignores, of course, the way their grading also guarantees failure for some in that same market.) In some crass cases, professors who defend grading argue like fraternity brothers or sorority sisters talking about hazing: "I was graded, therefore they must be graded." I have even heard such an "argument" trotted out to defend a particular kind of grading: the imposition of comprehensive exams at the graduate level - exams that I consider a case of double jeopardy in as much as students have already been graded once in their courses. A few derive a kind of sadistic joy from wielding the power of domination it conveys whether that domination take the form of psychological or sexual abuse. While it might take considerable psychotherapeutic work to discover why these individual professors so willing embrace this alienating character of their work, the fact that they do makes them willing partners with the administration in its continuation.

Because I am acutely aware of all of these things, I am as up front and as clear with my students about the class politics of the imposition of work and of grades as I can be. I discuss with them this key element of the work I am supposed to be doing and the problems that it poses both for them and for me.

Along the way to the periodic evaluations that produce grades, I am also expected to impose work in an ongoing manner. The main vehicles for doing this are the imposition of work in the classroom and the assignment of material to be studied outside the classroom. These involve for both professors and students the alienations of the classroom and for students the prolongation of the working day beyond the classroom. The classroom is the primary place where we collectively interact; it is a space (a work site) and a set of behaviors (work) on which I dwell with my students.

The typical university classroom has two important features shaped to structure the imposition of work on both professors and students: first, its physical layout most often rigidly fixed to create and maintain a

hierarchical and antagonistic division of power between the professor and the students, and secondly, the size of classes - also shaped to the same end. The physical layout is almost invariably designed around the assumption that the professors will lecture and students will listen. Although professors may or may not have a podium, they almost always have what amounts to a stage upon which they can speak and move freely. The students, by contrast, are organized by chairs and desks, usually screwed into the floor and immovable, to be passive listeners. The typically large number of students assigned to each classroom (mostly varying at the undergraduate level from 50 to 500) is designed for, and almost always leads to, active professor lectures and passive student listening being the dominant overt behaviors. As the German philosopher Friedrich Nietzsche complained in 1874:

One speaking mouth, with many ears, and half as many writing hands--there you have to all appearances, the external academical apparatus; the university engine of culture set in motion.

While at the level of elementary and secondary school an essential day-to-day aspect of a teacher's work is the imposition of order (forcing students to be still, to keep quiet unless granted the momentary right to speak, to request permission to go to the bathroom, and so on), at the university level such order in the classroom is assumed and the primary forms of the imposition of work is the confining of students to a mostly passive listening via lecturing and strictly limited questioning. Within the constraints that I have already mentioned, the lectures are, in turn, organized and ordered by the professor so the content and presentations that the students have to listen to is imposed on them.

The size of classes, the organization of the classroom, and the necessity of imposing work and grades all tend - as indicated above - to reduce professors' "teaching" to lecturing, to what is essentially a performance, a spectacle, designed at worst to test the limits of student tolerance for abuse and at best to inspire. While a few questions may be tolerated or even solicited, the vast bulk of the time in class is taken up delivering organized lectures on the topic of the day to students who sit quietly, listening, taking notes and wondering what of the material covered, if any, will be on the next test. The increasing modernization of classrooms these days primarily involves the equipping of the lecturer's podium with more and more electronic gadgetry to facilitate more entertaining multimedia presentations. As the pressures on students have increased in recent years, we are being provided with more and more sophisticated means of keeping them entertained - and not thinking about hose mounting pressures. I am reminded of the stories of a orchestras of prisoners who played as their fellows were marched into labor camps or to their deaths.

I walk into a the classroom at the beginning of a semester and find all kinds of students: those who are there because they are sincerely interested in the subjects to be covered,

¹ It can also be argued that the large size of classrooms is at least partly a function of the cost minimizing practices of administrations and, in the case of public schools, of state legislatures. It is cheaper to have fewer professors teach more students than it is to hire more professors and have smaller classes.

those who wish they could be absolutely anywhere else, those who are ready and willing to get as much out of the course as possible and those who will do the absolutely minimum amount of work to get whatever grade they deem acceptable. But regardless of their attitudes I know that the relationship of the active lecturer-test-giver-grader to the passive listeners-test-takers-graded is structured to create antagonism: I must impose work and grades and students suffer from that imposition whether it be willingly or resentfully, whether I successfully entertain them or not.

While the classroom provides the primary space of collective interaction between my students and myself, the institution of "office hours" - usually a minimum of four a week - provides an opportunity for more intimate one-on-one, or small group interaction between us - a chance to discuss issues or ideas generated mostly by *their* learning processes and only partially by *my* lectures. Unfortunately, for a variety of reasons - ranging from indifference to fear - relatively few students take advantage of these hours.

While indifference can derive from any number of sources - not least of which is the character of schooling to which they have been subjected for years - fear seems an almost inevitable by-product of the hierarchical power relationships of schools. As bosses can brow beat or intimidate, raise or lower wages, promote or demote, sexually harass or even assault their employees according to their whims (in the absence of unions with enough power to effectively contest such arbitrariness), so too are students aware that professors can give higher or lower grades, pass or fail, sexually harass or even assault them behind the closed doors of their offices (in the absence of student organizations and legal teams with enough clout to effectively challenge such abuses).

As a result, when students do come, professors who are sensitive to such fears - and aware of the very real grounds upon which they are based - have the extra burden of allaying them, of finding ways of minimizing them. But let us be clear, it is *impossible* to allay them completely because within the rules of the game, quite legally and beyond almost all appeal professors do have the power to assign grades and students are constantly reminded of the importance of those grades for their futures.

Even when a particular professor's conduct in the classroom has suggested that the individual student need fear no such actions, long years of imposed passivity and crushed initiative leave a great many students too timid and with too little self-esteem to feel confident enough to "impose" their own agenda on their professor. Far too many will come to office hours driven only by a desperation produced by low grades on previous tests and with the sole goal of improving those grades - a blighted ground for any intellectual encounter.

The best of us would love to have an unfettered, free exchange of ideas with our students, an exchange untainted by any difference in power between us. We would love to be able to meet with individual students as

whole human beings engaged freely in intersecting quests for knowledge and understanding. Unfortunately, the structure of modern education makes the realization of such freedom impossible.

In terms of ongoing homework, testing and evaluation, the work dynamics can be usefully understood in terms of Marx's analysis of piece wages. Grades, students come to realize, are effectively IOU's on future income/wages (the higher your grades the more scholarships, better certification and higher paying jobs you can get). Moreover grades are not awarded according to the hours of work put in (like time wages) but according to the production of pieces (e.g., tests, papers). In schools, as in factories, professors play the role not merely of taskmaster but of quality control inspector.

As Marx points out in chapter 21 of Volume I of Capital on piece wages their beauty for capitalists lies in the ways they hide exploitation and are conducive to competition while requiring only quality control rather than constant supervision. By keeping piece rates low (whether monetary pay per unit of commodity produced or grades per test, paper or course) workers/students are coerced into imposing work on themselves. Just as the managers of factories prefer piece wages to instill discipline cheaply, forcing workers to work hard and long to produce enough pieces to earn a livable wage, so the managers of universities find grades a fine vehicle for forcing students to work hard and long on their own, far from any direct supervision (say at home or in libraries or laboratories) to get high enough grades to pass a course or earn a degree.

