EDUCATIVE OR MIS EDUCATIVE WORK: A CRITIQUE
OF THE CURRENT DEBATE ON WORK AND EDUCATION*

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Abstract

The current debate on work and workplace education is characterized by two distinct but related approaches. The first emphasizes the training of skills for present and future job requirements, and is oriented towards maintaining or restoring the economic status quo. The second approach looks at the workplace itself as a learning environment where personal and job-related developments are integrated. It raises critical questions about what kind of work environments can be considered conducive to these developments and can therefore be called "educative" as well. In this article the argument is made that both approaches share the same overall framework of assumptions about work, the economy, progress and development. These assumptions directly undermine the critical intent of the second approach by blocking the view towards a fuller understanding of the cultural dynamics behind destructive and divisive economic and social arrangements. While the emphasis is on a critique of the shortcomings of these approaches, the beginnings of an alternative framework are suggested. Such a framework leads to different conceptions of work and progress, and opens the view towards equally different educational responses and programs.

In the wake of the many changes and developments taking place in the world of work and production, the theme of work and workplace education has become more prominent within the field of adult education. This has raised issues and concerns that transcend the usual division between workers' education, vocational education, and

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professional education. These discussions seem to be dominated by two relatively distinct, though not altogether different, approaches.

The first approach, which I will call the skills approach, emphasizes the skill requirements of the future work force in light of the need of corporate America to stay competitive in the world market, and looks at work and workers from the perspective of "human capital." It represents "conventional ideas about the education and training of workers" (Welton, 1991, p. 11), but places these ideas within the context of rapid technological and economic change. The second approach emphasizes new challenges and opportunities for learning in the workplace itself, and moves "to an analysis of the workplace as a 'cultural environment which has been selected as a set of possibilities for learning transactions'" (Welton, 1991, p. 11). Within this approach further distinctions exist. Marsick (1987a, 1988) and Marsick and Watkins (1990), for instance, operate within a framework of conventional, status-quo-oriented assumptions about current social and economic arrangements, and owe their legitimacy framework entirely to human capital theory. Welton (1991), on the other hand, draws on critical analyses of the current reality of postindustrial capitalism, and is explicit about the political nature of his suggestions.

Undoubtedly, the differences among these two groups of writers are considerable. In particular, Welton adds a number of new themes and perspectives to the debate, and his suggestion that work is an important "context for adult development and learning" (1991, p. 11) breaks with a tradition that sees the political arena or the sphere of leisure activities as "the primary site(s) for the development of human efficacy" (ibid., p. 9). His concepts of "the educative workplace" and "development work," part of a larger concern for processes of social democratization, are rich with suggestions and possibilities for critical adult education research and practice.

This essay claims that, despite considerable theoretical as well as political differences and discontinuities among writers contributing to the debate on work and education, there are also a number of continuities. I believe that this is due to the fact that all share the same overall framework of assumptions about what work is, what constitutes and drives "the economy," and how progress and development are defined. While these assumptions are explicitly expressed by the representatives of the skills approach, they are mostly silently assumed, and thus remain unexamined by writings focusing on workplace learning itself. As I will show in this essay, these unexamined assumptions creep into otherwise critical analyses. This is particularly troublesome in the case of Welton, who explicitly sets out to develop a critical notion of workplace learning, distancing himself intellectually and politically from Marsick's and Watkins' indebtedness to human capital theory. I share Welton's critical intent and believe that his concept of educative or developmental work opens up many important questions usually not associated with work-related education. At the same time, I also believe that concrete, positive suggestions for what constitutes good or educative work cannot solely be based on an analysis of existing workplaces, thus relying on conventional notions of work. Rather, I suggest we need to draw the concept of work into the orbit of critique as well, as the many problems associated with employment and workplace issues underlie our very conventional notions of work as well. For instance, troublesome
issues relating to social hierarchies and divisions, forms of exploitation, alienation, etc. are reflected in complex and varied ways in general social ideas concerning what constitutes good work or bad work, glamorous or dirty work, and highly skilled or lowly-skilled work.

