

at the same time yields new forms of social knowledge and organization which can undermine it. Or in Gramsci's words: "Every relationship of hegemony is necessarily an educational one..." *Selections from the Prison Notebooks*, trans. by Quintin Hoare and Geoffrey Smith (New York, 1971), p. 350.

102. This issue poses one final problem in Braverman's analysis. Braverman places overwhelming emphasis on technical knowledge of the production process. When workers possess it, it affords them control of their own labor power within the labor process. The reorganization of work is presented in terms of dichotomous marxist categories as the process whereby knowledge is taken away from the working class by capital. But the use of the structural (logical) categories obscures the importance of organizational (sociological) factors since specialized knowledge is now located within a "new middle class" - among scientists, technicians, middle-level supervisors, and certain professionals. This knowledge does not confer control of the production process to them but it does provide a resource with which they can exert some control over their own labor power within the labor process.
103. Layton, *op. cit.*, p. 213.
104. *Ibid.*, pp. 154-200, and Edwin Layton, "Science, Business and the American Engineer," in Robert Perrucci and Joel Gerstl, eds., *The Engineers and the Social System* (New York, 1969).
105. See Magali Sarfatti Larson, *The Rise of Professionalism: A Sociological Analysis* (Berkeley, 1977), p. 28. It may be interesting to contrast the failures of the industrial engineers to organize as a profession with the strategy adopted by the managerial groups analyzed by Alfred Chandler in *The Visible Hand* (Cambridge, Mass., 1977). David Nobel, in *America By Design*, (New York, 1977), argues that the engineers in fact became managers rather than a group with separate interests and identifications.
106. Cf. Samuel Haber, *Efficiency and Uplift: Scientific Management in the Progressive Era, 1890-1920* (Chicago, 1964); Raymond Callahan, *Education and the Cult of Efficiency* (Chicago, 1962); and especially, Magali Larson, *op. cit.*
107. Cf. Barbara and John Erenreich, "The Professional-Manual Class," *Radical America* (March-April, 1977); Nicos Poulantzas, *Classes in Contemporary Capitalism* (London, 1976); Alvin W. Gouldner, *The Future of Intellectuals and the Rise of the New Class* (New York: Seabury Press, 1979); and George Ross, "Marxism and the New Middle Classes: French Critiques," *Theory and Society*, 5 2 (1978). Wright's (*op. cit.*) "contradictory class position" between the working class and the capitalist class describes positions which are very similar to those defined in the "new middle class" approaches. I am concerned less about the label with which we identify certain positions and more that we see these positions as the outcome of struggles in which this class, stratum, group (however labelled) actively participates. Val Burris presents a strong case that there is a new middle class. His excellent use of census data from 1900 to the present documents the expansion of this class as well as identifies its major segments. Although his categories are much more discrete than this summary, his data suggest that the new middle class expanded in two major waves of a qualitatively different character: the first from the turn of the century to World War II among managerial and supervisory personnel within industry, and the second from World War II to the present among "reproductive" personnel (social services, education, etc.) within the state. Burris' finding of stagnation in growth (and actual absolute decline among some segments) of this class in recent years have important implications for class realignments in American politics. See "Towards an Historical Understanding of the New Middle Class," unpublished manuscript, Department of Sociology, University of Oregon (1978).
108. Cf. Poulantzas, *op. cit.*

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PROLETARIANIZATION AND EDUCATED LABOR

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The debate on the class position of nonmanual workers is as old as their massive appearance and continued multiplication in the labor force of advanced capitalist societies. Beginning at the end of the nineteenth century in German left-wing circles, the debate was spurred forward in the late 1920s and '30s by the catastrophic social consequences of runaway inflation and world depression.¹ The toll which economic crisis was taking on professional and white-collar categories raised, for marxists and non-marxists alike, urgent and inescapable political issues.

Regardless of the position argued, the very terms of the debate and the very structure of the problem were (and perhaps still are) inseparable from marxist theory, as can be seen in either the revisions of a simplified orthodoxy or in the negative reactions to marxist class analysis. Moreover, the theoretical issue could not be separated from the burning issues of marxist politics in a time of defeat and bloody repression: indeed, not only the fate of socialist movements but that of bourgeois democracies themselves seemed to hinge on the uncertain class allegiances and ambiguous political potential of this most heterogeneous stratum of workers.

After World War II, this political heritage was partially obscured in the contributions of professional social scientists even if, in rephrasing the problem of the "new middle class," they followed (as did C. W. Mills) lines of analysis developed in the earlier phase.² Not until the late 1960s, in fact, with the massive unfolding of student-based social movements, did the theoretical issue once again become infused with the passion and urgency of practical political questions. In the meantime, C. W. Mills' position - that ultimately the "new middle class" was incapable of autonomous political organization and structurally condemned to follow the lead of either "business" or "labor" - had been displaced in both European and North American social science by a more complete rejection of the thesis of growing class polarization. Whether rejection and

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criticism came from a broadly defined left, as they mainly did in Europe, or from anti-marxist and anti-socialist positions, as they mainly did in the United States. Their starting point was the interpretation of the structural shifts that had taken place in the capitalist mode of production and in the mechanisms of its social reproduction. The welfare-warfare state, the gigantic business corporation controlling and manipulating its international markets, the automated factory and the "scientific establishment" symbolized, in their apparently insatiable hunger for educated labor-power, the rise of a new class bred in the mass university. And for some social analysts, the movements of the late sixties precisely signified that this new class was capable of playing an autonomous and even a crucial role in the class struggles of late capitalism.³ In fact, the emphasis on autonomy and, often, on the political equality between "old" and "new" working class is perhaps the most distinctive aspect of the "new middle class" or "new working class" theories. It is also the aspect that reflected the most closely the situation of student activists, now turned professionals or, at least, "new working class" members.

In the United States in the early 1970s, the problem of the class position and class identification of professionals, technicians and others in the educated white-collar strata was posed either in more or less revised "Marxist-Leninist" terms or in terms closer to the "new working class" theses of European sociology. In the background were not only the life-cycle of former New Left activists, but also the collapse of Students for a Democratic Society, once the most significant New Left organization, now partly dissolved into a myriad of "old Left" or "neo-communist" sects.⁴ Even if they themselves did not adhere to any political sect, many analysts still assigned the key historical role in revolutionary politics to the industrial proletariat. From this standpoint, they argued, once again, that the new "middle" class occupied an intermediate position, like the old *petite bourgeoisie*; that its social distance from the proletariat barred it from becoming a decisive ally for the major protagonist of socialist politics; and/or that its position in the system of production denied it an autonomous and leading political role.⁵ Other theorists, probably closer politically to the "radicals-in-the-professions" approach developed by SDS in the mid-1960s, focused instead on continued proletarianization within the ranks of educated labor, on which process hinged the thesis of an enlarged working class. The changing structure of this working class changed as well the prospects and strategies of revolutionary politics.⁶

In 1974, the publication of Harry Braverman's book, *Labor and Monopoly Capital: the Degradation of Work in the Twentieth Century*

helped turn the attention of "new working class" theorists to the labor process itself in its continued subjection to heteronomous rationalization.⁷ For, indeed, the signs of proletarianization ought to be found at the level of work conditions, in a parallel with the history of both industrial and clerical work. The study of "proletarianization" – a term that is often used lightly, as a quasi equivalent of "rationalization" or "industrialization" of the labor process – coexists but does not quite merge with theories about the origins, evolution, and possible historical role of the "new class". Among the latter, one might distinguish two broad varieties: theories that still hold to the basic marxist assumption (i.e. the position of individuals in the social relations of production, their productive activity, contradictory or not, is the basis from which to assess the potential and the trajectory of their collective consciousness and behavior); and theories that assign a more determinant role to broadly understood ideology and cultural socialization.⁸ In any case, both varieties of theories and theorists measure the role of the intelligentsia, however implicitly, against the paradigmatic role assigned by marxism to the industrial proletariat.

This reminder that the debate on "intermediate categories" and educated workers has a long history was meant to place the issue of their "proletarianization" in its political and intellectual context. However, the purpose of this paper is not to review the origins and diverse trajectories of "new working class" theories but to consider how we can approach and research the problems of educated workers at the level of work itself, which includes work opportunities and labor markets, work conditions and the work process, the *activity* we call "work". As I have implied, underlying most analyses of a marxist persuasion is the analogy between the present of educated mental workers and the past of the industrial working class. In the "contradictory class locations" of educated workers or "semi-autonomous employees" some authors implicitly look for answers to the question of why these special kinds of workers do not demonstrate the political coherence that the industrial working-class has only seldom sustained for any protracted period of time.⁹ Others apparently assume that all forms of control over the work process by direct but subordinate producers can be expropriated, reacting in this to the very present and practical concerns of management with the "rationalization" of professional, technical and administrative work. Indeed, for state managers in particular, the issue of reorganizing the bloated public service sector acquires a new urgency under the double spur of the fiscal crisis and the "taxpayers' revolt". Here, as in the private sector, the guiding principles are cost-efficient productivity, and the reduction or reassignment of highly paid personnel.

what I intend to do here is, first, to examine briefly the classic terms in which the issue of the proletarianization of industrial workers was posed by Marx, with reference to concrete analyses by later historians and sociologists of work. Second, I want to confront the problem of "analogical thinking" and consider to what extent a theoretical parallel can be established between the situation of industrial and professional or at least educated workers; the limits of "proletarianization" should be connected here with the limits of "professionalization" and with the theoretical questions that analogical thinking implies but does not address. Third, I will use some material on labor market trends to clarify the issue of "proletarianization" or, rather, the way in which it is perceived by both social analysts and educated workers. Fourth, I will consider trends in the labor process itself, as they affect or may come to affect categories of professional or, at least, educated workers on whom we have scant empirical information. In conclusion, I will outline some themes on which much needed empirical research could be theoretically centered.

The Analogy with Classic Proletarianization

In marxist theory, proletarianization is the complex historical process which produces a working class, locking it into subordination to and conflict with a capitalist class. As a continuous process, proletarianization reproduces this working class in new and expanded forms, which depend on the predominant structure of exploitation and on the configuration and outcomes of the class struggle at a given time. In *Capital* we see how proletarianization passes through different stages, which are not chronological but analytical stages in each historical period. pre-factory or pre-modern forms of subjecting the labor force and extracting surplus value from the use of its labor power coexist with the specific mechanisms of modern industry. The latter does not only change the nature and composition of the labor force and the mode of control over its labor; it also changes the nature of exploitation and the functions of production in the pre-modern industries.¹⁰

stages of proletarianization in CAPITAL

1st stage

Manufacture, still based on handicraft production by assembled laborers, is the first stage of capitalist industry. Its fundamental characteristic is the cooperation "on a large scale" among workers simultaneously hired by a capitalist employer. "Even without an alteration in the system of working," writes Marx, "the simultaneous employment of a large number of laborers effects a revolution in the material conditions of production." The first sign of this transformation is the "socialization," through com-

common use of instruments of production
+ still primitive sources of energy

mon use of the instruments of production and of still primitive sources of energy. The subsequent stages depend on the introduction and development of a more and more advanced division of labor. In capitalist manufacture, however, the socialization of the labor process is lived by the workers as an essentially alien and alienating reality, from which the craftsmen can still in part detach their own individual work activity.

The passage through the labor market, the simple fact of the sale of labor power, allows manufacture to "seize labor by its very roots" and to consciously reorganize it. No longer spontaneous nor autonomous, the division of labor appears to the workers "in the shape of a preconceived plan of the capitalist, and practically in the shape of the authority of the same capitalist . . . who subjects their activity to his aims."¹¹ The central mechanism by which capitalist manufacture revolutionizes the labor process is specialization. Depending on the nature of production, specialization adopts one of two main forms: in the first form, where separate crafts are assembled, specialization is deepened; in the second, a unified process of handicraft production is broken into fractional activities. The results, however, are the same: increased productive power for the collective producer (the manufacture as a whole) and increased "detail dexterity" for the worker, who is now riveted to either a narrowed or a fractionized task and compelled to perfect his partial skills.

specialization

Obviously, not all tasks have the same complexity, nor do they carry the same responsibility or the same social prestige; therefore, within the new collective producer, "a hierarchy of labor-powers develops, to which there corresponds a scale of wages." The decomposition of the labor process can create new comprehensive functions; the perfecting of fractional operations simplifies the required skills, but it also multiplies (as does the technical improvement of the instruments of work) the accuracy and the speed which can be expected of fractional skilled workers. However, the heteronomous division of labor also creates at the bottom of the hierarchy a class of unskilled laborers, a class which, according to Marx, "handicraft industry strictly excluded."¹² From the sphere of production, the redefinition and redistribution of skills passes to the labor market, in the form of redefined differential wages.