I know, for example, that the most effective way to impose more work is to give students research papers and take-home tests with virtually no time or page limit. Some will spend an extraordinary number of hours crafting the paper or test to get a good grade. Making them take tests in a class period (limited say to one hour) will mean much less work - even though they may spend time before the test preparing for it.

I also know that the university monitors me (and other professors) to determine just how much work we impose. It does this casually by keeping an eye on course syllabi and it does it methodically by keeping track of how we award grades. Every semester at the university where I work, the university computers record the grades that each professor gives for each course and generate summary statistics about how many "A's," how many "B's" and so on. When the time comes to consider promotion the university committee that makes such decisions hauls out a black binder that contains these statistics for each professor being considered for promotion and examines it to see if the professor is imposing enough work.

They measure the amount of work being imposed by the distribution of grades - the more "A's" and fewer "F's" the less discipline a professor is assumed to maintain. If over time an increase in the percentage of higher grades can be identified, then the professor is branded a "grade inflator" (that professor's "A's" are deemed to be

declining in value, like currency during a period of inflation, but in this case those "A's" are seen as of declining in their value as indicators of work performed by both students and the professor). On the other hand, if a professor is seen to be giving fewer and fewer highlevel grades, then that professor is deemed a "grade deflator". One year, the Dean of the College of Liberal Arts awarded permanent \$1000 wage increases to a handful of professors that this process identified as "grade deflators." Such practices, obviously, put pressure on professors to be hardnosed disciplinarians, to impose lots of work on their students. The result, also obviously, is an intensification of the antagonism between students and professors.

Within such contexts it never surprises me that some students go "postal" and kill their professors, nor that so many professors hold so much contempt for students (which rationalizes their own otherwise unpleasant tasks of selection, reward and punishment).

To the above standard working conditions should be added the additional work for those who try to teach against the stream, to provide students with materials and opportunities for critical thinking and discussion about the limitations of, and alternatives to, capitalism. One way to minimize the amount of time and energy you put into your job is to just "teach the text book" - however boring it may be for students. (Especially at the introductory or intermediary level there are very few significant differences in textbooks because their commercial editors demand that they be written for the largest possible market.) But teaching the textbook means, for the most part, teaching a set of ideas designed to produce and reproduce the kind of labor power desired by capital. Teaching "outside" the textbook involves at the very least the extra work of providing a systematic critique of the book itself and more usually the extra work of seeking out, sorting and sifting through texts and other resources to find materials that will provide points of view different from, and critical of, those provided in standardized textbooks. For survey courses a similar process applied to the ferreting out and making available of original texts and primary materials instead of some one textbook author's interpretation can also require vast amounts of extra work. Some of us, of course, willingly undertake such extra work, partly because it is intellectually more interesting and partly because we believe that by organizing our courses in this way we can facilitate and deepen the learning of some students. It thus helps us overcome, to some degree, at least on the psychological level, the alienation between us and our work and between us and our students.

For professors working in universities whose administrators pride themselves on being CEO's of "research" universities - and I am employed by one - promotion and wages/salaries are awarded overwhelmingly on the basis of research and publication, not teaching. This has serious consequences for every aspect of our work.

One consequence for those of us who do teach (and not all those with the title "professor" do) is a constant

monetary pressure to divert our energies away from teaching to research, to getting research grants, to writing and to publishing. Concretely this means pressure to devote less time to preparing course materials and lectures, less energy to lecturing, and to find ways to shift the burden of work onto students - all of which increases the alienation and antagonism between students and professors. Students taking courses with professors who are driven by the rules of promotion to focus on their research to the neglect of pedagogy will not only find lectures less interesting but office hours more likely to be unhelpful. Such students will be forced to compensate for the professor's lack of effort by increasing their own.

Research, Writing and Publishing

The administrators of such research universities are generally highly competitive - both personally and in terms of the growth strategies they impose on their institutions. As Veblen pointed out long ago, this competitiveness is a trait characteristic of the kinds of people business-dominated boards of trustees or regents tend to appoint to run such universities. More often than not it is also explicit in the guidelines within which such appointed administrators are supposed to operate.

This competitiveness is constantly communicated to professors, first through general statements about the university's "mission", second, through sub-administrators derived from the professoriat (such as College Deans and Department Chairpersons) and third, down the academic hierarchy to each and every professor through the explicit linking of promotion and wage increases to "competitive" research and publication.

"Competitive" research involves the winning of research grants from public or private institutions that award such grants. "Competitive" publication involves having one's writing be published in a small number of "elite" journals. Doing research on one's own, financed out one's own pocket or writing and publishing articles elsewhere than in those elite journals not only doesn't count but is looked down upon. No promotions or "merit" salary increases are likely to be awarded for such efforts.

The institutions of research funding and publication are closely interlinked. Decisions in each are generally made by the "elite" in each profession or field - where "elite" is defined as those who have excelled in doing the kind of work dictated by the current rules of the game. Some may participate in the winnowing of research grant proposals; some may participate in the editorial process of selecting which submitted articles are worthy of publication. Some may do both. But all cases the "rules of the game" are similar.

The "rules of the game", however, are only partially set - and usually only in their fine points - by the members of that elite. They are also set, and changed, by those - in both the public and private sectors - who provide the money that funds research and publication, and builds university offices, classrooms, libraries and laboratories. Ultimately, all those who compete, and who manage the competition, must craft research grant proposals and write

articles that are judged relevant and useful by those holding the purse strings. Such persons may be government bureaucrats, agents of "non-profit" private foundations or employees of profit-seeking corporations, but through their control of money they hold the power to decide what kinds of research will be funded and go forward and what kind will remain unfounded and unlikely to be carried out.

Therefore, all professors in each "research" university are under pressure not only to apply for research grants, but to structure their applications in ways that will appeal to the priorities and values of the funding institutions. Similarly, they are also under pressure to write about things, and in ways, calculated to appeal to those same institutions. Only within this framework, in acceptance of these parameters does "academic freedom" have any meaning. Those who choose to work within this institutional framework, accepting its rules of the game, are perfectly free to use all their imagination and creativity to compete. Refusal to work within the rules, however, generally results in either failure to achieve tenure (and thus expulsion from the university) or failure to receive "merit" pay increases. For those whose priorities and values differ from those of the dominant elite and the funding entities behind them and who choose to direct their research into other areas and to craft their writing for other audiences, "academic freedom" is a worst a joke, and at best what Herbert Marcuse called "repressive tolerance."

Leaving aside the reality and hypocrisies of "academic freedom", it is worth noting, I think, that work is imposed on those of us who are professors in much the same way we are supposed to impose work on students. As we are to do unto students, so too is it done unto us: instead of being subjected to constant supervision we work within the logic of piecework and piece wages. Because promotion and wage increases depend on publishing, and because publishing is competitive and quality controlled, we are expected, and things are set up to guarantee, that we impose vast amounts of work on ourselves. Pressures drive many of us not only to work in our offices, laboratories and offices during the day, but in those same places or at home at night and on weekends. Union collective bargaining may have won the 8 hour working day and the five day working week for many workers, but not for university professors living with the unremitting pressure to "publish or perish".