To perform a critique of the concept of work itself means to step outside the framework that defines the parameters of the current debate on work and education; to assume a broader, more comprehensive perspective; and to call into question the values, assumptions, and myths out of which this framework is constructed. Relocating one's point of departure has several advantages. First, it relieves the pressure of making a choice between a more “pessimistic” and a more “optimistic” interpretation of current changes and developments. For instance, in the current debate on the future of work, much energy is spent on deciding whether work is going to be more skilled in the future, or more de-skilled, with considerable evidence marshalled in favor of both positions. However, by examining the broader social context that gives rise to the division between skilled and unskilled work in the first place, one can identify its underlying logic and its relationship to a myriad of social divisions that not only determine the socially constructed meaning of skills, but also provide mechanisms for distributing opportunities for developing or practicing those skills.

This brings me to the second advantage of assuming a broader, more comprehensive view: it allows for an analysis where questions concerning social divisions along the lines of sex, race/ethnicity, or nationality can be fully integrated with class. In other words, questions raised by women, people of color, or Third World people are not merely added to an otherwise gender-neutral, color-blind, “general” analysis, but they provide its very foundation.

This essay highlights some of the basic features of the current debate on work and education from a perspective informed by feminist and Third world analyses of work, economic progress, and development. It begins by describing the overall framework of assumptions in which all current writings on work and education are embedded, and how the two approaches mentioned above link up with these assumptions. It proceeds to a critique of some of the issues raised in the current debates in light of a broader, more comprehensive framework characterized by different questions, and lead to a different view and analysis of the reality of work and production. The paper concludes with some suggestions for relocating the point of departure for our discussions on work and education.

The Current Framework

The current debates on work and education are based on a three-dimensional view of “the economy,” or of what drives the economy: all economic decisions are determined by a worldwide structure of economic competition; the need to compete on the world market requires a constant increase of productivity (measured in abstract indices of input/output); and this competition also requires an ongoing drive to reduce labor costs.

The first group of writers, i.e. the proponents of the skills approach, establish a direct link between the need for increased productivity, the importance of ongoing technological innovations, and, as a result, changed and higher skills requirements for
future workers. In light of these requirements, the future workforce is depicted as unprepared and generally functionally illiterate, seriously endangering economic competitiveness (A Nation at Risk, 1983; Bernstein, 1988; Dole, 1989; Johnston and Packer, 1987; Lee, 1988; Perelman, 1984).

These gloomy prognoses rest on two main assumptions. The first, mentioned above, is the belief that technological innovations affect the nature and organization of work in ways that require higher and more complex skills. The second is the assumption that the workforce of the future will primarily consist of a kind of “human resource” where “investment has been historically inadequate — women, minorities, and immigrants” (Dole, 1988, p. 12). This “startling demographic reality” (Carnevale et al., 1988, p. 11) is blamed for a “widening skills gap,” “emerging between the relatively low education and skills of workers entering the labor force, many of whom are disadvantaged, and the advancing skill requirements of the new economy” (Chynoweth 1989, p. 2).

The view outlined above leads to a relatively clearly defined role for adult education: to train “human capital” in the right kind of skills. Through close cooperation and “partnerships” the “needs of business and industry” could be identified and thus be better served by adult educators, trainers, or human resource developers. Although the precise determination of required skills outside of the specifics of a particular workplace itself has traditionally been a rather elusive task, lists have appeared that try to specify “the skills employers want” (Carnevale et al., 1988). These lists are to provide clear guidelines and tools for the providers of training (ibid.), leaving little room for ambiguity about the function or purpose of such efforts: to help American business to keep or regain its competitive edge on the world market. The welfare or interest of the workers is seen as entirely merging with this purpose.

The analyses and suggestions of the second group of writers are similarly fed by arguments for new and more complex skills demands on workers. However, in addition to investigating technological changes, these writers also emphasize changes on the level of organization (Marsick), or draw on analyses of larger economic changes, such as the change from manufacturing to service (Welton). Organizational changes have occurred in the wake of massive corporate restructuring, such as mergers and “downsizing” processes (measures associated with the reduction of labor costs), all of which result in a slimming down of the ranks of middle managers, traditionally the rank charged with direct supervision. These changes are seen as opening up possibilities for greater worker autonomy, or more equal cooperation among workers.