↑ productividad

In the first volume of *Capital*, Marx gives us only brief and incomplete references to guild (or caste) organization; thus, the largely implicit contrast between manufacture and the past of independent producers introduces a note of nostalgia and idealization: unexamined, the figure of the "well-rounded craftsman" appears as the silent standard against which

the degradation of work is measured.¹³ But the implicit idealization of the past does not detract from the depth of Marx's insight: forced cooperation, in tying each man's work to the total organization of production, begins to change the meaning of work and the relative importance of the skills needed in a productive process. Yet, in manufacture, the core of the labor process is still intact: the structure of work is still nothing "apart from the laborers themselves." Because the handicraft is still the foundation of manufacture, each operation "is therefore dependent on the strength, skill, quickness and sureness of the individual workman in handling his tools." For this reason, manufacturing capital is "constantly compelled to wrestle with the insubordination of the workmen." whose denial of labor denies it fractional, but still largely irreplaceable, dexterities and skills.¹⁴

manufacture e proceso de trabalho

At the level of execution, of work activity itself, the skilled craftsmen of capitalist manufacture are still to a large extent their own masters (and the direct masters of their unskilled helpers). They are given orders and fixed programs but, within these alien boundaries, they preserve their technical and social autonomy. The principal form in which surplus value is extracted - by lengthening the working day - respects the essence of the labor process. Thus, manufacture represents only the beginning of proletarianization, only the formal subjection of labor to capital:

surplus in manufacture lengthening the working day

The production of absolute surplus value turns exclusively upon the length of the working day; the production of relative surplus value revolutionizes out and out the technical processes of labor, and the composition of society. It therefore presupposes a specific mode, the capitalist mode of production, a mode which, along with its methods, means and conditions, arises and develops itself spontaneously on the foundation afforded by the formal subjection of labor to capital. In the course of this development, the formal subjection of labor to capital is replaced by its real subjection.¹⁵

Whereas, "in manufacture, the revolution in the mode of production begins [and also, we may say, ends] with the labor-power, in modern industry it begins with the instruments of labor."¹⁶ The mechanization of large-scale production moves, historically, from flexible to specialized single-cycle machinery and from separate to integrated transfer machinery, which covers a whole process of production and culminates in the assembly line; from the automatic self-regulating machine, mechanization advances in our day to the numerical control machinery which revolutionizes small batch or unit production. In this passage, proletarianization is completed.¹⁷

mechanization in capitalism note 16

Special purpose and transfer machinery represent a qualitative leap in the history of proletarianization: first and above all, modern machinery changes the nature and the composition of the collective worker. Workers who no longer need to be strong or previously trained in a craft (in concrete historical terms, women and children) may now be brought into the factory, not as helpers of the skilled craftsmen but in their own right, as unskilled servants of the new machines. The massive degradation of industrial skills by modern machinery creates a new labor market, one in which the supply of labor is enormously increased by the influx of unskilled - and therefore interchangeable and eminently replaceable - workers. To repeat what is well known, modern industry brings into being a new proletariat and, within it, an industrial reserve army: the massive volume of the potential supply of laborers exercises a constant downward pressure on the average wage, breaking down the resistance of the now largely dispensable machine craftsmen (formerly adult and male). In consequence, the configuration of the class struggle is changed and the labor movement historically reorients itself from craft to industrial organization.

degradacao de qualificaçao

Secondly, at the technical level, modern machinery increases productivity so enormously that, as Marx indicates in the *Grundrisse*, "labor in its direct form has ceased to be the great well-spring of wealth."¹⁸ Through technology and applied science, large scale industry overcomes the limits posed by human biology and workers' resistance to the lengthening of the working day: its growth and economic viability now depend on the extraction of relative surplus value through the deployment of ever more advanced machinery (and the investment in increasing proportions of constant capital). The condensation of labor which can be achieved by increasing the pace of production or the number of machines assigned to the attention of each worker far surpasses the intensification that was possible in manufacture. Moreover, the new levels of intensification are inscribed, as it were, in the mechanical process itself: its pace and unambiguous sequences predetermine the operatives' movements and the rhythm of their work. Continuous flow production thus appears to convert discipline from a sociological problem (how to use and legitimize hierarchical structures of command) into a technical one. This conversion is symbolized by Taylorism and aptly illustrated by the end of the foreman's arbitrary reign.¹⁹ As management and planning are removed from the shop floor and taken to "the offices," their functions in turn become differentiated, hierarchically connected and bureaucratically integrated. The much enlarged ranks of management are staffed increasingly by college graduates, who are or appear to be members of a different social

Taylorismo management

class than the workers: this development tends to sever the last personal connections between industrial workers and management and, within the latter, between the staff and the lower levels of the line.²⁰ Institutionalized in the organization of production and reproduced outside the factory by the educational system, the gap between industrial workers and management appears to coincide with the structure of class, in which professionals and professionalism begin to play a generalized role.

professional

2nd phase

Human Distortion Approach

professionalism

Thus, in the second phase of mechanization, the separation of "head" from "hand" is completed for the large majority of industrial jobs. Technology, the province of management and of the highly schooled engineer, prefigures the further displacement and elimination of "semi-skilled" human interventions by still more advanced machinery. In fact, modern industry has broken the personal technical relationship between the worker and the material and tools of his work, replacing it with the integrated social organization of the whole productive process: in destroying the meaning and value of individual contributions to the work process - contributions in which skill and craft (significantly called in French "la qualification professionnelle") formerly played a determinant role - the new organization of industrial work gives primacy to its social conditions and to its social meaning. The meaning of work depends on "the relation between two totalities: on the one hand, work in its social unity; on the other hand the worker, considered in all his diverse social roles and in his personality."²¹ As the human relations approach emphasized (after Taylorism ceased to be the predominant managerial ideology), the meaning of work depends on the worker's objective and subjective participation to the life of his firm and, we may add, to the life of his society. However, in the social division of labor, the subjective meaning of proletarianized industrial work cannot be separated from the meaning of work that is apparently autonomous and socially esteemed, work that is often considered or claims to be *professional* work. One may thus be tempted to see professionalization as the objective and subjective opposite of proletarianization or even, in the factory, one may see them as the two antinomic faces of the same process, one which eliminates intelligence and judgment at the base of the labor hierarchy, in order to concentrate them at the top. Before turning to a closer analysis of professionalization, we need to recapitulate the stages and different dimensions of proletarianization which appear in the classic case.

At the risk of splitting and misusing the term "alienation," we may say that the *real* or *complete* proletarianization of the industrial working-class proceeds by adding new dimensions of alienation to the proletarian

condition and by cumulating their intertwined effects. Beginning with the sale of labor power, proletarianization evolves through the various modes of organizing labor and extracting surplus value; the effects of proletarian subjection to alien authority change, in turn, the conditions in which labor power is sold and the social nature of the sellers. In the sale of labor power, equivalent to the *formal* subjection of a seller's time and capabilities to the buyer, the *economic* dimension of alienation is predominant. Under any conditions, the sale of labor power implies that a countable connection is established between time and task, even if the sellers do their own monitoring.²² However external it remains to the execution of work, the countable connection introduces a quantitative element into the notion of skill: speed, or the capacity to perform under time pressure, become part of the ordinary conceptions of discipline (and self-discipline) at work.

A inherent para passar o trabalho

The countable connection contains, in germ, the dimension of alienation which we might term *organizational*: manufacture, the stage of "forced cooperation," deepens organizational alienation, as the employer redefines work tasks and times in the direction of fractional specialization and increased standards of performance or yield. As the redefinition of skills in the manufacture reaches the labor market, it begins to subvert the logic of apprenticeship processes (heretofore relatively autonomous and independent from the logic of alienated labor processes) and the value of independently acquired skills. Thus, forced cooperation sets in motion the process which de-individualizes the worker's skills and qualifications: by submitting them to the whole alien organization of the work setting and by controlling from above the conditions of any increase in skill.

manufatura e alienação

As modern industry submits the mass of workers to technical control, organizational alienation takes a qualitative leap and fuses with a heretofore weak or absent dimension of alienation - *technical* alienation, or the dispossession of control over the execution of work. The simplification and homogenization of industrial tasks eliminate preexisting skills and destroy the *individual's* independent assets, his bargaining power on the labor market. Carried to unprecedented levels by modern industry, the organizational and technical dimensions of alienation fuse, in turn, with its economic dimension, transforming the terms of the sale of labor power and the very structure of class: *the fusion of the three dimensions of alienation - economic, organizational, technical - constitutes the classic proletarian condition.*

control técnico
→ alienação técnica
↓
desproporção do controle sobre a execução do trabalho

Throughout the proletarianization process, we see the deepening of a *class proletarian condition* - 3 dimensões de alienação → econômica, organizacional, técnica.

political alienation
 ↓
 decision making
 ↓
 what for what
 how much
 to produce
 ↓
 changes
 ↓
 to how
 to produce

professionals
 +
 autonomous
 formal
 ↓
 economic
 +
 organizational
 alienation

special dimension of *political* alienation: the alienation from decision-making in and about the productive process goes from the level of decisions about what, for what and how much to produce, to the apparently non-political level of decisions about *how* to produce, about methods, times and rhythms. The process is precisely inscribed in the mechanisms and in the integration of machinery: this technological base and the enormous economic advantages it represents over other modes of production makes proletarianization appear as *technically* irreversible. Thus, after massive deskilling, the only way for the proletariat to act upon its productive life is *political*, by collective action inside and outside the factory. Political organization is, in fact, the last and logical term of Marx's analysis of the making of a working class. Because the *personal* relation between man, tools and materials has been severed, the meaning of work has become social in the broadest sense. Political action upon the work process is therefore mediated, not only by specific ideological conceptions of work and politics, but also by the whole depth of everyday ideology, in which workers are individually and collectively immersed.²³

At first glance, there are striking, though superficial parallels with the contemporary situation of the large majority of professional workers: 1) the majority of workers who claim a professional label are formally subsumed under the heteronomous authority of capitalist or state managers by virtue of the fact that they sell their labor power. Although they are subjected to the laws of *special* labor markets, they objectively experience alienation in its economic dimension. 2) Large sectors, if not a majority, of employed professional workers work within large-scale, centralized, bureaucratic organizations. In principle, they are objectively exposed to the organizational dimension of alienation (a situation which the sociology of professions has often analyzed as the so-called "conflict between profession and bureaucracy"). 3) In this context, the ideology of the "free professional" functions, for both workers and their sociological analysts, as an equivalent to the ideology of the independent producer or preindustrial craftsman in the analysis of industrial work. It functions, that is, as the hidden and often misleading parameter of work alienation.

The question here appears to be to what extent can the parallel be continued? To what extent can we trace the onset of technical alienation and the fusion of the various dimensions of alienation in the contemporary situation of professional workers? In more concrete terms, can the bureaucratic organization of professional work produce levelling, deskilling and a reserve army of surplus professional workers? Is professional work effectively and irreversibly socialized in large-scale heteronomous

organizations? Or, rephrasing these questions from a different angle: to what extent does professionalization effectively defend certain special categories of workers against (1) the unmitigated effects of labor market laws; (2) the organizational transformation of the technical content of work, under heteronomous authority and by heteronomous criteria; (3) the de-individualization of skills and qualifications (or the destruction of the market value of individual skills; and (4) the fusion of economic, organizational and technical dimensions of alienation, a fusion which creates a proletarian condition and, in fact, leaves only political action as the recourse for changing all the conditions of work? To begin answering these questions we need to analyze what professionalization is historically and what it has become.

professionals
 +
 occupational
 content

Classic Professionalization and its Limits

What we call profession in everyday English usage is, in Howard Becker's words a "shorthand folk term"; it is based on the practice and ideology of people who call their occupation a profession and claim certain prerogatives, normally understood to be associated with the term. In exchange, they offer or claim to offer certain competences and qualifications as well as certain guarantees. This "folk construct" emerges within specific, and probably insurmountable, historical and cultural boundaries. Thus, to attempt a definition of profession outside of the historical processes which constituted this definition seems to me unsound, both methodologically and theoretically. As I have argued elsewhere, the classic definition, or the classic model of profession emerges in nineteenth century England and in the United States out of the movements of professional reform which responded both to new market opportunities, created by industrialization and urbanization, and to the decline of communal warrants of professional probity. Analytically, the organizational strategies adopted by professionalization leaders intertwine two levels of project: one is the creation and control of a protected, or institutional, market; the other is a project of collective occupational and social ascension.²⁴

As way
 of professionalization

The constitution and control of a protected market requires, as its core task, the creation of a standardized and uniform system for the training of professional producers. The complex model of market organization and control which modern professionalization strove to attain depended on achieving a structural linkage between two sets of elements which theretofore admitted independent trajectories: specific bodies of theoretic-

content
 +
 protected
 market

cal-technical knowledge, on the one hand and, on the other hand, actual or potential markets for skilled services or labor. The structural linkage between these two sets of elements could only be achieved in the modern type of university, a training institution which cumulates the production of knowledge (the research function) with the standardized production of professional producers (the teaching function). The practical goal of professionalization movements was not only to establish such a system of training, but to make it the mandatory point of entry into professional practice, the monopolistic source of legitimate professional producers. This monopoly is justified by seemingly objective and universalistic criteria of recruitment and achievement: not by the status of those who apply these criteria or of those who satisfy them, but by the impersonal expertise which they either embody or demonstrate to other experts. This meritocratic appeal to expertise, summoned from the beginning by modern professionalization movements, could not yield its full ideological benefits until the twentieth century, when the ideological claim could be rooted in and supported by the structure of apparently autonomous, nominally open and cognitively graded systems of public education.