Although the current structure of higher education formally provides several months a year of ostensibly free vacation time (Christmas holidays, Spring Breaks and Summer), competitive pressures often have the effect of provoking professors to give up such free time and to continue to work at their research, writing and attempts to get published. This is especially true for untenured assistant professors, although, by the time they have achieved tenure many have entered so deeply into the alienations of professional competition that they continue to work endlessly for further promotion, research grants, and salary increases.

Administrative Work

I'll use the term "administrative work" to refer to the various kinds of work that professors have to do, either regularly or periodically, that are byproducts of the way our business overseers run the university - other than teaching and research and publishing. At the university where I work this kind of work is sometimes euphemistically called "service" work - a term intended to evoke the notion of work that is of service to one's department or the university as a whole. If the university were in fact an institution of collegiate intellectual community, the term would sometimes make sense: as in, for example, the work of hiring new faculty or selecting new students for admission to graduate studies or the collective consultations of the faculty as a whole. Unfortunately, as I have already indicated, the university is not that kind of institution and therefore the only "service" being provided is to the administrators of the place. Let's look, briefly, at some of these tasks.

If departments or colleges within the university were terrains of collegiate intellectual encounter and collective inquiry, then the process of choosing new faculty members would revolve around the careful examination of the intellectual accomplishments of individuals - to see if that seemed likely to have anything to offer to the community - and of their personalities - to see if they would make good colleagues to interact with. If the faculty were truly involved in helping students to learn, then candidates would be examined in terms of their ability to do just that and certainly a key part of that examination would be carried out by current students with a vital interest in whether incoming new professors would not only have interesting knowledge to share, but had some notion about how to share it effectively.

Unfortunately, while a certain amount of lip-service is given to all these things, in reality the central issue in hiring is generally - and this has been increasingly true in recent years as the competition between universities has accentuated - the degree to which a given candidate will add to the prestige and ranking of the department, and hence of the college and of the university in national standing. While this factor was never absent in the 20th Century university, it became more and more dominant as that century drew to a close and the neoliberal strategies of increased privatization and competition were imposed more and more on the school system.

The mandate for this focus in hiring has, generally speaking, come down from the top, from university administrators whose own prestige and salaries depend upon the status and rank of the institutions they manage and who have embraced the neoliberal ethic of competition as the road to *increased* prestige and increased salaries. Success in raising the prestige and ranking of the university they administer, of course, heightens their broader job market prospects as well. Despite repeated, effusive public expressions of local "school spirit" their preferred career goals always involve the prospect of getting an even better, more prestigious and higher paying position at a higher ranked institution. In other words, their goals parallel those of most other corporate managers.

This preoccupation of administrators is communicated usually quite explicitly, no subtlety required - to the faculty many of whom are careerists enough to have no problem identifying with such motivations. Indeed, the explicit goal of raising the ranking of a given department is often a prime concern in hiring, or appointing, new chairpersons. That chairperson soon makes it - if it is not already - a prime concern of whatever faculty committee is charged with the work of coming up with candidates and winnowing them to find those most likely to add to the department's national ranking. The last time I had the misfortune to sit on such a committee under the tutelage of such a department chairman - after an absence from such work for several years - I was appalled to discover just how crass the whole process has become. There was virtually no discussion of any aspect of candidates' qualifications other than how much they had published in those few journals that count in determining department rankings and whether they were likely to continue to publish in the same vein. What was noticeably absent from all discussions was any intellectual interest in the substance of the candidates' work. The closest thing to such a discussion took place in the preliminary determination of the fields of specialization in which candidates were to be sought. Unfortunately, that discussion was cursory at most because of a pre-existing consensus among all the other members of the committee to mainly hire those whose work, either in theory or in the application of theory, was closest to the core of the current neoliberal mainstream.

This process and the same kind of consensus informs the less frequent work of considering assistant professors for promotion to tenure positions. For each candidate a committee of senior professors are formed who must recommend promotion or no promotion to the chairperson who adds another recommendation and passes the application along to the Dean of the College (who may have a select committee of faculty to assist) and hence to the higher instances of the university administration. The work of evaluation consists overwhelmingly in examining evidence of success in research and publishing and only very distantly and secondarily of their teaching abilities (remember the black book of grade distributions mentioned above?) or contribution to the "intellectual life" of the department or university.

The work of evaluating student candidates for admission to the undergraduate studies is usually handled entirely by the bureaucracy of the university administration. But much of the work of evaluating candidates for admission to the graduate program is allocated to professors and parallels, to some extent, the work of evaluating potential faculty. The work is also based, for the most part, on a pre-existing consensus about the general nature of the best candidates: they should come from the highest ranked undergraduate programs and they should have an aptitude and ability to handle the theory at the core of the current neoliberal curriculum.

The implications are two-fold. First, applicants from low ranked schools are often dismissed out of hand. Partly this dismissal is based on the assumption that the "best" students will come from the "best" schools and of course we want the best students, so we have the best chance to have the best graduates whose future work will bring the most prestige to the department. Partly, such dismissal dramatically reduces the workload for committee members by dramatically reducing the number of applications that need to be more carefully scrutinized.

The second implication - in my department where the core theory is highly mathematical - is that the "more careful scrutiny" accorded the remaining applications is dominated by a preoccupation with math scores on the Graduate Record Examination and the grades achieved in advanced mathematics courses. Although in principle other elements of the applications are also examined, e.g., personal statements, letters of recommendations, qualitative evidence of intellectual ability and in pre-Hopwood days the issue of the need for affirmative, the usual rank ordering of candidates to be admitted (and offered financial aid) is little effected by such secondary considerations.

To such work of "personnel management" professors have a variety of other tasks that they must perform intermittently. These include: the competitive work of revamping curriculum at the undergraduate and graduate levels (always executed with a eye on the way things are done at higher ranked universities), the ultimately humiliating work of sitting on various university committees that accomplish little beyond providing university administrators with the pretence (and naïve faculty with the illusion) that the higher-ups take their underlings' opinions into account (e.g., Faculty Council, grievance committees) or on committees that allocate small amounts of funds for various academic awards, and, of course, the obligatory work of participating at spectacles put on for the gratification of various constituents and to maintain the public prestige of the university (e.g., graduation ceremonies carried out with pomp and circumstance - including colorful archaic robes, marches, edifying speeches, the recitation of individual achievements complete with frequent sonorous audience participation and the ritual singing of the school, state or national anthem).

The Costs of Academic Overwork

For those who have not had the pleasure, the idea of professors spending long hours sitting at their desks, puttering about in their laboratories, chatting on departmental or university committees, or singing in public spectacles may conjure up the very images of easy, even lackadaisical "work" carried out in a clean, perhaps even attractive environment. What is this work after all? Isn't it just thinking or the physically undemanding tasks of manipulating computers or other laboratory equipment or parading around in robes?