Instead of determining and packaging work-related skills from the outside, this approach places the issue of skills and skill development in the broader context of the workplace or organization as a “learning environment” (Welton, 1991), or a “learning system” (Marsick, 1988). This broader context not only determines what kinds of skills and competencies are required for effective performance of the individual worker and the organization as a whole, but it also provides the enabling (or disabling) conditions for learning. Learning here means more than the acquisition of skills, but refers to a variety of processes, including
a broadening of the instrumental focus of learning, integration of personal and job-related development, an organizational model that functions as a learning system, a focus on group as well as individual learning, a concern for critical reflectivity and for problem setting as well as problem solving, emphasis on informal learning, and development of the organization as a learning environment. (Marsick, 1988, p. 194)

In such a way, “the organization ... becomes a learning environment for the growth of individuals and groups vis-à-vis work, not primarily a factor to be manipulated to produce desired behavior” (ibid., p. 195). Marsick (1987a, 1988) and Marsick and Watkins (1990) broaden their understanding of the learning environment by emphasizing the importance of informal learning that is both ongoing as well as cumulative.

In his monograph Toward Development Work: The Workplace as a Learning Environment (1991), Welton takes up similar issues, but approaches them from a different angle. Above all, Welton is more explicit, and more differentiated in his effort to examine some of the larger social and economic changes that have opened up the possibility for looking at the workplace as a learning environment, and he addresses some of the problems associated with these changes. Marsick (1987a, 1988) and Marsick and Watkins (1990), on the other hand, place their analyses of workplace learning in a social context that is sketched out in somewhat formulaic terms. In fact, these authors draw their rationale for new workplace learning directly from the assessment provided by human capital theorists such as Perelman (1984). Consequently, their description of the social background for current work-related changes is very similar to that described earlier. Marsick writes, for instance (1988, p. 189), that “pressures to change come from both the external world of business, particularly the technological revolution and the increase in international competition, and the nature of the workforce itself.” Changes in the nature of the workforce are attributed to “women entering the labor market in large numbers, a larger pool of both more highly-educated white middle class workers and less well-educated minorities and immigrants, and the mid-career glut” (ibid., pp. 189-190). However, Marsick does not systematically integrate these assertions into her analysis, and only very indirectly relates her description of the importance of dialogic, self-reflective, and instrumental learning to these broader social issues. She therefore also does not consider how the very social categorizations that underlie the divisions between women, minorities, and immigrants likewise underlie the social construction of skills or skill deficits, and determine employment as well as learning opportunities for these social groups.

Welton (1991, pp. 13-21), however, precisely makes such an attempt. First of all, he problematizes the very concept of skills, discussing some of the “political struggles” that determine definitions of skills or skill deficits, particularly with respect to women. Secondly, he points to some of the complexities and ambiguities that plague prognoses about future work-related skills, prognoses that often appear to totally contradict one another. Thirdly, he bases his own argument for designing “developmental” or “educative workplaces” on a critical evaluation of three different analyses of the current reality of “work in postindustrial society,” providing different types of “curricular
structures” (ibid., p. 21). He discusses Watkins' (1986) claim that Taylorist principles continue to reign supreme in the organization of work, and are often enhanced, rather than contradicted, by new technology. He essentially rejects Watkins' assertions, stating that “the picture Watkins paints of the world of work is, ... a partial one, and he does not see developmental possibilities inherent in the new technologies” (p. 23). In contrast, Welton looks favorably on Offe's (1985) description of the reality of work under current late capitalist conditions as providing a more “complete and complex picture” (ibid.).

Offe states, first, that work may no longer be the central organizing principle of society, and that the motor of social development has shifted to other spheres of life, such as “family, community, leisure activities or education” (Welton, 1991, p. 24). Secondly, he maintains that the shift from manufacturing to service has broken the monopoly of industrial rationality in the experience of work, instead creating more “reflexive” kinds of work “with a different form of rationality than that in industry” (ibid., p. 27). Taken together, Offe's two main points open up the view towards forms of resistance against industrial rationality, and towards ways of “humanizing” work.