In sum, modern professionalization movements aimed at monopoly: monopoly of opportunities in a market of services or labor and, inseparably, monopoly of status and work privileges. The special benefits derived from monopoly were to be both insured and justified by the monopoly of expertise. What the modern systems of training in fact allowed was control over the supply of both expertise and experts "at the point of production."

The success of this complex project not only required the backing and the cooperation of the state but also, obviously, a profound and still unfinished transformation of society and culture. Among its multiple and interrelated dimensions, we must mention the most significant from the point of view of professionalization: at the level of general ideology, science, an increasingly esoteric domain, becomes the cardinal system of cognitive legitimation; at the level of social structure, the transformation of production in the corporate phase of capitalism, the ever expanding role of the state in the economy and in society and the massive expansion of the educational system support, and at the same time reflect, changes in the dynamics of social inequality and the still incomplete reorganization of class systems.

It is in the phase of corporate capitalism that the complex model of profession, first projected in the structural context of competitive capital-

ism, is both implemented by the older professions and *generalized*. By generalized, I mean two things: (1) the privileges collectively attained by the classic older professions pass into a public *image* of profession or, in other words, the special benefits extracted from cognitive monopoly become part of the "shorthand folk term"; and (2) the model of profession, divorced from the historical matrix within which it was formed, is adopted as a strategy by occupations which are in radically different situations with regard to the market and to capitalist relations of production than were the classic protagonists of the first professionalization movements (law, medicine, architecture, as examples of "pure" market professions). Elements of the model of profession which were structurally rooted in the position of the older professions are thus transposed to different structural situations: in this passage, profession - a complex model of work organization based on the producers' control over an institutional market - tends to be superseded by the *ideology* of professionalism. This typical variant of the dominant ideology, which I will not analyze here, may well be the most significant common trait shared by the diverse and often incomparable occupations that claim the *status* of profession.²⁵

New functional areas of the social division of labor (e.g., librarianship, city planning), new specialties in the public sector (social work, hospital administration, school superintendency), new specialized roles which, in the private sector, often result from the dismemberment of capitalist entrepreneurship, newly differentiated specialties within older professional fields as well as old occupations such as nursing, attempt to create an occupational identity while pursuing exclusive jurisdiction by means of certification and licensing. Some if not all of them justify these claims by following the institutional strategy of older professions: in the United States, where this is possible because of the vocational openness of higher education, the new professional training systems are often successfully grafted to colleges or universities.²⁶ The question is whether generalized credentialism based on academic systems can successfully attain and guarantee monopolistic returns and work benefits, given that most "new" professionals (as well as increasing number of the "old") do not work in "free markets," but in subordinate positions. Some general considerations are in order.

First, for most professionalizing occupations, the strategy based on the monopoly of training is only as effective as the state or the corporate employer is willing and able to honor academic certificates and pay their price. Logically, the more technical a job is, the more it should require

appropriate previous training: this is not incompatible with evidence that employers *also* tend to favor college graduates in *non-technical* positions, for reasons that have little to do with the specific content of their education.²⁷

Second, even though the state may encourage licensing and even "academicization" as forms of control over future performances, self-initiated professionalization aspires to exclude alternative providers as much as it aspires to regulate them: therefore, the generalization of the strategy should logically exacerbate jurisdictional rivalries and disputes. Given the artificial and often tenuous manner in which the cognitive bases of expertise have been contrived, it is unlikely that these rivalries can ever be resolved (except by *fiat* of the state) into clear patterns of occupational dominance, or even lead to clear locations within the social division of labor.

Third, the generalization of academic credentialism encourages the overproduction of degrees. The ^{to the point} ensuing market devaluation of first level degrees reverses the scarcity calculation on which the strategy is based: it can also contribute to stimulate what we might call "academic escalation," as new academic fields invent a research function and go from the BS or BA to the Master's degree and even to the doctorate. In many cases, such escalation represents an artificial upgrading by which educators seek, first, to reproduce themselves and, second, perhaps, to match existing occupational inequalities with the institutionalized inequality of degree levels. However, superordinate work positions are by nature finite: neither certification nor the escalation of academic degrees can in themselves guarantee jurisdiction or hierarchical privileges commensurate to the degree in the workplace.

The transformation of professionalization strategies into generalized credentialism tends to erode what was at the core of classic professionalization: the structural linkage it established between a specific, though perhaps excessive, education and an occupational field. On the one hand, the adoption of academic strategies by new occupational specialties which lack a firm foothold in the social division of labor dilutes, in practice, the very connection they seek to establish between education and clearly recognized work functions. On the other hand, in the established older professions, increasing specialization tends to reduce the technical and cognitive commonality and thus to render the specialized work functions unrecognizable or incomprehensible to the larger public. The "shorthand folk term" objectively divorced from reference to precise

work practices and functions increasingly connotes *professional status alone* - that is to say, a generic claim to a nonproletarian class location, which tends to coincide with the middling-to-higher steps of bureaucratic ladders and with general positional privileges in the wider structures of social inequality. These are fluid privileges, defined by intuitive comparisons with multiple other groups and greatly influenced by extra-occupational attributes and life styles. As technical denotations either ^{consider} recede or become more esoteric, economic and consumption connotations play a proportionally larger part in the common sense understanding of the label "professional," taking us back, in a sense, to the kind of understanding that prevailed *before* the success of modern professionalization movements.

Insofar as the expectation of something like "professional" status underlies the choice of getting of college degree, the general category of college educated labor is *subjectively* equivalent to a broad "professional" stratum.²⁸ The emphasis on positional, and therefore relative advantages creates a wide field for individual experiences of relative deprivation which, under certain conditions, may come to be interpreted subjectively as "proletarianization". Moreover, the dilution of profession into professional status adds to the importance of economic factors as determinant of extra-occupational benefits. Where income and labor market phenomena are concerned, we are entitled, I believe, to consider educated labor as a whole, without assigning *a priori* significance to formal labels (names of occupations or degree levels): indeed, it is unlikely that the sharp income differences within the stratum of educated workers would coincide with classificatory labels (or even with broader labels, such as "established" versus "professionalizing" or "self-employed" versus "employed"). In the long run, income differences are more likely to cut across professional categories and to represent career inequalities within the latter. Thus, despite the vagueness of its overall connections with the social division of labor, the "diluted" concept of professional status directs us, nevertheless and once again to the organization of work: if, indeed, the meaning of one's work life and life style is relative: if, moreover, there are as great income and status differences within one occupational category as there are without, both objective differentials and subjective evaluations must be related not to predetermined conceptions of professional work, but to actual work situations and work-life experiences.

Empirical studies must be approached, however, with theoretical questions in mind. Those we outlined above with regard to the possible extension of proletarianization to highly educated workers focus our attention

not academic

academic

academic
"academic"

income inequalities within occupation

organization of work

on dialectical relations - between labor markets and labor processes, between workers and the authority to which they submit, between the organization of work settings and the meaning of individual work, between the utilization of labor and the defense or the enlargement of workers' skills. These abstract relationships should now be examined in terms of our analysis of professionalization. The first and obvious thing to note is that characteristic aspects in the situation of educated workers derive from the educational system; perhaps less obviously, they derive from the relative autonomy of education vis-à-vis the labor market, at least as much as they depend on concrete features of the educational process.

dialectical relations

labor market
Educational system

(1) Whatever their content or level, college degrees build a general protective barrier around the stratum of educated workers, separating them from other large groups of workers without a college degree. The two broad categories do not ordinarily compete with each other but rather inhabit distinct regions of a compartmentalized labor market. This general barrier appears to operate independently of the degree's educational content: as an illustration, in two large industrial firms, 45% of the educated workers with non-technical degrees felt that their education had little or no relationship to their position, while 38% of all educated workers, technicians or not, thought that their college major had not been important in getting them a job. The employers, however, in a much larger sample of comparable firms, hired mostly non-technical degree holders (70% of all the graduates hired from 1958 to 1967). In fact, the employers deliberately used the college degree as a primary mechanism of initial screening, after which screening personality appears to play the major role. In a period where the population's average educational attainments increased substantially, employers appear to have responded by upgrading entry requirements for many jobs. In fact, the phenomenal postwar growth of higher education does not appear to have been entirely, or even in large part, determined by increased market demand for higher level credentials (a demand itself determined by the higher technical content of production); on the contrary, the expansion of education and the ensuing availability of college graduates appear to have stimulated much of the increase in the demand for credentialed workers.²⁹ Upgrading, in turn, contributes to sustain the public pressure for entry at the college level, although it did not originally cause this pressure. As the college degree loses value because of autonomous overproduction (largely independent of market demand), it becomes nevertheless all the more necessary to have one as a defensive measure, if nothing else.³⁰

personality screening

Proceso de superproducción de graduados

Some important features of the condition of educated workers appear already at this most general level of analysis: (a) the credential acts as a defense against competition "from below," but, except for technical positions, it obviously does not deter competition from all other credentialed workers. Thus, within their relatively protected labor markets, educated workers are fully exposed to the economic consequences of oversupply. (b) Far from being a consequence of deskilling (that is, of organizational and technical alienation in the workplace), oversupply appears to be generated by social pressures upon the credentialing system, partly as a response to the perceived changes in the mechanisms and dynamic of social inequality. Employers, initially availing themselves of educational screening mechanisms that cost them nothing, later provide substantial amounts of training, especially to the non-technical degree holders whom they select (and among whom they continue selecting, by a continuous process of training-screening on the job). Thus, (c) at least for non-technical graduates, the acquisition of practical work-related skills appears to be increasingly dependent on the training imparted or facilitated by the employers after the sale of labor power has taken place. In general terms, the situation of these workers is both similar to and different from that of the industrial proletariat: similar, because non-technical college graduates are in many cases subjected to alien organizational authority, and because their relationship to their work is less a personal one, based on the application of independently acquired knowledge and skills, than a social relationship, meaningless outside of the overall organization of work in a given agency or firm; it is similar also because the increase or the enlargement of individual skills depends, as it did in manufacture, on global work organization and therefore ultimately on the employer's authority.³¹ The situation of nontechnical college graduates is different, however, from that of industrial workers in mechanized production because their economic and organizational alienation does not necessarily fuse with technical alienation, nor does organizational alienation result in the destruction of their individual asset on the labor market (the credential). On the contrary, even as the absolute market value of the credential is eroded by educational oversupply, its gross relative value increases, as a hedge against even more insecure, low paying or subordinate jobs in the non-credentialed areas of the labor market. Thus, insofar as college graduates are preferred to workers without degrees (and thereby assured of "bumping" the latter out of their jobs if competition forces them into traditionally non-credentialed sectors), the choice of getting a degree can still be seen as an individual strategy against proletarianization in the labor market.