But for those enduring the endless hours, working under the pressures of competition in which their job tenure and future financial security is entirely dependent on what they come up with, "performing" in classrooms before an often hostile or indifferent audience, this work is not "easy" much less lackadaisical; it is rather stressful, arduous labor from which they can never escape. Machine tool operators can flip a switch and walk out the factory door. Call center operatives can hang up, shut down and go home. Construction workers can lock up their tools and walk away from the job. But professors, like other workers who work primarily with their minds and are expected to be creative and to come up with new ideas, find it extremely difficult to leave their work behind. Not only does their work virtually never end, but because they are expected to push out the limits of existing knowledge and understanding (not only of their own, but of all those in their "field"), but there is little opportunity for the relaxations of rote work or the pleasures of dilettantism and there is a constant pressure to conjure one's muses to find the necessary inspiration for enough originality for a new article or a new research grant proposal. Added to this is all the ancillary work of administration: either the stressful work of competing with their peers, always striving individually and collectively to climb the academic career ladder or the humiliating work of pretending to participate the governance of the university.

Such enormous quantities of psychologically intense - and therefore physically stressful - work inevitably undermine not only our teaching (by stealing our time and energy) but our health, our families and our relationships with others more generally.

Stress kills, we now know, in myriad ways. It kills those who are stressed, and it kills those killed by those who are stressed. (See the "job stress" page of the American Institute of Stress website if you have doubts.) But leaving aside such fatal results, the kind of work pursued by professors undermines our health in many, less dramatic ways. Far too much of it does indeed involve hours of sitting - reading, working with computers, writing by hand or typing, editing - and the consequent lack of exercise leads to overweight, atrophied muscles, poor cardiovascular conditions, carpel tunnel syndrome and even such immediately life threatening problems as deep vein thrombosis. Beyond such health consequences of overwork for individual professors, the endless hours spent working are stolen from other forms of selfvalorization, including relationships with friends and family.

The overworking, focused professor - like all workaholics - runs the risk of becoming one dimensional, especially as specialization has become standard in academia and innovation in research and writing is often extremely narrowly focused. With little time or energy for the pursuit of diverse interests professors risk becoming, little by little, stereotypical professors, so caught up in their own little worlds of work as to be blind to what is happening around them. Not only does such narrowness strip them of part of their humanity but ultimately it may render even their narrowly focused work less productive because of their inability to bring insights from other parts of life to bear on their immediate problems.

Certainly for professors, giving in to the pressures driving them into workaholism can wreck havoc upon their efforts to create or sustain families and friendships. It is well known in academia how often marriages succumb to the endless toil of graduate school and then the race for tenure. It is also well known how often ill-nurtured marriages come apart for workaholic tenured faculty. The dissolution is sometimes initiated by spouses who are just fed up and worn down by the lack of time accorded to them by their competitive partner. Sometimes neglected marriages don't just wear out but are sundered by betrayals - all too often by professors who find it quicker and easier to have an affair with an adoring and vulnerable student than to spend the time necessary to nurture their marriage. The variations are endless, and many are well known. What is less often recognized is the degree to which these ruptures are rooted in the overwork of one or both of the victims.

What is true of marriages is equally true of friendships: their cultivation and nurturing requires time and energy. Certainly, a certain degree of friendship can be achieved on-the-job as people work together or side by side. But real friendship, like marriage, requires the intersection of lives on many levels and the negotiation of many kinds of differences. The discovery and exploration of such intersections and the negotiation of many differences takes a lot of time and energy - time and energy that, for the workaholic, is simply not available. And friendships off-the-job require, well, all the same things but beginning with the ability to actually leave the job behind and experience one's humanity differently on a different terrain amongst different kinds of people. For the workaholic this can be an insurmountable obstacle.

Finally, under the generic rubric of the general costs of academic overwork, let me point out another kind of political cost. On the one hand, at the university you have an enormous array of highly educated, relatively wellinformed individuals concentrated geographically in one place. But on the other hand, because of overwork and the specialization that comes with the competitive character of their work, vast numbers of these individuals have neither the time, nor the energy to become well informed about urgent political issues of the day outside their specialities. This is not unique to professors, of course, the general subordination of life to work in capitalism makes this problem widespread and chronic. But while it is not unique it is more striking precisely because professors have repeatedly demonstrated their ability to undertake research, to seek out and find relevant information beyond the blandishments and superficial statements peddled by mass media and professional politicians. They have the abilities and skills to undertake the research necessary to debunk and expose the misrepresentations and lies that are so pervasive in spectacle of contemporary politics. Yet because of the character of their work not only do they not do this but they often spout opinions rooted in the same ignorance as so many others. In such cases, unfortunately, their status lends credence to misrepresentations and lies in ways that the opinions of the average person-in-the-street do not. All too often the problem is not the absence of "public intellectuals" but the presence of well-meaning but ignorant ones.

To all these costs of the institutional pressures to devote virtually all of one's time and energy to work, we must add the additional costs born by those subject to discrimination due to gender, race, ethnicity and so on. A full exploration of these additional costs is beyond the scope of this essay and would require an exploration of the literature produced in the last thirty years by specialists and of testimony both by those who have failed and by those who have succeeded as professors in universities.

Short of such an exploration, it is enough, I think, to point out the sexual and racial discrimination in hiring and promotion that is widespread in the academy. So well recognized are such practices, and so frequently have they been contested, that many universities have been driven to spell out specific policies against them and their historical legacies, i.e., the disproportionately smaller number of women and smaller number of "non-white" professors in various universities, departments or administrative positions. Despite such policies such practices persist - I even know of a case where no woman who has a child, or expects to have one, can be hired because the department head doesn't want any such diversion of energy away from research. Moreover, it is widely believed by those who feel themselves to be the objects of such discrimination that they must work longer and harder than their male or "white" peers to achieve the same results in terms of promotion, wages, and so on. And so they do work longer and harder and, in the process, run greater risks of suffering all the ills spelled out above.

Such then, are some of the characteristics and hazards of professors' share in the work done in universities. Let us now turn to that share of the work portioned out to students.

Students at Work

For students - at least for those low entropy students who will succeed - school occupies as central a position in their lives as the office or factory will be later on. The work they have to do for it takes up the majority of their time. The classroom, the library, the science laboratory, the computer lab, their dorm room or apartment are all work sites, places where they are told what to do and how to do it and where they try to figure out what it all means.

Beyond these central sites where students' prime job of study takes place, we need to recognize two other kinds of work sites. First, are all of those places, on campus or off, where students must learn the informal social skills necessary for peer relationships in future waged employment. If the classroom and the laboratory is where they continue the work begun in elementary and secondary school of learning to accept and follow the dictates of authority, and if the library and dorm room are where they refine their ability to impose work on themselves remote from such authority, then student centers, fraternity and sorority houses, dorm common areas, work-out rooms and most other social areas are the terrains where they must learn to manage their enthusiasms, frustrations and passions in ways compatible with future waged work situations. Second, for those with neither fellowships nor parental stipends large enough to cover the costs of school and life and who must find one

or more paid jobs to continue their studies, we must also add their supplementary work sites as well.

The Work of Studying

The first thing to note about the primary work of students - studying - is that their choices are very similar to those of waged workers: they have some choice over the general domain of their work but within that domain for the most part they must do what they are told to do, in the order they are told to do it, in the way they are told to do it. Let me clarify: first the choices, then the compulsions.

Just as a waged worker can choose among jobs in say manufacturing, agriculture or services, so a student can choose among studies in say the liberal arts, business or engineering. Just as a worker who has decided upon a job in services can choose between say financial services and teaching, so a student can choose between the field of finance in the business school and a field in liberal arts that can lead to a Ph.D. that would make possible a job as a professor.