This latter point is, according to Welton, affirmed by Hirschhorn's (1984) analysis of the “cybernetic workplace.” Hirschhorn's main point is that modern, cybernetic technology requires the workers to integrate work and learning. He bases this claim primarily on the fact that “cybernetic systems introduce new and unexpected ways of failing” (ibid., p. 72). This situation requires from the worker complex diagnostic skills that combine three modes of knowing: dense perception of physical processes, an heuristic knowledge of production relationships, and a theoretical understanding of the production process (ibid., p. 93). Together, these skills represent an “orchestration of attention” (p. 91), drawing on the worker's “knowledge, attention, and watchfulness” as a way of “controlling the controls” (ibid., pp. 72-73).

Equipped with arguments provided by these analyses, Welton proceeds to synthesize “studies of work and personality formation, the application of learning theories to the workplace, and job redesign studies” as a way to answer his main question: “Can the workplace become a site for the development of worker cognitive, communicative, affective and somatic capacities?” (1991, p. 28). He essentially answers this question in the affirmative, but stresses the importance of further dialogue.

Whereas Marsick (and Marsick and Watkins) only indirectly express a concern with “humanizing” the workplace or “empowering” the workers, this concern is explicitly expressed by Welton. Because Welton sees worker empowerment as dependent on participatory structures, his outline of an educative work environment places greater emphasis on interaction and communication, and on organizational changes that would make such an environment possible. He draws on Pateman's (1970) theory of participatory democracy, which considers workplace interaction as “the training ground for participation in the wider political sphere” (Welton, 1991, p. 30), and on Kornbluh and Greene's (1989) “radical humanistic standpoint” (Welton, 1991, p. 36), which stresses interdependence and mutuality among the workers.

Where Welton has an openly democratic agenda, Marsick and Watkins legitimize their views primarily by emphasizing the greater effectiveness of an educative work
environment, ultimately benefitting the maximization of profits (although Marsick chides those who focus extensively on the bottom line). Despite these differences, however, both Marsick’s and Watkins’ as well as Welton’s descriptions locate the impetus for greater reflectivity, creativity, group learning, participation in decision-making, etc. as coming from larger social and technological changes that lie outside the immediate work environment. Welton therefore states that “with the evolution of cybernetic sociotechnical systems, workers are forced (so to speak) by these new settings to develop diagnostic skills — the ability to frame problems, infer causes from symptoms and check resulting hypotheses against one’s analytic knowledge” (1991, pp. 25-26, emphasis added).

**Where Do We Locate Progress?**

It is certainly true that structural changes necessitate individual or subjective responses or adaptation, and Welton is clearly aware of this dialectical relationship. However, I believe that it is not the relationship between technological innovation and individual adaptation where the most important questions concerning progress are located. Instead, I propose to scrutinize the larger social context of values, priorities, and interests that continue to drive technological developments and that have traditionally distinguished technology as the undisputed realm of progress and development. In light of the rapid destruction of our planet, greatly aided by science and technology, I find it increasingly implausible to see radical democratic change coming out of an arena that from its inception has been wedded to power and domination (Lloyd, 1984), and thus to a wide-scale destruction of people and nature. Instead, many have begun to look at those areas, human experiences, and ways of living and working that have been systematically destroyed by scientific and technological progress and development as precisely those that contain the new and challenging categories we so badly need today. In other words, without needing to go “back” to perhaps “premodern” times, we can, and indeed must, explore and learn from the lessons of survival contained in these experiences. They provide “categories of challenge” (Harding, 1986), reveal different entry points for practice, enable us to locate new arenas for political struggle, and lead to a changed definition of what is considered “progressive” or “revolutionary.”

For instance, while much has been said and written about the revolutionary potential of new technology for restructuring and humanizing the workplace, little has been said about the equally if not more revolutionary potential represented by the current trend of more and more women, most of whom are mothers, entering the workforce. This situation points in the most promising ways to the need to rethink the relationship between market and non-market work (i.e., in this case the raising of children), an issue that is also at the forefront of Third World debates on alternative economies and forms of development. Questions concerning what is truly important and productive work, measured against the life interests of society’s members versus the profit interests of capital, point to the rather limited contributions of market work. In fact, most of the work directly contributing to the sustenance of life is performed outside of the market, and therefore without wages (Waring, 1988). By examining the progressive potential of this work, we discover other hitherto neglected dimensions: work’s purpose of producing truly useful goods and services, and work’s relationship to nature on whose resources we must draw on in our collective effort to survive.
Work's relationship to individual development and to the creation of specific forms of interaction or cooperation have been examined quite extensively in discussions on work and education, whereas questions concerning the usefulness of goods produced and the treatment of nature and natural resources have not been raised. However, these questions are integral to a critical examination of work, and of work's implications for education. It is these questions that most seriously challenge conventional notions about work, progress, and development, as they directly touch the core premises of our global economic structure: that production is, above all, production for profit; that nature is dead, malleable matter entirely at our disposal (Merchant, 1980); and that the immense social and environmental costs of our way of production can therefore be externalized, and do not figure into our calculations of growth and development.