(2) This individualistic strategy can avail itself of more than just the average benefits inherent in a standard college degree. Even without considering specialized technical training, college degrees of any level and kind can be de-standardized *through the educational system itself*; that is, before the sale of labor power on the market. The standardization of training and credentials – a particularly important aspect of professionalization strategies, as we have seen – creates the illusion of quantitative equivalence among the educated, but standardization is immediately differentiated by non-equivalents: it is the background on which “equivalent” units can be ranked quantitatively (by years of training, grades, etc.) and, especially, qualitatively, according to attributes of the stratified educational system or personal attributes. There is evidence to indicate that even low-level job entrants are sorted out by their employers on the basis of these destandardized criteria, and thereafter directed toward different careers:

For example, persons with high grades, extensive extra-curricular activities, or degrees from “prestige schools” are given an inside track. Such employees . . . are given the best jobs, the most immediate recognition and the best chances to become acquainted with the powers that be. Of course, they may well perform better, but this may reflect the exceptional incentive and opportunities to which they are exposed. For the majority of the college-graduate employees, on the other hand, the funneling process is longer and more competitive.³²

De-standardization strategies may also be followed to compensate for the adverse effects of an oversupply of standardized degrees. It is not likely, however, that large numbers of degree holders may *revert* to de-standardization after having attained their undifferentiated credentials: thus, the effects of de-standardization at the educational level tend to establish lasting differences within occupational categories and within cohorts of credentialed workers, thus contributing to internal stratification and to the sense of relative deprivation of the less advantaged workers. De-standardization is, I believe, a significant factor of variation in the objective situation and subjective evaluations of educated workers; insofar as it is based on the stratification of the educational system, it is, besides, a distinctive factor of variation, one which affects *only* educated workers and their work situations.

specialization

(3) Two last general aspects of the educational system affect educated workers: the first is specialization of training. Like de-standardization, specialization precedes entry into the labor market, even at the undergra-

duate level. Although specialized technical training is, presumably, oriented toward an outside demand, neither the vocational choices of individuals nor the system of training respond rapidly, if they respond at all, to market inducements.³³ Universities and professional schools, in particular, respond to market changes (or create these changes, as in the case of American medicine) with considerable time lags: the time it takes to train new cohorts, or the time it takes to process those in training and cut down subsequent admissions. Thus, educational overproduction of specialized degrees can result at any level. For the low-level specialist, conversion of his or her narrow education into a more marketable asset is difficult: in fact, narrow technical training is an asset only when the demand is guaranteed, since it probably does not compete well with broader, non-technical degrees. The very technicality of the skills, moreover, condemns them to obsolescence unless they are updated by use or further training. High level specialization is also subject to high risks of obsolescence and “inconvertibility,” as the massive layoffs of aerospace engineers in the early 1970s dramatically illustrate. Presumably, high level specialists have a much broader and deeper polyvalent base of knowledge than the narrowly trained technician: the former, however, have invested much more time, energy and interests (let alone money) in acquiring their knowledge and skills. If personal identity is wrapped up with a specialized function, the psychological penalties may be heavy when one is unable to fulfill this function.

If we add to the above the fact that one large category of highly trained specialists – the holders of Ph.D.s – has traditionally depended on only two major sources of employment (academic employment, or research and development, of which more than two-thirds depend on federal expenditures), we can better appreciate the particular risk inherent in their position: not only are scholars and scientists themselves relatively resistant to following market inducements in their vocational choices; they are furthermore reinforced in their choices by the institutions of training which are on the whole “more concerned with their institutional well-being than with the state of the market for the profession.”³⁴ For most Ph.D.s, the practical utilization of their knowledge and, in a sense, their full productive life depend almost entirely on the effective sale of labor to employers who have quasi monopolistic buying powers. A drop in these buyers’ demand is likely to have serious economic and psychological consequences for this class of highly trained workers. In their ranks, oversupply may easily result in the creation of a peculiar “reserve army,” one in which unemployment and underemployment are not a consequence of deskilling, but of overtraining. Furthermore, because over-

mercado de trabajo
educación
autonomía de sistema educacional

supply originates in the educational system, it follows the latter's particular "cycles of production": that is to say, the effects of oversupply do not ordinarily bear on whole categories of highly trained specialists, but *on particular cohorts* within each category.

(4) The last point leads us naturally to another effect of the educational system's autonomy: as has been aptly remarked by Roger Cornu, all apprenticeship systems follow an autonomous logic.³⁵ The logic of *transmitting* a knowledge and allowing increasing responsibility to the receivers, as they progress in that knowledge, does not follow the chronological sequence by which the body of knowledge came to be constituted, nor does it follow the normal ordering of work operations in the field where this knowledge is applied. The gap between apprenticeship and work is obviously much deeper when training formally emancipates itself from work settings. The relative autonomy of training with regard to the labor process contains the germ of tensions and contradictions between education (not only what is learned, but how it is taught and learned, and for what) and actual work practices (not only the work one does and the conditions in which it is done, but also the work one does *not* get to do). The sense of individual progression on which training claims to be based may conflict with the kind of progression, or the absence thereof, allowed by the work situation. In other words, the expectations of *personal growth* materially inscribed in the sequential organization of training and ideologically present in its logic contribute, however silently, to the evaluations and the self-evaluations made by the highly educated in their work lives. The potentialities of this particular sort of discontent are not even contingent on the broader ideological implications of higher level education, but on its organization (they do not depend, for instance, on the development and absorption of a "culture of critical discourse," which is for Gouldner the shared ideology of intellectuals and technical intelligentsia³⁶).

In sum, the success of modern professionalization and of the imitative strategies that followed the movements of older professions consists in setting up *effective defenses against proletarianization*. The institutional base of these defenses is the modern system of higher education; their ideological base is, ultimately, the monopoly of cognitive rationality which this system claims in the name of science. The older professions pioneered in what we might call a new form of property, founded on the structural linkage between autonomously constructed training/expertise and specific positions in the social division of labor. In advanced capitalist societies, this linkage becomes ubiquitous - multiple and diversified

but not unequivocally strengthened. The specific contradictions contained in the linking of education with occupation appear to be heightened; they do not combine, however, into the classic model of proletarianization, where distinct dimensions of alienation were fused. Rather, the contradictions appear to consist, today and for the most part, of market phenomena and of the subjective evaluations attached to their consequences. Oversupplies may exaggerate the tensions between an identity-forming notion of "occupational community" and the latter's invidious internal inequalities. Perhaps more gravely, oversupply and internal stratification can bring about under-utilization and wastage of knowledge and skills for *specific* cohorts and categories of educated workers. The waste of one's abilities is, at least, an experience of stunted growth which may be lived as a deep social betrayal of the self. Finally, this analysis raises a further question, which we are going to broach empirically: the deterioration in the conditions of sale of labor power aggravates economic and organizational alienation, the latter by foreclosing the individual alternatives available to most workers; it remains to be seen whether this is the soil wherein technical alienation may be growing.

Labor Markets and Relative Privilege

The recent story of the labor market for college graduates is by now relatively well known: in 1968, toward the end of a decade of unprecedented growth in both college enrollments and in the share of "good" jobs that went to college graduates, a special report of the Bureau of Labor Statistics optimistically announced a sustained demand for graduates in most professional fields till 1980. The only fields in which supply would significantly exceed demand were pharmacy, mathematics, the life sciences and school teaching.³⁷ On the whole, the forecast had grossly overestimated demand because it had underrated the destabilizing forces that affect high-level job markets. This was realized as soon as data for the 1970s became available.

Indeed, after the peak in demand reached in 1971, professional, technical and managerial jobs ceased to exhibit the rapid rates of growth of the 1950s and '60s. In the estimation of Richard Freeman, one of the foremost manpower economists in the field of educated labor, "had the number of professional and managerial jobs increased at the same rate as in the past, 27.5% of the work force would have been so employed in 1974." Instead, only 24.8% were, a modest increase compared to 24% in 1969.³⁸ Relatively stagnant demand coincided, however, with booming supplies

Apprenticeship
Systems

Professionalism
as
defense
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proletarianization

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as the very large cohorts trained in the sixties at both graduate and undergraduate levels reached the labor market: the ratio of professional-managerial jobs to potential workers with a college degree fell from 2.33 in 1952, to 1.90 in 1969 and 1.60 in 1974.³⁹ The major economic recession of the seventies did not help the job prospects of college graduates, but it was not responsible for the "market turnaround". The share of college graduates typically increases when global unemployment rises: in the Great Depression as well as in other recessions, college graduates suffered substantial unemployment but they fared better than other workers, many of whom they presumably displaced from "non college level" jobs. Between 1969 and 1971, however, the rate of unemployment of professional and technical workers grew much faster than that of the labor force as a whole (by 125% and 80% respectively), although it was still half the global rate in 1971 (2.9% and 5.9%). In October 1972, the rate of unemployment for that year's graduates was 11.7%, for an average national rate of 5.1% and a rate of 7.7% for high school graduates in the same age category. And while the rate of unemployment for all professional workers averages 2.4% between 1970 and 1974, corrected for cyclical patterns, it should have been 1.9%.⁴⁰ The phenomenon was thus not cyclical but structural: overproduction in the face of stagnant or even declining demand.

The economic effects were registered by average wages: with more than a little help from inflation, the real salaries of new college graduates dropped to levels below those of 1950. The *relative* loss of all educated workers with regard to the less educated was substantial: in the period 1969 - 1974, the *real* incomes of year-round full-time workers older than 25 increased for every level of educational attainment *except the college levels*. Males with 1 - 3 years of college lost an average of 2.5%; females, 2.2%. Among workers who had finished college, the decline in real wages was 8.9% for men, 2.7% for women; at the graduate level, it was respectively 7.7% and 5.6%. Starting at much lower salary levels, women graduates lost relatively less than men by comparison with less educated females, a trend which also holds in the younger group of 25 to 34 year old full-time workers: the advantage of male college graduates over high school men fell from 33% to 15%; that of women declined only from 42% to 29% for the same dates (1969 and 1974).⁴¹

The general data on income levels that are available do not tell us through what kinds of jobs each educational category secures its income. The decline in the relative economic advantage of educated workers may thus have been caused by two kinds of employers' response to the market

"turnaround": the first is to take advantage of the excess supply of college graduates to pay them lower wages where this is possible (that is, mainly with new recruits and with new entrants to the job market); the second is to hire better educated workers for lower level jobs without increasing average wages. Freeman gives some evidence about college graduates "skidding" into less desirable jobs: between 1969 and 1974, "the proportion of male graduates (with four years of college) working as salesmen increased by 23% and the proportion of female graduates in clerical positions by 26% In 1972, over 30% of men and 25% of women graduates (with BAs or MAs) ended up in nonprofessional, nonmanagerial jobs."⁴² Aggregate relative data cannot tell us, moreover, how much of a relative decline in wages is caused by *losses* of the formerly privileged and how much is caused by *gains* of the underprivileged. For less educated year-round full-time workers, gains were undoubtedly due to legislative increases of the minimum wage, to union actions and to inter-industrial shifts in employment towards better-paying industries. Despite the effects, single or combined, of these forces, the less educated workers fell far short of equalization of pay: the coefficient of variation for the incomes of males over 25 was 0.70 in 1969 and 0.66 in 1974 (0 would represent no variation, and therefore equality of income); Christopher Jencks estimates that about two thirds of this rather pitiful advance in economic equality was due to "the declining economic differences among education groups."⁴³

Thus, the first point to be noted is that this was a decline in *relative* advantage, which must have seemed particularly notable after decades of sustained employers' demand, and after the inflated advantages which accrued to educated workers during the 1950s and '60s. The first major reverse experienced by college graduates in many years did not wipe out the economic advantage conferred by college: it reduced it in relation to the modest gains of other workers and *in relation to the investment required*; indeed, what seems particularly notable to manpower economists is the decline of the "return to educational investment" - that is, the decline in earnings after graduation in relation to the rising costs of a college education, costs which are for the largest part borne by parents or taxpayers, not by the graduates themselves. *Family* incomes, however, grew slightly more unequal during the years in which the excess supply of college graduates significantly contributed to the slight equalization of *individual male* incomes.⁴⁴ To continue, this latter trend would take a prolonged decline in the income advantages of college graduates and, other factors being equal, a sustained situation of excess supply. Even this, however, would not contribute to more economic equality among

families unless other things also changed (such as the income of single-parent and female-headed households), or unless public subsidies replaced the financing of higher education by families. In the light of present signs (to which all the talk about "overinvestment in college education" must have contributed), both excess supplies and increased public subsidies to individuals are not likely.

medical
social
institutions

The second point to be noted is that this relative decline in economic advantage was experienced mainly by the young latecomers to the high level job markets. Presumably, some of them may have already recouped their relative loss, as they accumulate seniority and experience and advance to better jobs. "Good" jobs, indeed, imply upward progression in responsibility and rewards; precisely because the educated workers of former years had experienced such career progression, the new cohorts did not only have to bear the brunt of the market "reversal," but also the effects of their seniors' entrenchment in better paid and more authoritative positions. Moreover, workers with very different levels of education do not often compete for the same jobs; competition and inequalities therefore tend to be experienced with one's educational peers. Even though younger workers may be (or believe they are) better trained, older educated workers and older professionals are likely to be protected by tenure or seniority: thus, for those categories of workers who normally expect careers, supply and demand forces tend to be transformed into experiences of blocked mobility or, within specific professional fields, they tend to harden the lines of internal stratification.