Once having chosen a field of study, however, the student, like the worker who has chosen a kind of waged work enters the realm of compulsion. For the worker the compulsion comes in the form of "work rules" and - if advancement is possible - a predetermined "job ladder", for the student it comes in the form of curriculum: the set sequence of "required" courses that - if successfully completed - will lead to a degree. Choice at this stage is limited to a small number of "elective" courses and, sometimes, a choice of professors if there are multiple sessions of the same course being offered.

The most familiar work site for students, the one whose times and space are most rigidly structured and the one whose hierarchical social structure sets the pattern for their work experience as a whole is the classroom. Normally, a school semester begins when classes begin, and classes begin in classrooms. The semester ends when final examinations end, and those examinations are normally given in classrooms. In between, day after day, week after week, students' lives are structured around the hours that they are expected to sit in classrooms.

Within the classroom students initially find their only commonality as part of what the French philosopher Jean-Paul Sartre called a "serial group". That is to say they find themselves as one of a group of people with nothing more in common than having to sit through the same lectures, be subjected to the same tests and be graded by the same professor. In Marx's terms they find themselves a part of the working class in-itself, defined by nothing more than their common experience of having work imposed on them.

In classrooms students may find themselves collectively amused or, more commonly, bored by lectures on subjects only superficially of their choosing. While a few professors are entertaining, and even fewer are inspiring or truly thought provoking, a great many - because of the pressures to which they are subject - have done very little to prepare for lectures and merely repeat the material of

textbooks. This, of course, makes lectures either a tedious repetition of familiar material or - if students haven't studied the book ahead of time - a dry and mechanical sketch of something utterly unfamiliar. In the former case there is often no point in even taking notes because it's all in the book and in the latter case listening to new material for the first time means most students must struggle to understand what is being said and hardly have the time to digest it or react to it critically enough to ask questions beyond those of clarification.

In the best of cases, where students have prepared in advance and have the initiative to go beyond listening to actually think and query the lecturer, they can get more out of the class. By so doing they are, to some small degree, taking control over their work and in the best of cases trying to fit what has been said into their own learning process.

Unfortunately, experience appears to teach most students that such in-class initiative has, all too often, daunting risks and costs. The risks they are most conscious of are those of being ridiculed by an insecure and abusive teacher or of being subjected to the snickers of other students for "dumb" questions - or their resentment for those rare questions so sophisticated that they understand neither the question nor the answer. Obviously students try to avoid such professors, but with so many courses being required that is not always possible. They would also avoid having such classmates but about that they have even less choice.

To avoid such risks, real or imagined, most students simply remain silent, neither asking questions nor challenging what is said. Whatever efforts they may make to grasp the material at hand in ways that make sense to themselves take place privately and in silence. In the most boring of lectures many don't even bother but follow the time-honored tradition of sitting in the back of the room where they can doze, read newspapers or study for other courses. They attend classes only to make sure they don't miss something essential for the next test.

The pervasiveness of such passivity in the classroom has led to its being satirized in comic strips and legend. In one Doonesbury strip a professor enunciates a whole string of grotesque lies but the students are too busy frantically taking notes to recognize the obvious falsehood of what is being said. The well-known story of the professor who, fed up with the passivity of his students, goes to class but instead of lecturing sits at his desk at the front of the room and reads the newspaper - testing the limits of the passive acceptance of abuse by his students - derives, undoubtedly, from the widespread perception of such passivity. Unfortunately, neither the strip nor the story recognise how the much lamented passivity has been produced by years of experience with abusive teachers and with competitive, intolerant classmates.

While most professors would never mock their students in the manner described by the story above, a great many have not hesitated to change - quite unilaterally - either the content or the requirements of a course in midstream. Such changes obviously heighten uncertainty and the difficulty for students to keep track of the work rules and to meet the changing expectations of the professor. Such arbitrary exercise of the power of professors over students has been common enough, and challenged enough, to lead some universities to enact rules compelling professors to provide fixed syllabi at the beginning of a course detailing the work rules to which students will be subject. Such syllabi constitute quasi-legal labor "contracts" between professors and students spelling out exactly what work a student has to do to achieve a good grade. Typically, such contracts are binding on professors and can only be changed without risk of challenge (even legal challenge) through collective bargaining.

(Something similar happens in some graduate programs where students produce, and professors on the student's committee must approve, formal proposals for Masters theses or Doctoral dissertations. The objective of such proposals is not merely to help students work out their research agenda, but to create a kind of contract spelling out exactly what work the student has to accomplish for the final product to be accepted. Again such "contracts" can only be changed through negotiations and reduce uncertainty and anxiety for students.)

Listening to lectures in classrooms may be a more or less collective experience but much of the other work students are expected to do is quite individual including a great deal of studying, research, paper writing and, of course, the work of taking tests - where cooperation is considered cheating. In some of this work a certain amount of purely individual effort is inherent; after all, each individual must come to terms in their own minds with the knowledge and understandings being presented in various courses.

On the other hand, the all too typical, isolated student working alone in dorm room or library, night after night, week after week, is by no means the paradigm of the only, or even the most productive, way to learn. Such individual isolation outside the classroom parallels the silent isolation of too many students in the classroom. But the issue here is not that of passivity, because the student studying alone may be quite actively engaged in the work of studying - not just reading a textbook, but perhaps comparing and contrasting sources, working through variations of problems, making connections with other topics and so on. The issue, instead, is that of an absence of dialog, the absence of the kinds of interactions with others that a great many studies have shown to greatly facilitate learning.

From the ancient dialogs of Socrates to modern sessions of collective "brain storming" those who have studied learning and creativity have observed how the true interaction of engaged individuals can stimulate and facilitate the imaginations and understandings of each individual involved. In a capitalist society, one such stimulus may be that of "competition" - of individuals striving to out-think and out-perform one another. Such a source of stimulation can even be recognized, and undoubtedly celebrated, by those with a neoliberal mindset. But more perceptive observers have seen many other sources of enhanced stimulation from the Socratic

power of negation and counterargument to the joys of solidarity in confronting problems and in working out solutions. Solidarity reduces anxiety and gives strength and confidence that are more conducive to clear thinking. A half-formed idea, a tentative approach to a solution, a random association or an occasional inspired connection tossed out by one individual to a group can become the catalyst that inspires more refined or complete insights by others. In the best of situations such mutual stimulation and reinforcement can have a snowball effect of rapidly expanding imagination and growing understanding for each participant.

Unfortunately, with few exceptions such as the training of musicians for orchestral performance or of athletes for team sports, the structures of the modern university do not encourage such collective endeavor and mutual stimulation. Not only are students rarely encouraged or organized by professors to work in groups but the organization of lecture classes, the usual practice of professors holding office hours for individual students and the organization of testing as the testing and grading of individuals all encourage students to think of their work as their work alone and to undertake it in solitary ways. Of all of these, the character of testing probably does more to encourage the isolation and solitary endeavor of students than all the others combined.