In the beginning of this essay I claimed that women, people of color, and Third World people have most fundamentally challenged these myths, as they have been the ones disproportionately burdened with the costs of progress and development; and racism, sexism, and nationalism continue to justify or render invisible the super-exploitation and misery of these particular populations. At the same time, it is no coincidence that it is especially women, but also peasants, tribal people, and other subsistence producers, whose work and workplaces resemble least the kind of work or workplaces that are the focus of the current debates on work and education. Nor is it a coincidence that their work is oriented towards immediate sustenance of human life rather than towards the bottom line. As discussed in detail elsewhere (Hart, 1992), in the history of capitalism it has been precisely this kind of work that has been the hidden foundation of "truly" capitalist, i.e. industrial, wage work. Because the producers have been branded "backward," "uncivilized" (because closer to nature), or, in today's terminology, "premodern" or "undeveloped," their work and the super-exploitation of their work have equally been "naturalized"; i.e., they have become "naturally cheap labor."

Today, it is these "naturalized" groups and populations who are asking the most radical questions: Growth of what? Growth for whom? What is enough? What is the appropriate goal? What are the costs? Who is bearing the costs? And, because much of their work is subsistence work — i.e. oriented towards immediate use rather than exchange on the market — their experiences also challenge our conventional notions of "real" work as equivalent to waged work or, even more narrowly, to industrial work or work in large, bureaucratic organizations.

The following section examines three key issues most fundamentally questioned by the alternative debate outlined above: the role of technology and its connection with our views of progress and development, social divisions, and definitions of work. Because an alternative framework not only produces but is itself fed by a different view of reality, I will move back and forth between a critique of educational discourse and its terms and assumptions, and a presentation of information that challenges some of the myths entangling this discourse.

Technology, Progress, and Development

An evaluation of the role of technology in the restructuring of work needs to be based on an analysis of how technology functions — or is seen to function — in the larger
social and economic context, and has to be seen in relation to a core of ideas that govern our views of the economy: that the economy is inexorably tied to global competition, that this race can only be won by continuously increasing productivity, and that such increased growth and productivity depend directly on ongoing technological innovations.

These two interrelated sets of assumptions are so powerfully entrenched in our collective consciousness that their validity appears to be beyond critical scrutiny. This is especially true for the first idea: i.e., the inexorable demand for participating in a race for economic supremacy that can only be won with the help of continuous scientific and technological innovations, which in turn guarantees ongoing growth and development. As Ulrich ("Mythos Weltmarkt") points out, the tremendous costs of this race are never calculated. These costs include, among many other things, increased national debts and huge government subsidies, but also the considerable damage to water, soil, and air caused by massive motorized transportation, which is a precondition of world market strategies. Furthermore, global economic competition means a war not just against nature, but also against cultural and economic autonomy. Wherever Western ideas of development have been put into practice, previously existing, relatively autonomous subsistence economies have been destroyed. A Western cultural definition of poverty branded these economies and their modes of production as backward, even though they were oriented towards the producers’ own needs, were adapted to and preserved local and regional conditions, were controlled by the producers themselves, and cultivated a large genetic variety of plants and seeds. By transforming these economies into monocultural cash crops, they become dependent on the vicissitudes of a national or international market and on large chemical and technological inputs. Thus, the modern version of poverty, the “misery of deprivation” (Shiva, 1989, p. 10), so widespread in the Third world, was created (Bennholdt-Thomsen, 1982; Mies, 1986; Pereira and Seabrook, 1990; Shiva, 1989; The World’s Women, 1991). We have to include this misery in the costs of progress and development.