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In economic terms, the simplest response of potential college students to a labor market downturn is to take account of the "declining returns" to the investment in higher education by foregoing college. In the period 1969 - 1974, this seems indeed to have happened in the younger male group (18 to 24), although the effects of the draft law (greatly attenuated by the institution of the lottery in 1969 and the abolition of college deferments in 1971) cast doubt on any straight-forward economic interpretation.⁴⁵ During the same years, however, men older than 25 and women in all age groups continued attending college in proportionally growing numbers, as an indirect confirmation that the decision to attend college involves much more than just an estimation of labor market benefits. Economic factors and market estimations appear to have a more direct influence on the patterns of college enrollment than on its size. The effects of the early seventies' recession and of chronic inflation since then show up in the choice of public over private colleges and universities and in the sustained increase in the enrollments of two-year colleges and

technical schools. In four-year institutions, the trend that favored during the 1960s those majors related to social and ecological concerns appears to have been replaced, starting in the 1970s, by a movement away from purely academic pursuits, towards business-related majors and professional or pre-professional programs.⁴⁶ At the graduate level, the continued decline in graduate enrollments as a proportion of the undergraduate classes undoubtedly reflects the increasing dearth of academic and research positions: for, indeed, enrollments and applications increased in the worse years in professional schools and graduate business programs (the exception was engineering, hard-hit by the demise of the space program after 1969 and apparently sensitive, besides, to business cycles).⁴⁷ Presumably, the students' preference for business and professional fields reflects to some extent the accurate perception that managerial employment had become, since 1960, the fastest growing source of positions for college graduates; it also reflects the generalized image of the professions as those occupations which have attained a measure of control over their labor market and/or allow self-employment. A cursory review of the market and salary situation in some chosen professions will indicate how they fared during the worse years of the college market downturn.

Dr. 822

There is no need to belabor the issue of medical incomes. A few facts will be sufficient to illustrate the comparative advantages of successful monopoly: in 1976, the President's Council on Wage and Price Stability estimated the incomes of self-employed physicians at \$63,000, almost four times that of male professional and technical workers and almost five times that of year-round full-time male workers; doctors' fees, in fact, had increased faster than the price of any other commodity.⁴⁸ The outrageous advantages enjoyed by physicians as a whole hide deep income inequalities between fields, geographic areas and modes of employment. Part of the variation in earnings depends, no doubt, on the employment of interns and residents (ostensibly as students in clinical or specialized training) as a source of cheap medical labor by hospitals, which can therefore be avoided by physicians in lucrative private practices. Until recently, foreign medical graduates and research physicians supplemented the indigenous interns on the staffs of many hospitals; since the mid-1970s, however, the organized profession has moved to block the entry of foreign MDs as a compensatory move for the expansion of admissions it had been forced to accept in American medical schools. In fact, the economic privileges of the medical category do no longer appear to accrue from the schools' restriction of supply, but from inflated demand. Collectively subsidized demand for health services

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and skyrocketing costs (\$118.5 billion in 1975, of which the state paid 42%) explain much of the advantage reaped by physicians through straightforward monopolistic superprofits, unethical manipulation of demand in certain specialties and not infrequent insurance fraud.⁴⁹ The concentration of much of this demand in hospitals and the character of modern medicine explain, on the other hand, the solid labor market position for nurses and for most allied health professions.

The case of physicians is only interesting here to set off what happens in other established professions that enjoyed neither secure monopolies nor apparently unlimited demand for their services. Lawyers illustrate the latter case. The supply of lawyers grew relatively slowly during the sixties. Toward the end of the decade, a major increase in demand, sparked by vast increases in litigation and in state demand or subsidy for legal services combined with the moderate supply to produce "a major boom in the market for young lawyers." According to the Cantor survey of legal salaries, the median income for attorneys in law firms was \$40,000 in 1974, although it hovered around \$30,000 for lawyers in private practice in Illinois, Michigan and Maryland. In 1970, however, the average general practitioner practicing alone - about a third of the profession in that year - averaged less than \$15,000. As the students who flocked to law school in the early seventies graduated, and as the even larger classes of 1974 and after flood the market, the saturation is likely to become increasingly severe, unless the new practitioners tap the vast reservoir of unfulfilled legal needs which has been a concern of the legal profession since the 1920s. But here, legal services lawyers, the most clearly public spirited sector of this deeply uneven professional field, are being laid off in many states and crushed by overwork when they maintain their employment. Given the dependence of legal outreach services on public expenditures, the growing fiscal crisis of state and local governments aggravates the prospects for an overcrowded and stratified market: more than 600,000 attorneys are expected to have taken the bar by 1985, for less than 500,000 projected jobs.⁵⁰ Despite the problems faced by tax-supported legal services, the continued growth of large firms and the encouragement the latter give to cheaper paralegal workers indicate that the entrepreneurial "general practitioner" of the law will face increasing competition, low incomes and professional marginality.

The market for engineers is a special case. This professional group grew faster than any other during the decade 1950 - 1960, undoubtedly as an effect of economic prosperity and of the large increase in the percentage of GNP devoted to research and development in those years. The relative

gains in annual average earnings were not large, however, by comparison with other professional groups who also gained; the relative advantage of engineers with relation to full-time non-professional workers was, in fact, lower in 1966 than in 1929, reflecting, perhaps, the tendency for labor supplies to follow demand. Largely dependent on the business cycle, employment opportunities for engineers exhibit abrupt swings, to which prospective workers appear to respond by withdrawal from training. According to Freeman, characteristic shortage-surplus situations recur every four or five years, the time it takes to produce a new cohort for the labor market. Thus, after the disastrous drop in demand in aerospace industries (and in other industries as well, such as electrical machinery) in 1969 - 1972, enrollments fell to about 50,000 in 1973, a 27% decline from 1965. The relative ranking of specialties in terms of average salaries and student preferences also changed, reflecting the shifts in industrial structure. By the mid-'70s, employment and average pay had started to improve up to the present favorable conditions, which are marked by comparison with the deterioration of the market for college graduates as a whole. The upswing in enrollments after 1975 may presage another cycle of excess supply.⁵¹

As for architecture, exposed for a long time to a restricted market demand, economic recession and reduced government expenditures in construction spelled out a prolonged depression: unemployment was estimated at 25% nationwide in 1976, with a heavy concentration in the Northeast (it was estimated at 33 - 50% in New York and Philadelphia). While business dwindled for employers and private practitioners, employment and real salaries plummeted for both beginners and experienced architectural employees, leading some of them back to school for a graduate degree, into other careers or into different activities related to small-scale construction and urban rehabilitation.⁵²

Finally, it is common knowledge that the teaching professions have been and are increasingly among the most gravely affected in our decade by the decline in school enrollments: the consequences of the decline in natality could in part have been offset by substantial improvements in teacher-student ratios; however, the salary gains that teachers had made in the previous decades and the fact that senior teachers have tenure combined with the growing fiscal crisis to produce stagnant employment, at best, and widespread layoffs in many cities. In the '70s, only 57% of education majors were able to find teaching jobs in elementary schools, and less than 50% obtained appointments at the secondary level. Real salaries dropped by 2.5% from 1971 to 1973, eroding the advantages

gained in previous years. As for higher education, 26% of the new Ph.D.s of 1974 were in the job market with no prospects of academic employment; in 1973, over 9% male Ph.D.s were already teaching in junior colleges and in secondary schools, compared to 3.3% in 1967.⁵³ In subsequent years, part-time or unstable academic employment became increasingly common, especially in hard-hit fields such as history, mathematics and philosophy. Here, indeed, overtraining and underemployment create a "reserve army" whose situation is not likely to improve markedly in many years.

These scattered and incomplete data allow us, nevertheless, to glimpse at a larger picture, which illuminates the incapacity of all but a few educated workers to create a demand for their services. The major destabilizing factors in the demand for college educated workers were, first of all, the change in government spending patterns and, in particular, the decline in R & D spending (from 2% of the GNP in 1964, after the highs of the 1950s, down to 1.2% in 1974 and still dropping, if adjusted for inflation) and the decline in social services expenditures; the fall in school budgets, not only due to the substantial and continuous decline in school-age children, but also to the inadequate tax bases and financial problems of municipalities beset by inflation; the economic slowdown in "college intensive" industries and the fall in the proportion of private R & D devoted to basic research; and, last but not least, the crisis in higher education itself. The "growth industry" of the 1950s and '60s was not only directly and indirectly hit in our decade by all the above factors; it also suffered the effects of potential students' responses to market trends and the "accelerator" effect of falling enrollments on the demand for new faculty. Moreover, the factors that "busted the booming demand" of the sixties do not promise rapid recovery at comparable levels: a recent survey of business plans reports that "during 1979, American firms intend to spend only 2.1% of their anticipated sales on R & D - the lowest proportion since 1956" and one which explains in part the very low growth of United States productivity (2.3% annual in 1970 - 77, the lowest rate of all advanced capitalist economies except Britain).⁵⁴ Meanwhile, the government, faced with a continuing fiscal crisis, plans to generate demand for specific categories of highly trained workers through its energy-related programs; like the demand generated by high military budgets, this circumscribed field is unlikely to compensate for the cuts in social services and social programs.

The last decade cut short the illusion of unlimited expansion and unlimited pay-offs for the class of educated workers. With their new role

in the labor force of advanced capitalist societies, most educated workers also acquired a corresponding vulnerability to their society's contradictions and crises. The gloomy economic prospects for the 1980s make it improbable that jobs which could represent acceptable alternatives to a college education will be easily available. As in the 1930s, the stock of college graduates may therefore continue increasing in the face of severe unemployment; a continuing situation of oversupply would maintain or increase the market pressures on educated workers and contribute to the further erosion of their remaining advantages. Disappointed expectations and blocked social mobility, which many educated workers now experience as a sort of "proletarianization," could therefore be repeated on a wider scale in the next decade. The recent experience suggests that adverse labor markets, far from reducing educated workers in the same occupational and educational category to a "community of fate," create different types of career lines, associated to relatively stable patterns of the labor market itself.

The situation of highly trained specialists who, despite unfavorable market conditions, enter the fields for which they were trained harbors specific frustrations. Like other educated workers, they face decline or stagnation in real salaries, all the more difficult to take in recent years because they come after the "boom" period of substantial salary gains and rapid career progression. Objectively, the depressed labor markets sharply reduce individual alternatives, forcing acceptance of the job one is lucky enough to find; workers not previously unionized, besides, do not have much hope of obtaining remedies through collective action for, in a "buyers' market," the sellers are collectively weakened by their structural disadvantage. Moreover, highly educated specialists are in principle destined to labor markets which are partly structured by the "cycles of production" of the educational system: therefore, the patterning of career lines is not only determined by age in itself as in other labor markets, it is also greatly influenced by age as an indicator of membership in a particular educational cohort.⁵⁵ Especially in fields where knowledge and technology evolve rapidly, even a future recovery of the market does not spell too much hope for the cohorts who graduated under adverse employment conditions. Insofar as they will continue competing throughout their careers in age-circumscribed segments of their market, the structural disadvantage with which they began their work life is likely to follow them, with the possible effect of preserving the radical ideas to which many students were exposed in the sixties and early seventies.

Nowhere is the tendency toward labor-market segmentation more visible

than in higher education, a system in which reproduction is self-contained and "de-standardization" structures the labor market directly, without external mediations. Moreover, because the institution of tenure freezes in their place the still young men and women who were rapidly and abundantly promoted during the years of high demand for Ph.D.s, junior faculties are increasingly forced back to the labor market after five or six years (or one and two, depending on the discipline and the institution). Surely, it is hard to consider the fate of an assistant professor who goes to a small town state college after Harvard or Berkeley as "proletarianization," although he or she may well see it as just such a loss. More seriously, the "trickling down" of Ph.D.s from elite schools to lower levels of the academic hierarchy – if indeed it is occurring beyond the entry level – aggravates the overall situation of employment: not only is it a limited recourse, as more first and second job-seekers hit the labor market, but it may contribute to forcing out of their usual market "segments" the graduates of less prestigious schools. As we have seen, the personal costs of career reorientation can be very high, and not only in economic terms. Conceivably, some intellectuals can continue to follow their real vocation in their free time, although it is unlikely that they will receive much encouragement or recognition from their luckier colleagues: professionalization in knowledge-producing fields means precisely that they are closed to outsiders, who always tend to be seen as "non-experts."⁵⁶ Publication, reviews, references, awards and rewards are thus meant mostly for those already "in place" by the self-reproducing networks who control the normal development of junior careers. Thus, if we take into account the vigorous tendency of academic stratification to reproduce itself, it is not exaggerated to say that adverse labor markets presage the hardening of orthodox definitions in scientific or intellectual practices: as the entrenched academic elites become more and more able to sort out more and more applicants, potential heterodoxies are increasingly likely to remain marginal, or to be co-opted on the elites' own terms. For the specialized intellectual producers, what is at stake, besides the livelihood they expected, is the very possibility of acceding to the means of intellectual production and of accumulating what Pierre Bourdieu calls "symbolic capital". The term represents the fusion of technical-theoretical achievements with social power and recognition, a fusion which constitutes scientific or intellectual authority. Like real capital, discipline-specific authority is accumulated in patterns which coincide with the career structures that are possible in the field.⁵⁷

Even in this last case, however, deprivation and the denial of what one felt entitled to are relative: relative to one's expectations, relative to past

conditions, relative to the privileges still enjoyed by luckier, or better connected, or simply older colleagues. Above all they are relative to the present one has been able to secure: relative deprivation enhances impatience and dissatisfaction with regard to the objective conditions of the labor market and the labor process, but it cannot create these conditions. Pressures at the level of the labor process originate in the work situation and respond to pressures which the employer is subjected to. A market adverse to the sellers of labor power facilitates the application of pressure on their performances, since it reduces the workers' option to leave and their ability to resist the unwanted consequences of heteronomous authority. In most cases, educated workers submit to such alien authority in bureaucratic organizations, the hierarchical structure of which generates new divisions in the workers' ranks.