Each individual student faces tests alone, and each receives an individualized grade. Because such things as the admission to specialized programs, academic scholarships, admission to graduate school (or Law School, or Med School, etc.) and future job prospects depend, in large part, on good grades, students rarely take a relaxed or nonchalant attitude toward being tested and graded. On the contrary, it can warp their work time both in and out of the classroom.

I have already mentioned the resentment of many students towards those few who, during lectures, ask questions designed to meet their own particular intellectual needs. The resentment derives, at least in part, from the perception that such questions lead to "getting off the subject" taking time away from planned lectures that hopefully contain the necessary information for upcoming tests

More generally, because students (and professors) are habituated to the notion of a rank ordering that produces a grade hierarchy, the structure of evaluation is conducive to competition. Students are not just encouraged to understand the material and get good grades; they are told they must get better grades than their peers. *In extremis* such competition can generate not only intolerance in the classroom but individualistic refusals to help others outside the classroom for fear of undermining one's own position in the hierarchy. Economics professors, in particular, teach their students to beware of "free riders" who might take advantage of others' work thus accentuating such attitudes. Not surprisingly, for a great many students as test time approaches anxiety and stress deepen.

Beyond course-specific testing students must also suffer through the less frequent but largely unavoidable trials of standardized tests to which they are increasingly subjected. In the United States these may include state mandated tests of basic skills, the Scholastic Aptitude Test necessary to college applications, the Graduate Record Examination necessary to graduate school applications, the LSAT necessary to Law School applications, and so on. Such tests tend to generate even of anxiety and stress than those in particular classes for three reasons. First, they come at critical moments of transition for students where performance can make or break a student's plans for the future (e.g., graduate school and the careers that it makes possible). Second, because they are standardized and thus, by definition, not based on the individual student's particular course of study the uncertainty as to whether one is adequately prepared is much greater. Third, because such standardized tests have been demonstrated, again and again, to be culturally biased, they present particularly difficult obstacles for some students.

In all of this we can see, as we did with professors, those kinds of alienation discussed by Marx in the 1944 Manuscripts: alienation from the work itself (for students this results primarily from studying what you are told to study in the way and order someone else requires - instead of following your intellectual nose to meet your own needs), alienation from the product (for students this results from your schoolwork being merely something you do because your professor or your future employer requires it and therefore the abilities you acquire - labor power - something you have constructed for someone else), alienation from other workers (for students results above all from competition with students and antagonism toward professors - instead of cooperation within a framework of collectively self-defined learning) and finally alienation from species-being (for students, as for others, this means the lack of freedom to realize one's own self-determined social being, both individually and collectively).

These alienations involve two obvious forms of antagonism. The first is the antagonism among students associated with the alienation between them - that can take forms ranging from personal animosity to collective racist or sexist behaviors (e.g., Fraternity treatment of women and racial "minorities"). The second is the antagonism of students towards those of us who are professors - who are their immediate taskmasters, who impose alienated work and all the associated alienations on them, who act as reflexive mediators defining the students to themselves via grades (whether we do this arrogantly - like the abusive teacher of "The Happiest Days of our Lives" in Pink Floyd's *The Wall* - or sympathetically - like the title characters in the films Goodbye Mr. Chips and Mr. Holland's Opus).

These antagonisms, of course, mask deeper ones: namely that between the students and the institutions that impose grades and require those of us who are professors to impose work and that between we professors who find ourselves forced to impose work and incur student antagonism and the institutions that make this an integral

part of their jobs. These antagonisms are masked by the mediated organization of the imposition of work such that students rarely see or understand the institutional pressures on professors and such that professors who accept the organization of the university, become blind to its alienations and only see and experience the antagonism of students as irresponsible personal laziness and reproach. (There is more on such syllogistic mediations in chapter five of *Reading Capital Politically* on the form of value.)

In the current period in many countries, including the United States (and from what I have heard Britain since Thatcher), students are subjected to ever greater pressure to work harder and longer, to both extend their working day and intensify it (two classic capitalist strategies usually associated with absolute and relative surplus value). At the level of the length of their entire university work-life they are also subjected to speed-up, not only working faster and harder but with less freedom to change the direction of their studies, to take time off from those studies, etc. They are pressured to choose a single course of study and to complete it as quickly as possible and are penalized (even monetarily) if they deviate from the chosen path.

Because the situation is so full of alienations many students want to minimize their misery by at least being entertained; they prefer lectures to be funny, stimulating and perhaps even inspiring. They would also like, of course, little work to be required, that work to be easily accomplished and highly rewarded. They want, quite reasonably, the least obnoxious working conditions possible. They don't want me to be a Captain Bligh or a Simon Legree but rather a David Letterman or a Seinfeld with funny gag lines or a Robin Williams capable of not only funny but dazzling and uplifting rhetoric. Indeed, many will tolerate an outrageously high imposition of work outside the classroom if only I am entertaining enough in the classroom - effectively shifting the workload from themselves (of dealing with boring lectures) to me (producing entertaining lectures). The pressure, therefore, is on me to do the work necessary to meet these expectations, or to do the work of dealing with a classroom full of people whose desires are not being met. In either case I am doing the work of handling what is structured to be an antagonistic situation.

To these general alienations and antagonisms we must add those of gender and race, ethnicity and national origin - as in the rest of society. Some students are subjected to additional pressures either from other students or from their professors. The cruelties of some students are as well known as the predatory behavior of some professors - in both cases it is mainly students who are the targets and victims.

Costs of Academic Overwork

The wide variety of alienations inherent in students' work that produce isolation, a lack of control over their own lives and estrangement from their fellows creates repeated, sometimes virtually unremitting stress for students that is not only intellectually destructive but can be psychologically and physically harmful as well.

For example, the kind of anxiety associated with testing can sometimes produce, especially among dedicated, low entropy students, migraine headaches, cold sweats, hives, sleeplessness and outbreaks of herpies, It can also lead to behaviors and habits with deleterious results, e.g., the use of drugs (caffeine or speed to stay up to study, nicotine or downers to reduce nervous tension and so on) or eating disorders.

Not surprisingly, testing periods, especially those of final exams at the end of semesters, bring heightened demands for university counseling services as over-stressed students struggle to cope, even to survive. The under funded, under staffed and often ill-conceived character of such counseling often leaves many students with no help, or only momentary relief.

More generally, the misery of isolation can generate, at any time, self-destructive behaviors such as self-mutilation or addiction - to alcohol or other drugs, computer games or shopping, gambling or eating - or even suicide. To break out of such isolation, all too many students have demonstrated a desperate willingness to engage in mutually destructive behavior to gain social acceptance: from participation in collective binge drinking and compulsive sexuality - all too common at fraternity and sorority parties - to racist attacks, drunken riots after sporting events and murderous violence. Not only are university counciling centers regularly swamped by students seeking help to escape from such behaviors, but in extreme cases it is the police, rather than councilors who wind up taking the students in hand.

In seeking to understand the role of schoolwork in such extreme situations, it is important to keep in mind that it is not just a case of the inability of students to cope with particular situations. Rather such inabilities are the fruit of years and years of similar alienations. Remember: by the time students graduates from high school and enters the university study they have already suffered through twelve, and often more, years of schooling where controls were even tighter and more authoritarian than at the university. By the time a graduate students finally finish a doctoral dissertations they may have been struggling to survive the alienations of the school system for more than twenty years. Most realize how many years in a penitentiary can wound and cripple a person; fewer recognize the similarities between prison and school and how the effects of the latter parallel those of the former.