Furthermore, ongoing growth and productivity depend on the systematic creation of needs as well as dissatisfaction with the alleged satisfiers of those needs so that new satisfiers can be produced and sold. The cultural, psychological, and environmental costs are tremendous. Many products are useless, harmful, or unnecessary, yet are highly demanding in terms of resource use, and contribute more to our garbage problem than to human well-being. The manipulation and exploitation of human needs becomes an economic necessity, and consumption becomes an end in itself, eroding the possibility for true happiness and a spiritually rich culture (Bahro, 1989; Bookchin 1982; Fromm, 1966; Hayes, 1986; Seabrook, 1986). Again, these are costs that are never calculated.

The second belief, that scientific and technological innovations are the motor behind progress and development leading to greater wealth and a better life, relies on a line of reasoning that links new technology to new products, to new jobs, to new income, to new wealth. As Ulrich ("Elektronische Informatisierung") points out, this logic has become rather brittle. Today, markets are fairly satiated and hardly any new useful products are being produced. Instead, old ones are continually replaced with “newer and better” versions. This “aimless, measureless race for the latest technology” (Ulrich, "Elektronische Informatisierung", p. 2) has very little, if any, relationship to the needs
for health, food, clothing, or shelter. In addition, the speed with which products become obsolete is intensifying, in turn adding to our continuously growing garbage heaps. Secondly, large-scale “economic-technological rearmament” (Ulrich) depends on the ruthless plunder of natural resources, leading to environmental disasters and forms of destruction that are becoming less and less reversible. Thirdly, new technology is becoming ever more risky, in terms of our ignorance about inherent dangers. Often new discoveries create as many problems as they solve — problems that are merely downplayed by calling them “side effects.” Moreover, because technological and scientific innovations are seen as developing according to their own inner logic, and are set lose from any cultural norms or constraints, we have no moral framework for deciding whether we want to go on with certain innovations or not (Ulrich, “Elektronische Informatisierung”). Hirschhorn’s (1984) suggestion that the increased (and increasing) riskiness of new technology provides an impetus as well as opportunity for integrating work and learning neglects a discussion of the kinds of risks that are involved, and the consequences and costs of failure. He likewise does not address the issue of who will most likely pay these costs. Besides, it seems to me the workers who have to monitor these technologies are disproportionately burdened with the responsibility of preventing failure.

Social Divisions

One of the functions of new technology is never explicitly mentioned in discussions on work and education: to assist in the search for “cheap labor.” The new technologies of communication and transportation allow for high capital mobility, for relocating in so-called cheap labor countries, and for dispersing location as well as stages of production across the globe (Bluestone and Harrison, 1988; Haas, 1985; Safa, 1986). By undermining the bargaining power of workers, this global dispersement contributes to a reduction of labor costs, or to the “cheapening” of labor in industrialized countries themselves.

The search for cheap labor directly feeds on and creates a number of social divisions and polarities. In fact, existing divisions among the races or sexes are directly reinforced rather than alleviated by current economic developments, with employers relying on “broad cultural understandings about the type of work that it is appropriate for particular population groups to perform, whether they be women, racial minorities, or younger people” (Block, 1990, p. 116). There is little reason to believe that this will change, and evidence abounds that sexism and racism remain a primary organizing factor in distributing and structuring work (Bergmann, 1986; Gelpi et al., 1986; Hossfeld, 1990; Wilkerson and Gresham, 1989; Wilson, 1987).

The facile lumping together of such diverse groups as “women, minorities, and immigrants” into one big category of generally deficient human capital, deviating from the norm because it is “non-white,” “non-male,” and “non-young” (Ehrlich, 1988, p. 112), delivers much-needed ammunition for the war on wages. Depicting these groups as categorically unskilled or less worthy than others (i.e., white, male, adult) helps justify paying them lower wages. The fact that they are socially devalued provides a lever for greater economic exploitation.
New combinations of imperialist, sexist, and racist exploitation of "cheap labor" have emerged as well. A particularly striking example is the favored employment of Third World women in global factories and Free Enterprise Zones, often in areas where male unemployment is high, mainly because women are still cheaper than men (Fernandez-Kelly, 1983; Safa, 1986; Ward, 1990; The World's Women, 1991). As this often makes women the only income earners, the overall poverty level in these areas increases as well.