Tendencies of the Labor Process

The submission of more and more areas of social life to what C. W. Mills called the "managerial demiurge" implies that more and more workers, as they sell their labor power, come to work under bureaucratic types of control, which they tend to see ideologically as the very embodiment of their alienation. The professional or "professionalized" skills that are either required by the managerial demiurge or autonomously centralized under bureaucratic authority in large-scale service organizations are not evenly deployed but distributed in rough accordance with the steps of the bureaucratic hierarchy. Routinized skills are delegated downward, while skills that are recognized as higher concentrate at the top levels in the ideal-typical model of modern management: a set of polyvalent generalists, who invoke technocratic legitimations for their power to act as planners, monitors and coordinators *vis-à-vis* the specialized units under their control. Insofar as managers are recruited from the ranks of professional workers (as is still frequent in hospitals, universities, large legal or accounting firms, etc.), or if they themselves claim some kind of "professional" expertise, they are not likely to deny the *ideology* of professionalism, from which they too can derive legitimation.

The above is but one ideological reason for the adjustment of profession, an alternative mode of work organization, to bureaucratic work settings. For managers, moreover, professionalism and credentialism offer guarantees that high level employees will use their discretion predictably. Professionalism also becomes a manipulatable resource – an honorific

status that businessmen can borrow, or a possible compensation for staff that does not attain either high salaries or high decision-making levels. For professional employees, in turn, bureaucracy offers at least some guarantees against the arbitrary and autocratic power so characteristic of small professional firms.⁵⁸

Thus, insofar as controls and regulations respect professional prerogatives and are coupled with other advantages, professional workers are not likely to resent them: the support structure, the security, the release from fiscal and administrative worries offered by heteronomous bureaucratic organizations are attractive, even to professionals who are not in the least interested in climbing the steps of management.⁵⁹ Yet, it is precisely in the support structure offered by bureaucratic organization to autonomous workers in their midst that we may discern the deepening of irreversible organizational alienation: in simpler work settings, the elimination of alien authority is simple, and a return to cooperative forms of craftsmanship is easily conceivable. But as specialized educated workers become integrated in large scale organizations, their work becomes dependent on the latter's infrastructure and on the complex division of labor which it supports. The "return to simpler forms" means, in fact, changing the content of one's work and changing careers. The worker's position within the division of labor may still be technically dominant, as is that of the physician in the hospital or that of faculty in universities; managers may still be selected from among high level professional staff; yet, the centralization of authority, the complexity of coordination and the tendency to reify administration into a "separate science" reduce the scope of work and narrow the sphere of autonomy. No matter how gladly professional workers may accept their subordination, they are subordinate; they do not control key financial resources and the organizational authority they hold is only delegated. Although their activities are not prescribed, the organizational outcome to which they contribute is predetermined and they can but rarely change it. The same of course is also true of managers, even if they have access to high-level decision-making: under economic pressure, managers may be obliged to launch cost-reducing drives of which their own positions can in turn become the target.

Managerial policies are, in any case, *political* products; as policy becomes the stake of internal conflicts, neither its thrust nor its outcomes can be prejudged. Lower level educated workers may, for instance, cooperate with administrative efforts to curb the power of higher level professionals and to make the latter more accountable for their time and actions (such

might be the case of nurses hoping to gain some autonomy from physicians, or of junior faculty tempted to work against tenure); also, not all reorganization is necessarily centralizing, but even decentralization may threaten professional groups whose interests were vested in centralized forms of authority, while it favors other groups of comparable power (such appeared to be the case in a large hospital, where specialized clinics opposed the organizational emancipation of research labs and of the intensive care unit⁶⁰). Indeed, in most cases management appears to have the option of recruiting individuals to its ranks or of eliciting their collaboration, if not the more dangerous option of pitting one organizational segment against another. Under financial pressure, the focus of managerial policy is clear, however undecided or unpredictable its strategies: costs must be reduced and/or productivity must be increased. The imperative inevitably threatens the prerogatives of privileged workers, even if only through the reduction of support facilities and auxiliary lower level personnel. The next step is to aim efficiency measures and cost-effective controls at the work activities of the higher level employees. In the human service organizations of the public or quasi-public sector, where underfinancing and overload are exacerbated by the fiscal crisis of the state, the attempts to reorganize and rationalize a "professional intensive" labor force are commonplace.

Leaving aside outright layoffs, we may distinguish three major interrelated tendencies at the level of the labor process of educated and even highly trained workers; these tendencies can also be present in other types of work settings than the large-scale bureaucratized ones but, in the latter, managerial policies seize them, institutionalize them, systematize them, and inscribe them irreversibly in the organization's *modus operandi*. First is the tendency to increase and rigidify the division of labor, with two principal effects: augmenting the delegation of routinized or menial tasks to lower level workers, and multiplying lateral specializations, which may be of lower or similar level. For the higher level worker whose functions and tasks are being streamlined, this tendency is contradictory: it elevates his or her specialized skills at the same time that it narrows the sphere of work and increases dependence on the bureaucratic whole. Second is the tendency toward *intensification of labor*: obviously parallel to the speed-ups in manufacturing industry, it reduces the periods of inactivity or preparation between tasks. Regulations or intensified supervision directly limit the breaks allowed to lower level workers, but higher level employees have private offices and do not punch clocks; for them, it is the volume of work that fills the pores of the working day. Heavy caseloads often require synchronization of work-flows; in any

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case, they reduce the "alternate bouts of intense labor and idleness" characteristic of independent producers to more uniform rhythms.⁶³ Third is the tendency toward *routinization of high level tasks*, to which managers can seldom contribute directly, for it requires direct knowledge of the operations that are changed. While services that are easy to comprehend and standardize can be rationalized and subdivided by "outsiders" (for instance, the management consultants who are frequently called to diagnose and redesign job reorganizations), the routinization of high level tasks implies expert intervention, with either the deliberate purpose or the unintended effect of codifying oft-repeated operations. Non-expert managers can then use the results of codification to break down operations and reassign partial tasks to cheaper and less educated workers, or ultimately to cybernetic machines.

These general tendencies of the labor process affect different categories of educated workers in obviously different and uneven ways. Logically, the educated workers who owe their occupational identity and functions to bureaucratic organizations have less defenses against their encroachments than professionals who enter bureaucracies with the backing of tradition and the authority of a cognitive base that has been established and independently validated for a long time. Indeed, most of the cases of rationalization of mental work that are cited involve subordinate workers whose credentials, if they have them, appear to be required more as a result of upgrading than of technical needs. Such appears to be the case of social workers in Texas social service agencies, whose tasks (in particular the definition of eligibility) were "taylorized" in 1977 as a response to budgetary cuts: the interventor was in their case an industrial engineering consultant.⁶² The case of nurses shows the effects of subordination in a different light: dependent on the hospital, the latter's growing division of labor tends to weaken the occupation's ability to defend its position in the medical hierarchy, despite successful academic strategies and despite union actions that often deal with the substance of work. A British study shows that state and local governments were able to curtail the professionalization of nursing in order to maintain a supply of cheaper labor. After World War II, the nationalization of medicine and the development of complex bureaucratic hierarchies in the hospital reduced the autonomy that nursing had been able to gain on the job: *individual nursing careers* now lead, at the top, to administrative positions, but nursing departments have lost status in the hospital hierarchy. Nursing has no control of the new technical specialties that erode its original functions, and it tends to become specialized along lines that follow the medical model and reveal the technical subordination of nursing to the

physician. On the other hand, the recuperation of a specific nursing function based on non-technical conceptions of "total care" risks exposing the functional redundancy of the "complete" nurse in the modern hospital.⁶³ The increase in long-term degenerative diseases, new medical technologies and the progress of nursing education open up new possibilities of discretionary authority to professional nurses: in Britain, however, these possibilities are difficult to actualize, given the present organization of health services, while in the United States, registered nurses seem to be "running a lot to stay in the same place."

While the professional dominance of the physician is specific to nursing and allied health professions, the hospital situation reveals a more general tendency of the advancing division of labor: in subordinate situations, technical work can lead individual providers of narrowly defined services to apparent "dead-ends," *unless they achieve a movement into management* (that is, out of their specialized field). The tendency is as complex as the notion of "dead-end," which negates the dual progression in *both* specialized technical capacity *and* responsibility. Organizational alienation means that alienated workers do not control the conditions under which skill can be increased (as craftsmen in manufactures did not): the repetition of tasks, while it impedes intellectual growth and increases the risk that skills will become routinized and obsolescent, debars narrow technicality from access to polyvalent managerial functions. Narrow specialization can be indispensable in a production process and it can still bring added value on the market, if the production process is common and not unique; it cannot, however, command authority in the organization as a whole. In large-scale bureaucracies, this distinction tends to be institutionalized in dual ladders of promotion: technical or professional, on the one hand, managerial and leading at the top to decision-making, on the other hand.

In electronic data-processing, after structured programming and modularization achieved the division between coders-programmers and "systems analysts," Philip Kraft observes the classic bifurcation of promotional ladders: while technical specialists are still in a good position to make the move into management, lower-level programmers "confront horizontal rather than vertical movement . . . until they are replaced by younger people who will do the same work for less money."⁶⁴ For engineers, it has been found that a high level of responsibility in production significantly minimizes the impact of cognitive obsolescence (conversely, low levels of responsibility increase this impact), which gives evidence for the routinization of technical skills.⁶⁵ Studies of lawyers and architects also show

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that narrow specialization disqualifies them for responsible positions in the firm and is negatively correlated with decision-making power (except for architects, in esoteric areas at the boundaries of the field).⁶⁶ Evidence available for more autonomous professionals – judges and lawyers in the court system – suggests that their prerogatives and, for judges, their central authority are maintained at the most *visible* levels: administrative reorganization and the “politics of productivity” meanwhile expand non-judicial forms of disposition, in association with the growing support staff of subordinate paralegal workers.⁶⁷

↓ In subordinate situations, the *involuntary* specialization of educated workers closely parallels the development of the organizational dimension of proletarianization in manufacture. It may even have similar long-run effects as the advance of a constraining division of labor displaces the provider of “complete” services or the “well-rounded” professional in the labor market. However, as seldom happened to displaced craftsmen, some professionals have the option of management; their new technocratic functions may then include planning and implementing the further fractionization of tasks which they once had performed. Here, in the deepening social distance between the displaced autonomous producers and the professionals turned managers we grasp, not the onset of complete proletarianization, but the growing and irreversible divergence between occupational categories and class situations.

Rm Intensification, the second tendency of the labor process, represents one of the most tangible ways in which the work privileges of educated workers are eroded. Its symptoms go from the trivial – “no time at all” for lunch, although the ritual cup of coffee is respected even in the most “taylorized” EDP outfits studied by Kraft – to the more serious, though not necessarily more exasperating gripe – no time at all to keep up with one’s field, to retool one’s skills. Architectural offices, for instance, have always known the *charrette* – the super-intense bouts of work to meet a deadline – but such spurts of intensity are not intensification; rather, they signal the persistence of task-oriented work rhythms. The most common source of intensification in mental labor is *chronic work overload*, which takes many forms and has different consequences in different work settings.