(Although it goes beyond the scope of this essay, the curious might find it informative to explore the frequency with which high schools have been physically constructed on the basis of architectural principles and sometimes even plans originally designed for prisons. Moreover, I suspect that an investigation into the parallels between the managerial methods of prisons and schools would prove equally enlightening.)

While the alienations of school are rarely the only sources of the kinds of problems mentioned above - they may be deeply rooted in family dysfunctionality or social pressures as well - they often contribute greatly, sometimes being the final bunch of straws that break the camel's back.

The above are a few observations of the organization of work and its consequences within the university workplace, with a focus on students and professors. (To have a more complete understanding of the class composition in the educational industry and its factories we must also, of course, investigate the work and conflicts among managers and staff within individual institutions - in and of themselves and in relationship to students and professors - as well as the overall hierarchical structure of the collective set of institutions of "higher learning" and their relationship to the rest of the social factory.)

Students in Struggle

I now want to turn from discussing how things are supposed to operate to how students and professors struggle against the work that is imposed on them and against the various institutions and mechanisms of that imposition - to turn, in Marx's words, from an examination of students (and professors) as part of the working class in itself, to their role as part of the working class for itself. Let me begin with students, for the sake of continuity with the previous section. (I spent something over 20 years of my life as a student (12 years elementary and secondary school, five years undergraduate college, and four years plus of graduate school).

At universities students initially confront courses, their professors and the work those professors impose as individuals, individuals very low in the hierarchy of power. As such they generally have very little ability to resist other than through absenteeism (skipping classes physically or mentally - or dropping out) or other forms of isolated refusal. In my experience it is very rare that an isolated individual student has the courage to openly challenge the way a professor organizes a course, lectures, grades or treats students (inside and outside the classroom). It is also rare to find a student with enough self-assurance and developed sense of their own intellectual agenda to engage in what the Situationists called "detournement" or the diversion of a mechanism of domination (imposed schoolwork) into a building block of their own autonomous intellectual development.

Not surprisingly, high on many students' agenda is the acquisition of friends and networks to escape from isolation, to break the alienations of schoolwork and the classroom and to get some enjoyment out of their sojourn at school. Sometimes such network formation takes place in particular courses as students collaborate to help each other cope with the work imposed - by forming study groups and such. (Collaboration that overcomes the alienation among students may be aimed at minimizing the amount of work imposed, but it may also be simply an attempt to form coalitions to improve the competitive edge of those in the group or network - the kind of contradictory phenomena portrayed in the TV series "The

Paper Chase" about law students at Harvard - and thus still very much within the capitalist logic of the school.)

Sometimes the escape from isolation takes place within the larger university communities through a great variety of student organizations - from the apparently purely social to the overtly political. Both provide students with backup and support for whatever forms of resistance and crafting of alternatives they may undertake - from organized mutual aid in study through what Doug Foley calls "playing around in the class room" to collective cheating and overt collective challenges to the organization and content of a course (or of curriculum) or to the policies and behaviours of professors.

When such networking becomes sufficiently wide and challenges the power structures of hierarchy and alienation openly we begin to speak of student "movements" - such as the Free Speech Movement at Berkeley in the mid-1960s that challenged the power structures of that university and demanded an unheard of autonomy of student control over their own studies and extracurricular activity. Or, more recently, the massive, year-long student movement at the National Autonomous University of Mexico, in Mexico City, where tens of thousands of students challenged neoliberal policies aimed at dramatically increasing the imposition of work. They occupied the many university campuses and carried their struggles off campus into the wider community.

Within the overall student movement of the 1960s there were a wide range of interlinked struggles: the attacks by anti-war protestors on university complicity with the Pentagon and capitalist strategy in the Pacific Basin, Black and Chicano Student Union demands for open admission, for more financial aid, and for a transformation of the curriculum to meet their needs, feminist struggles against gender discrimination and for their own needs, demands by all kinds of militant students that various curriculum be changed to meet their needs (e.g., demands for radical economics, insurgent sociology, bottom-up history). As a student I was involved in some of these struggles and as a professor I sometimes benefited from them, e.g., three years of struggle by radical students in the economic and political science departments resulted in my getting my present job at the University of Texas to teach Marx.

Within this wide array of student struggles we can see both resistance to the imposition of alienating work and efforts at self-valorization via the imposition of alternatives that meet student needs.

In such struggles within the university you can also see examples of the circulation of struggle among autonomous groupings, e.g., from Black student struggles to anti-war protests, from feminist struggles to ecological struggles, as well as such circulation to and from struggles elsewhere in the social factory, e.g., in black ghettos of US cities, in rice paddies and jungles of Southeast Asia.

We can also trace of the rise and fall (or cycles) of struggle, e.g., the anti-Vietnam War protests expanded rapidly in the late 1960s, swelled to a peak at the time of the Cambodian Invasion and then subsided as the US began to withdraw from Vietnam. Black and Chicano student struggles circulated rapidly in the late 1960s and 1970s continuing the momentum of earlier civil and labor rights movements as well as the insurgencies of the great urban centers and subsided with the successes in achieving Black and Chicano Studies. (Such achievements were sometimes lasting and sometimes transitory. At the University of Texas, for example, you can find both Black and Chicano Studies programs - the enduring fruit of those struggles. But it is also true that many "radical" professors hired during the years of struggle were subsequently purged.) Black student struggles then swelled again in the 1980s attacks on university investment policies in international solidarity with the struggle against apartheid in South Africa - to subside once more with the end of apartheid. Just as Piven and Cloward have chronicled the cycles of "poor peoples' movements", or Italian Marxists have chronicled the cycles of the struggles of the mass worker, so too is it possible to write a history of the cycles of student struggles and movements.

Every day I can see the struggles of individuals and small groups of students coping with the alienations of school: the physical and mental withdrawals of individuals and the small collective collaborations, in class and outside of class. Some are creative and rewarding; too many are merely self-destructive.

From time to time, I am confronted by efforts at detournement via questions based on students' own needs or demands for changes in the course materials (e.g., this last Spring the overwhelming desire expressed by students to include in my course on international crisis the case of the Bush Administration's invasion of Iraq).

From time to time I also see wider student mobilizations: political meetings and protests, the querying of the relationship between materials and ideas covered in class and ostensibly unrelated struggles, critiques of university complicity with business or with the state in the exploitation of people and the earth, or in war profiteering.

Once in a while I see open rebellions - student sit-ins, marches, strikes or rallies - or major collective initiatives, e.g., for next Fall student activists have organized, on their own, a course on the class politics of higher education and student struggles. In that self-organization they asked for my suggestions as to readings and for my collaboration as the "official" teacher but basically they designed the course on their own to meet their needs as activists. They were prepared to do all of this outside any official framework but with a faculty member involved they can get university credit - thus converting institutional arrangements designed to impose work on them into vehicles of their own struggles.