A study of media newswork finds, for instance, that financially hardpressed newspapers normally increase the story quotas assigned to reporters and understaff their beats: the speed-up that results reduces the journalists’ possibility of writing non-routine investigative stories; it also aug-

ments their dependence on pre-scheduled, pre-formulated events, thereby increasing their considerable reliance on the accounts provided by bureaucratic spokesmen.⁶⁸ The recently formed national union of legal service lawyers focuses on the consequences of work overload: attorneys ordinarily carry 70 to 80 cases each at the same time; overwhelmed with time-consuming individual actions, they do not have time to develop the “impact legal work” which is part of their mandate, nor can they, in conscience, accept to pass on a case they started to less busy colleagues without risking to hurt the client’s interests.⁶⁹ In schools and universities, where declining enrollments should in fact be reducing class size and number of preparations, the layoffs and cutbacks induced by the fiscal crisis have the opposite effect: classes of 40 students have become common in most urban schools, as has the displacement of specialized high school teachers to fields in which they were not trained. Except in the elite private universities, the number of courses taught annually by academics in four-year schools is reverting to the six or seven that were usual everywhere before the sixties.

Intensification appears to be the most frequent non-economic grievance of professional unions as, for instance, in the strike of May, 1975 by the New York Committee of Interns and Residents whose central grievance was the length of the work week (doctors claimed that they worked an average of 100 hours per week, and sometimes 35 to 50 hours without a break; they demanded an 80-hour week and no more than one night’s duty every three days). Intensification represents a break, often sharp, with the leisurely self-direction that privileged non-manual workers expect; as it compels the reduction of the time within the working day when no surplus is produced, intensification destroys the sociability on which association and community are founded. For workers whose labor activity is so often individual, the risk of isolation grows.

↓ Most professional workers, however, still have the option of taking that same important time for sociability over longer hours, of prolonging at will their working day, because *technically* the mode of production of the surplus has not yet changed. By itself, intensification is not a deskilling factor: it reduces the *quality*, though obviously not the quantity of services provided to clients or consumers. Thus, intensification contradicts the traditional craftsman’s interest in work well done, in quality products – an interest which human service professionals equate with the interests of the clients. Whatever form it takes, it is the appeal to the clients’ best interests that absolves the grievances of privileged workers from the taint of spoiled selfishness. If the appeal cannot be formulated, or cannot

evoke a sympathetic echo. if moreover intensification has become habitual and seems irreversible, should we be surprised if workers who deem themselves professional become accustomed to cutting corners and increasingly tolerant of shoddy work? This, indeed, is a familiar symptom of labor alienation, even if nothing yet in the experience of educated mental workers has taken the place of machine production. ✓

Critical examination
 Intensification, however, does not necessarily reduce the range of skills applied or possessed by educated workers: on the contrary. It appears that physicians "cut corners" by eliminating the most routine or superfluous aspects of an examination, concentrating instead on what seems to be critical.⁷⁰ Moreover, work overloads often require that personnel shortages be covered in diverse areas and therefore require the learning or relearning of non-habitual practices. For instance, the doctors in the New York strike complained that many of them had been used in non-medical areas of hospital work (mainly administration or auxiliary services): but it is hard to admit that they had objectively lost something more than status. College professors are frequently forced to teach large undergraduate classes which obviously demand skill, though not the same kind as a graduate seminar. The complaint here is that large classes demand more work, not less skill, and that the burden is so inequitably distributed among junior and senior faculty. Also, as the numbers of faculty decrease, professors are compelled to diversify their course offerings, when they are not transplanted to related disciplines or programs by administrators who seek to avoid the outright firing of tenure-track faculty. While it is impossible to see a gain in polyvalence as deskilling, the fact that teaching remedial maths may be profoundly diminishing for a specialist in harmonic analysis merits some attention. It is not unrelated to tendencies in other fields of work: for instance, where librarians cannot be replaced by young people out of library school because their jobs are protected by tenure or contract, the specialists in reference must often cover circulation or purchases, and most of them will have to take time to learn the new electronic technologies for cataloguing. Thus, after some time, the specialized librarian has the feeling of having lost ground in his or her specialty, despite undeniable gains of skill in other areas.⁷¹ ✓

A double risk, which we have already discussed, appears in these cases: ✓ one is the risk of obsolescence of technical skills, in fields where the technologies of work evolve rapidly; the other is the more specifically intellectual risk of being cut from access to symbolic capital. In the academic world, which both transmits and produces knowledge, polyvalence tends to become a factor of marginality in the production and even

in the consumption of new knowledge; because production is specialized, polyvalence tends to remain primarily attached to teaching. The secondary role of teaching in determining academic careers and its negative correlation with symbolic capital imply that diversification of skills at this low prestige level is seen as the equivalent of "intellectual deskilling". This special dimension of intellectual and scientific inequality generates specific hierarchies within each field.

The structure of the systems of cognitive production achieves its own singular and invidious separation between production, that is to say research, and distribution, that is, teaching or practical application. The risks of routinization of high level specialized work (the third tendency of the labor process) derive in large part from this hierarchical separation. ✓

For instance, the need to collect statistical evidence on still uncertain therapies required the standardization of treatments for leukemia. After the diagnosis is made, the clinician who accepts the research protocol is left with a rather mechanical choice among standardized therapies, the results of which he only records. Analysis is then left to the planners of the research. A not dissimilar trend appears also in structural engineering: exceptional cases and search processes that are difficult to analyze are transferred to higher level technicians, who are hierarchically superior in social and ideological terms, while the average engineer mainly applies standard solutions. Here, however, the germs of technical alienation are rapidly dissolved into the effects of a division of labor which apparently tends to continue expropriating higher levels of skill and concentrating them in relatively fewer hands or minds. *continue research*

The pressures that bear upon the labor processes in which different categories of educated workers are engaged force us to address a most difficult question: what constitutes at a given time a hierarchy of skills? Obviously, the question cannot be answered by looking at the content of skilled work alone, or at the length of training it requires, for it involves the power to define the skills, their importance for society, the training they require, the resources they should command. This power, in turn, does not only refer us to the history of professions and to the transformations of the dominant ideology, but even beyond that, to something that is characteristic of a civilization and its symbolic systems. In our civilization, the control of a scientific discourse and of technologies that allow some mastery over nature accounts in large part for such differential power as different specialists can presently apply to the social construction of partial realities. Yet, because of the mode of appropriation of

knowledge in our society, and because of the hierarchy of unequally distributed knowledge, high level training still constitutes a secure barrier against *technical* alienation.

In sum, the alienations of educated workers do not ordinarily derive from the technical organization of production and do not become fused, as they do in the classic model of the proletarian condition. The economic and organizational dimensions of alienation are real for many, if not most, educated workers, but their sense of increasing loss is still relative: it is the subjective side of a loss of power in the labor market and of their subjection to bureaucratic modes of work organization. Organizational alienation may still be lived by many educated workers with unconscious reference to an image of the autonomous professional, entitled to privilege by his education and by his benign contributions to the social welfare. The failure to secure expected rewards is, in any case, an important experience. Its effects depend on the complex relationship between a worker's sense of "entitlement," his or her actual work life and the compensations of life out of work.⁷² When a society promises advancement through education but withholds its rewards, cynicism and anger are easy; but what people do with their anger depends on ideological constructions and, especially, on the possibilities of action that are historically available. Even the more autonomous and the more privileged of educated workers can experience *political* alienation in the organization of their work lives; it is important that so many of them are directly or indirectly dependent on state budgets and state programs, that the state's structure of priorities affects not only their work, but their chances to find work for which they were trained.

Especially in the public sector, even narrow strategies of corporate defense may come to challenge the present definition of social needs and the present allocation of resources; the immediate political potential of work-related action lies in the direct relation of public service workers to the state, a relation that distinguishes them from the educated laborers and from the industrial workers in capitalist employ and requires the discovery of new collective strategies that deliberately become political.

Finally, truncated or marginal careers deny to the highly trained professionals or to the specialized producers of knowledge an access to the accumulation of symbolic capital. The producers' challenge to prevailing definitions of professional practice or to the nature of a knowledge are not merely intellectual disputes: as we have understood in the sixties, in attacking the social organization of cognitive fields, they can challenge the social definition of a hierarchy of skills.

The unsystematic evidence that I have adduced in this discussion suggests in itself what research is needed: we need more evidence on tendencies of the labor process as they affect educated labor; we need to examine and compare this evidence, in the light of our theory of social structures and our analysis of their change. We need to follow up the consequences of labor process tendencies in the short and long run: to examine the structuring of labor markets, the transformation of career lines, the response of educational systems, the orientation of collective actions, the symptoms that surface in the life of individuals, the traces that may be found at the level of symbolic systems and intellectual production. We may now be facing either the proletarianization of new social categories, even if it is only half complete, or the ascension of a new class, or both things; in any case, we need to redefine the structure and the meaning of class at the confluence of work life and life out of work, where consciousness is shaped, where, if I understand E. P. Thompson correctly, class as a historical phenomenon begins to happen in human relationships.⁷³

NOTES

1. See Martin Oppenheimer, "The Theory of the New Working Class," manuscript, 1976.
2. C. W. Mills, *White Collar* (New York: Oxford, 1956). Mills' analysis is quite compatible with that of Lewis Corey in *The Crisis of the Middle Class* (New York: Covici-Freide, 1935). See, besides, Mills' bibliography for references to the European literature.
3. In particular, see Alain Touraine, *The May Movement* (New York: Random House, 1971) and André Gorz, "Etudiants et Ouvriers" in *Le Socialisme Difficile* (Paris: Seuil, 1967).
4. See the analysis by John and Barbara Ehrenreich, "The New Left and the Professional Managerial Class," *Radical America*, May-June 1977, vol. 11, n. 3, reprinted in *Professionals as Workers*, ed. by Rand Wilson, Cambridge, Mass., Policy Training Center, 1979.
5. For some thoughtful examples, see Donald C. Hodges, "Old and New Working Classes," *Radical America*, Jan-Febr. 1971, vol. 5, n. 1, Kim Moody, "The American Working Class in Transition," *International Socialists*, 1970, and "Can the American Worker be Radicalized?" in Louise Kapp Howe, ed. *The White Majority* (New York: Random House, 1970).
6. See James F. Becker, "Class Structure and Conflict in the Managerial Phase," *Science and Society*, Fall 1973, and Part II, Winter 1973 - 1974, and Herbert Gintis, "The New Working Class and Revolutionary Youth," in *Socialist Revolution*, May-June 1970, I, 3.
7. Harry Braverman, *Labor and Monopoly Capital: the Degradation of Work in the Twentieth Century* (New York: Monthly Review Press, 1974).
8. The best examples I can give are, for the first trend, John and Barbara Ehrenreich, "The Professional-Managerial Class," *Radical America*, March-April 1977, XI, 2 and for the second, Alvin Gouldner, "The New Class Project," *Theory and Society*, Part I, Sept. 1978, 7/2 and part II, November 1978, 7/3.
9. See, for instance, Eric O. Wright, "Class Boundaries in Advanced Capitalist Societies," *New Left Review*, 98, July-August 1976.

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10. See Marx, *Capital*, Vol. I. (International Publishers, 1967). "Revolution effected in manufacture, handicrafts and domestic industry by modern industry," Ch. 15, section 8.
 11. Marx, *Capital*, I, p. 331.
 12. Marx, *Capital*, I, pp. 349 and 350.
 13. See Marx's statements that manufacture creates a class of unskilled workers unknown in handicraft industries, that it shortens the length and scope of apprenticeship (*Capital*, p. 350), that it cripples the workman "at the expense of a world of productive capabilities and instincts" (*Ibid.*, p. 360).
 14. Marx, *Capital*, I, p. 338 and 367.
 15. Marx, *Capital*, I, p. 510, italics mine.
 16. Marx, *Capital*, I, p. 371; see also *ibid.*, XV, I, especially pp. 379 - 386 for Marx's brilliant analysis of mechanization.
 17. See Braverman, *Labor*, Ch. 9 and Alain Touraine, *L'Evolution du Travail Ouvrier aux Usines Renault* (Paris, 1955), as well as the classics by Georges Friedmann, *Problèmes Humains du Machinisme Industriel* (Paris, 1946) and *Où va le travail humain?* (Paris, 1950). As both Touraine and Braverman observe, complex specialized machinery still admits and requires the craft of the skilled machinist ("le professionnel de la fabrication" in Touraine's words). Numerical control abolishes the machinists' skills; see Braverman, *Labor*, pp. 196 - 206.
 18. Marx, *Grundrisse* (Baltimore: Penguin, 1973), p. 705.
 19. The studies of Taylorism and of the reorganization of industrial production are abundant. A few important titles are: Reinhard Bendix, *Work and Authority in Industry* (New York: Harper and Row, 1963), Ch. 2, 4 and 5; Braverman, *Labor*, op.cit.; Richard Edwards, *Contested Terrain*, (New York: Basic Books, 1979), Ch. 2 and 7; Daniel Nelson, *Managers and Workers: Origins of the New Factory System in the U.S., 1830 - 1920* (Madison: Univ. of Wisconsin Press, 1975); David Noble, *America by Design* (New York: Knopf, 1977); Katherine Stone, "The Origins of Job Structures in the Steel Industry," *Radical America*, Nov-Dec, 1973, VI.
 20. See Andrew Barlow, "Coordination and Control: the Transformation and Limits of Higher Education for Business, 1790 - 1920," manuscript, 1978, and Alfred D. Chandler, Jr., *The Visible Hand: the Managerial Revolution in American Business* (Cambridge: Harvard Univ. Press, 1977) following his superb *Strategy and Structure* (Cambridge: M.I.T. 1963).
 21. Touraine, *L'Evolution*, p. 177, transl. mine: I have followed here his analysis, summarized in pp. 171 - 183.
 22. See the beautiful analysis by E. P. Thompson, "Time, Work Discipline and Industrial Capitalism," *Past and Present*, 38, Dec. 1967.
 23. For an excellent treatment of this distinction, see Douglas Kellner, "Ideology, Marxism and Advanced Capitalism," *Socialist Review*, VIII, 6 (1978).
 24. See Magali Sarfatti Larson, *The Rise of Professionalism* (Berkeley: Univ. of Calif. Press, 1977) and "Professionalism: Rise and Fall," *International Journal of Health Services*, October 1979.
 25. See Larson, *The Rise*, Ch. 12.
 26. The academic system can itself generate certified specialties (e.g. gerontology, early childhood education) which either reflect or anticipate the development of differentiated service functions; in the division of labor, the holders of such certificates are in the opposite situation of those upon whom the state imposes training and certification (the foremost example is that of the technical operatives of nuclear plants after the Three Mile Island disaster, whether they are baptized "nuclear engineers" or not).
 27. For evidence, see V. Lane Rawlins and Lloyd Ulman, "The Utilization of College-trained Manpower in the U.S.," in Margaret S. Gordon, ed., *Higher Education and the Labor Market* (Carnegie Commission and McGraw Hill, 1974), Ch. 6.
 28. See, for instance, the frequent reference by the media and by all sorts of urban dwellers to the "gentrification" of urban areas by "young professionals," a blanket term applied

- to a residential quarter, an income level and a life-style of *educated* people. Rawlins and Ulman, "Utilization," give evidence that corporate employers view non-technical degrees as mechanisms which screen essentially for *personality* attributes and styles of interaction (pp. 213 - 15).
29. For evidence on upgrading see Douglas L. Adkins, "The American Educated Labor Force," in Gordon, *Higher Education*, pp. 122 - 123; Ivar Berg, *Education and Jobs: The Great Training Robbery* (Boston: Beacon, 1970); John K. Folger and Charles B. Nam, "Trends in Education in Relation to the Occupational Structure," *Sociology of Education*, 38, 1964; and the recent replication of their work by Orlando Rodriguez, "Occupational Shifts and Educational Upgrading in the American Labor Force," *Soc. of Education*, 51, 1978. See also Rawlins and Ulman, "Utilization," pp. 198 - 203.
30. See Lester C. Thurow, "Measuring the Economic Benefits of Education," in Gordon, *Higher Education*, pp. 415 - 17.
31. For an interesting discussion of what this means in terms of control over the labor force, see Edwards, *Contested Terrain*, Ch. 8. Indirect evidence that workers may resist this de-individualization of their relation to their work is given by Rawlins and Ulman, "Utilization," p. 220: the rates of voluntary quits are high among non-technical degree holders, much higher than for technical graduates. On training-screening on the job see their evidence, pp. 211 - 215 and 218 - 221. See also Nicole de Maupéou-Abboud, "La formation des employés qualifiés des services," in *Division du Travail* (Paris: Galilée, 1978).
32. Rawlins and Ulman, "Utilization," p. 218.
33. See Allan Carter, "The Academic Labor Market," in Gordon, *Higher Education*, Ch. 8 and Walter Fogel and Daniel Mitchell, "Higher Education Decision Making and the Labor Market," *Ibid.*, Ch. 14.
34. Allan Carter, "Academic," pp. 283 - 284.
35. Roger Cornu, "Diviser pour apprendre, diviser pour produire," in *Division du Travail*.
36. Gouldner, "New Class Project," I, *Theory and Society*, 176 ff.
37. U.S. Dept. of Labor, Bureau of Labor Statistics, *College Educated Workers, 1968 - 1980*, Bull. 1676, 1970.
38. Richard Freeman, *The Overeducated American* (New York: Academic Press, 1976), p. 18.
39. Freeman, *Overeducated*, p. 18 and fig. 4, p. 17.
40. See Freeman, *Overeducated*, pp. 12 - 15 and Michael Crowley, "Professional Manpower: the Job Market Turnaround," *Monthly Labor Review*, Oct. 1972, pp. 11 - 12.
41. Freeman, *Overeducated*, pp. 12 - 15 and the figures quoted by Christopher Jencks, "Limited Degrees," *Working Papers*, Summer 1976, pp. 6 - 7.
42. Freeman, *Overeducated*, pp. 21 and 20.
43. Jencks, "Limited Degrees," p. 11.
44. *Ibid.* Jencks notes moreover that "between 75 and 80% of the variation in individual incomes arises among people with precisely the same amount of education." This implies that differences of income within the same educational category are not only more meaningful than those among educational categories in terms of the overall income distribution: they may also be more meaningful to individuals than the second kind of differences, since education is an ideological justification for differential rewards.
45. The percent of *male* high school graduates choosing to attend college dropped from 60% in 1969 to 49% in 1974. For males 18 to 19, the percent of the age-category attending college declined from 59.4% to 49.4%: in the 20 - 21 category, from 46.5% to 35.3%; in the 22 - 24 category, from 22.9% to 20%. See Freeman, *Overeducated*, p. 34 and ff., and Jencks, "Limited," Table 3, p. 9.
46. See Margaret S. Gordon, "The Changing Labor Market for College Graduates," in Gordon, *Higher Education*, pp. 62 - 77; Adkins, "Labor Force," pp. 127 - 131 and 142; Freeman, *Overeducated*, pp. 39 - 42.
47. On Engineers, see Freeman, *Overeducated*, pp. 112 - 117 and his "A Cobweb Model

- of the Supply and Starting Salary of New Engineers." *Industrial Labor Relations Rev.*, Jan. 1976. On the decline of graduate enrollments, see Cartter, "Academic," and Freeman, *Overeducated*, pp. 67 - 68 and Ch. 4 and 5. Freeman reports (p. 119) that "in 1926, 64% of the applicants to medical schools were accepted, in 1952, 52%, in 1973, just 35% In 1950, doctors, dentists and osteopaths constituted 3.9% of the professional labor force, in 1974, 2.8%."
48. See "Doctors Fees Rising at Fastest U.S. Rate," *New York Times*, March 23, 1978.
49. See the special issue of the *Review of Radical Political Economics* on health, 9, 1, Spring 1977 and, in particular, the article by J. W. Salmon, "Monopoly Capital and the Reorganization of the Health Sector," where these figures are taken from. See also the *New York Times* series on the rising costs of health, April-May 1978, in particular May 7. See also the letter by Sen. Edward Kennedy to the *Times*, March 21, 1976 in response to the article by Harry Schwartz, "Must Doctors Serve Where They Are Told?" *New York Times*, March 14, 1976.
50. The data on lawyers are quoted by Freeman, *Overeducated*, pp. 126 - 129 and are taken from the *New York Times* series on the legal profession, May 16 and 17, 1977. In Pennsylvania, legal service professionals have been cut almost by half because of a substantial budget loss: the state legislature, for political reasons, it appears, has refused to vote legal services a one-third matching grant. I discuss the internal stratification of the legal profession in *The Rise*, pp. 166 - 177.
51. See my analysis of engineering in *The Rise*, Ch. 3. For data see Gordon, *Higher Education*, pp. 31, 32, 51, 53, and Freeman's work quoted above in footnote 47.
52. See "Working Architects: An Endangered Species," *Philadelphia Inquirer*, Sept. 13, 1976, Section B. Unsystematic evidence on salaries was gathered by me in interviews with members of the Bay Area organization of Architectural Employees in 1974 - 75 and with unemployed architects in the Philadelphia area in 1977 - 78.
53. See Freeman, *Overeducated*, Ch. 4; Cartter, "Academic." For academic salaries, a good source is the American Association of University Professors' annual report on the economic status of the profession. See in particular, "Two Steps Backward: Report on the Economic Status of the Profession, 1974 - 75," also published in the Summer issue of the *AAUP Bulletin*, 1975.
54. See Gordon, "The Changing Labor Market," p. 51; "Innovation: has America lost its edge?" *Newsweek*, June 4, 1979 and Joachim Singlemann and Eric O. Wright, "Proletarianization in Advanced Capitalist Societies," manuscript, Vanderbilt University and University of Wisconsin, 1978, for data on industrial shifts of the labor force.
55. The concept of career line as a structure of the labor market is elaborated in a very interesting article by Seymour Spilerman, "Careers, Labor Market Structure and Socioeconomic Achievement," *American Journal of Sociology*, 83, 3, 1977. See in particular his treatment of the factor age, 559 - 575.
56. It is impossible to imagine physicists or molecular biologists doing research in their time free from a sales job; there are no studies yet that tell us what "overqualified" PhDs in science do when they cannot find a job related to their expertise; my impression is that they attempt to prolong their time as students, pursuing postdoctoral fellowships or outside grants for an employed "principal investigator". A few may retrain. In the first case the intent is to keep access to the means of scientific production open.
57. Pierre Bourdieu, "Le Champ Scientifique," *Actes de la Recherche en Sciences Sociales*, II, 2 (1976) and "La Production de la Croyance: Contribution à une économie des biens symbolique," *Actes*, 13 (1977).
58. For a discussion of the literature on profession and bureaucracy, see Larson, *The Rise*, Ch. 11. In her study of architectural firms, Judith Blau finds suggestive evidence that small firms are more arbitrary and autocratic than large ones. See her "Expertise and Power in Professional Organizations," *Sociology of Work and Occupation*, 6, 1, 1979. My evidence from interviews with the Organization of Architectural Employees is that union organizers desired more bureaucracy as a safeguard.

59. A still minor but interesting trend among MDs, the most successful of small entrepreneurs, is the movement out of private practice and into the executive ranks of industrial corporations. About 4,000 MDs work in industry; about half in occupational medicine, the other half in the pharmaceutical industry or as consultants or underwriters for insurance companies. See W. Abrams, "Industry Beckons MDs," *New York Times*, Nov. 28, 1976.
60. See Antoinette Chauvenet, "Professions Hospitalières et Division du Travail," *Sociologie du Travail*, 2, 1972, and also Wolf Heydebrand, *Hospital Bureaucracy* (New York: Dunellen, 1973).
61. E. P. Thompson, "Time," p. 73.
62. See Bill Patry, "Taylorism Comes to the Social Services," *Monthly Review*, 30, 5, 1978. See also his "Retail: A Worker's Observations," *Monthly Review*, April 1978.
63. See Paul Bellaby and Patrick Oribabor, "The Growth of Trade Union Consciousness among General Hospital Nurses Viewed as a Response to 'Proletarianization'," *The Sociological Review*, 25, 4, 1977, and Margaret Levy, "Functional Redundancy and the Process of Professionalization: The Case of RNs in the United States," Manuscript, University of Washington, 1978.
64. Philip Kraft, *Programmers and Managers: the Routinization of Computer Programming in the United States* (New York: Springer-Verlag, 1977), p. 83 and Ch. 4 and 5.
65. See Robert Perrucci and R. A. Rothman, "Obsolescence of Knowledge and the Professional Career," in Robert Perrucci and Joël Gerstl, eds., *The Engineer and the Social System* (New York: Wiley, 1969).
66. See Blau, "Expertise," and, for lawyers, Erwin Smigel, *The Wall Street Lawyer* (New York: Free Press, 1964).
67. See Wolf Heydebrand, "Organizational Contradictions in Public Bureaucracies: Toward a Marxian Theory of Organizations," *Sociological Quarterly*, 18, 1977.
68. Mark Fishman, *Manufacturing the News*, forthcoming, Univ. of Texas Press.
69. Personal communication by Irving Ackelsberg, Philadelphia.
70. Personal communication by Eliot Freidson.
71. Personal communication by Ms. Jane Bryan, Philadelphia.
72. The apt expression, "entitlement," is used by Charles Derber in a very interesting study of unemployed professionals, "Unemployment and the Entitled Worker," *Social Problems*, 28, 1, 1978.
73. E. P. Thompson, *The Making of the English Working Class* (New York: Vintage, 1963), p. 9.

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