Obviously there are limits to all of these struggles against the imposition of schoolwork and for the achievement of alternative goals. Isolated individuals can often achieve little other than survival. Small groups and networks are better not only at survival but at creating spaces and times

for self-valorization beyond resistance. Large-scale movements, of course, often achieve the most marked results - such as fundamental changes in course curriculum as mentioned above - but such movements come and go and students move on, not always leaving even a history of their struggles, much less a living legacy in the form of a new generation of activists. Moreover, even when universities make concessions the institutions do their best to co-opt and instrumentalise such changes and channel ex-student activists into professional careers where their energy may be more effectively harnessed for accumulation. Such efforts to harness can be seen in the formation of Black, Chicano and Women's Studies that are forced to operate using the same hierarchical methods for the imposition of work as those employed elsewhere in the university. The students whose struggles forced the creation of those studies are put to work just like they were in other courses - only the content has changed. The most highly motivated, who work hardest and move on to graduate school and Ph.D.'s may, if all goes well, then be integrated into the system as professors imposing work on the following generation of students.

Professors in Struggle

Which brings me from the struggle of students to those of professors. Unfortunately, as far as I can see, in most universities in the United States professors are so thoroughly divided and conquered as to make collective struggle difficult and rare.

Individual professors cope with the alienations of their jobs - teaching and research/publishing in a variety of ways. As with students some individuals withdraw. Young professors living under the threat of being denied tenure and told most explicitly that "publish or perish" is the rule, withdraw their energy from their class preparations and lectures and channel it into research and publishing. Older, tenured professors sometimes withdraw from the fierce backstabbing competition for promotions and salary increases and re-channel their energies either into teaching or away from their work altogether.

Other individual professors, again like students, seek out networks of colleagues for mutual aid (e.g., in research, in publishing ventures, in reciprocal citation) both to survive - as in young professors trying to find a protective and productive niche - and to advanced their careers. In this we can see both a natural resistance to alienation and, all too often, a embrace of precisely that competition that the university uses to pit professors against each other.

In the classroom individual professors who design their courses, and departmental committees of professors who design curriculum (the sequence of courses leading to a degree) have some leeway or "academic freedom" in their choices - more certainly than the students upon whom they will impose those courses and that curriculum. Within typical mainstream courses professors can structure their presentation of material in a critical manner, challenging received wisdom and even attacking capitalism. A very few of us can craft whole courses, even sequences of courses, that explore bodies of ideas critical

of, and struggles against, capitalism, e.g., my courses on Marxian theory.

But that "academic freedom" is usually dramatically overstated. The design of curriculum is overwhelmingly shaped by the styles and fashions of the professions of which the professors in a given institution are but one competitive part. Most feel compelled to teach courses whose content corresponds to the currently dominant approaches in their fields, e.g., in the post-WWII period most economics departments offered core sequences of neoclassical microeconomics and Keynesian macroeconomics. In the present neoliberal period of marketworship microeconomics has come to largely displace macroeconomics as a separate field and most other fields have been reduced to mere applications of microeconomic methodologies. The room for maneuver in such situations is limited - both by the amount of material that has to be covered the courses (leaving little time for critique) and by most professors' adherence to the fashions of their profession. Those of us who move entirely outside such fashions are few and we usually "pay" - quite literally by being marginalized, not promoted and excluded from wage increases and other perks. Some of us, of course, find more than adequate compensation in the satisfactions of working with students willing and able to think critically, including student activists engaged in various struggles, and thus participating in, and contributing to, the circulation of struggle across time, space and experiences.

The pressures that shape research and writing for publication are even more acute. Only peer-reviewed articles, books and research grants are considered significant for promotion or wage increases and the "peers" who control professional journals, the editorial houses and the institutions doling out research monies almost systematically impose the very pro-capitalist fashions of the day as one choice criterion for accepting or rejecting submissions. Within such a situation creativity is sharply limited to crafting variations within a narrow theoretical and methodological sphere. Professors may be somewhat less alienated from their work than students - by having more control over how they teach but they are also working according to others' wills, both those of university administrators, those of the trendsetting "leaders" of their professions and those who fund

Those who resist such pressures to do what is necessary to get published in such a framework, even more than those who refuse to participate in preaching the dominant theories and policies, usually find themselves either excluded entirely from the university (refused tenure) or sharply marginalized in terms of income, perks and a voice in decision making. In rare instances, a small number of those who refuse to go along with the dominant fashions of their professions are able to carve out spaces for themselves - even becoming a dominant force in a few isolated departments, or creating new departments (e.g., Black Studies). But the price for this is usually submission to the rules and regulations of the larger institution to the point where they become - as I suggested above - just as much functionaries of the

capitalist imposition of work and discipline on students as any mainstream group of professors.

As such dynamics suggest, it is extremely rare to find much evidence of collective resistance by university professors to either the imposition of work on themselves or to their role of imposing it on students. In a few instances, where state laws allow it, professors have formed unions to defend their rights and fight for better wages and working conditions. But mostly the intense competition among them effectively undermines such efforts and the best they can do is form such bodies as "Faculty Councils" to "advise" university administrators on faculty points of view - to which administrators may give lip service but are usually under no obligation to heed.

As can be deduced from the above description of the working conditions of professors, they suffer, though sometimes to a lesser degree, from all the alienations that afflict students: alienation from their work (as they find themselves pressured to teach such and such subjects, to research such and such issues, to utilize such and such methodologies, to impose grades and incur the hostile antagonism of students - as opposed to having the "academic freedom" university ideology asserts them to have), alienation from their product (their students' labor power - which at the graduate level may soon be pitted against them - and their own labor power and research results that contribute to the system of control that confines them), alienation from their colleagues (in competition for promotion, wage increases, research grants, and other perks) and ultimately alienation from their species-being (the free exercise of their will).

All this is true regardless of how professors feel about their work. It is probably not much of an overstatement to say that most professors identify with their work and only occasionally feel it as an imposition. Indeed, given the dedication required to work as hard as is necessary to compete and win in the academic market place, it is not surprising to find a large number of professors to be workaholics, to have thoroughly internalised the values of the system in which they work. This is a measure not only of their dedication but of the efficacy of a system whose "Maxwell's Daemons" ("peer" reviewers and university administrators) have carefully selected and promoted those competitors who have demonstrated through their work low levels of entropy and have excluded those less competitive, high entropy professors who have refused to channel as much of their life energy into their work.

At the same time, the contradiction between the conscious dedication of such workaholics to their jobs and the alienations that in fact constrict, narrow and poison their lives often lead to all the nasty consequences common to workaholics in any job category. They often suffer from chronic stress and anxiety with nasty consequences for their health. Endless hours of research may create isolation from and an inability to communicate with or meet the needs of spouses, children and friends that leads to further alienation and sometimes broken marriages, homes and friendships.

Not surprisingly in virtually all widespread resistance and rebellion on university campuses students take the lead and professors are either passive spectators or work with administrators to limit and constrain student actions. In some cases struggle may circulate from students to faculty and a few of the latter may speak up in support of student demands or participate in student organized struggles - as advisors, speakers, sources of information and so on, but the initiative almost always begins with students. In my experience - which runs from the Civil Rights and anti-Vietnam War movements of the 1960s through the antiapartheid and anti-intervention (in Central America) movements of the 1980s to the anti-Gulf Wars and antiglobalization movements of the 1990s and current period, participation by faculty, much less leadership, has been the exception rather than the rule.

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