Far from being eliminated or even ameliorated by work-related changes and developments, social and international divisions are deepened, or new ones are created. These divisions, and the interlocking systems of oppression they signify, profoundly affect the educative or miseducative potential of work.

While it is undoubtedly true that workers in the kind of workplaces described by Hirschhorn (1984) or Zuboff (1988) are required to develop complex reasoning and diagnostic skills, Zuboff herself, as well as others, have pointed out that "there is clear evidence that as bureaucracies are restructured around computerized systems a bifurcation into expert and non-expert sectors tends to result" (Burris, 1989, p. 168). And, as the same author writes, "at the non-expert level, the tendency has been for tasks to become more routinized, fragmented, and automated by the system. ... Women and racial minorities predominate in the non-expert sector and are underrepresented in the expert sector, making such organizational changes gender laden" (ibid.; unfortunately, Burris here drops the category of race; see also Cockburn, 1983; Game and Pringle, 1983; Wajcman, 1991). Thus, the revolution of the smart machine is propped up by "a very unrevolutionary industrial division of labor" (Hossfeld, 1990, p. 152).

An analysis of these divisions needs to be systematically integrated into a discussion of new learning opportunities at work in order to grasp the fact that these opportunities are fully tied to an all-pervasive structure of privilege, interlacing in systematic ways with the categories of sex, race, ethnicity, nationality, or class.

Definitions of Work

A conceptual framework that looks at issues in relation to rather than in isolation to each other will lead to an expansion of the meaning of work as well. The two approaches discussed above operate on the basis of a rather narrow conception of work, i.e., primarily wage work in large bureaucratic organizations. In this conception we still hear an echo of an ideal of wage work and of the wage worker whose empirical foundation is rapidly disappearing. It is the (masculinist) ideal of the "bread-winner" earning a decent "family wage" in a fairly stable job, with long-term prospects for security and promotion. Never a majority in the Third World, this type of wage earner is rapidly disappearing in the First World as well (a phenomenon sometimes referred to as the growth of the informal sector; see, for instance, Ferman et al., 1987). We are today witnessing the mushrooming of work that "deviates" from typical wage work, as indicated by the precarious work relations of temporary, seasonal, and less-than-full-time forms of employment, all of which are characterized by high job insecurity, low pay, lack of benefits and promotional opportunities, and, frequently, hazardous working
conditions (Christensen, 1988; Working at the Margins, 1986). As reported in The New York Times (Lohr, 1991), this trend is continuing, if not intensifying, as more and more companies “farm out more work to subcontractors or contract workers, who can be quickly hired or dismissed as demand rises or falls” (p. C9).

In light of this reality, Offe’s idea (1985) that new forms of work, particularly service work, will lead to a new value orientation needs to be called into question. Offe (ibid., p. 139) claims that the new types of work associated with service produce a “new class” of workers that “challenges and questions the work society and its criteria of rationality (achievement, productivity, growth) in favour of substantive, qualitative and ‘humane’ standards of value.” To recall, part of this argument depends on the observation that work has generally ceased to be central for society as a whole as well as for its individual members.

There are two problems with this suggestion. First, by operating entirely within a classical notion of wage work, Offe mistakes the diminishing of this type of work, and the wages along with it, with the diminishing of the importance of work per se. Such a conceptual short-cut is possible only because Offe’s vision neglects the fact that other types of work have always existed next to and alongside the more typical or “normal” wage work, and that these forms, or new versions of these atypical forms of work, are on the rise. In other words, there is plenty of work, and most people, especially women, work more than ever before (Hochschild, 1989; Schor, 1992), but this work has either never assumed the form of classical wage work, or is now performed under the conditions of “informal” work. For instance, Offe counts “domains such as the family, sex roles” among those that “lie at the margin, or completely outside the realm of work” (ibid., p. 133). It is difficult to swallow a statement such as this in light of over twenty years of feminist analyses of women’s work, especially the unpaid work within the household. As discussed elsewhere (Hart, 1992), it is precisely this kind of work, be it in the form of housework or other kinds of subsistence work, that has always provided the foundation for the more typical wage work and that has been subjected to particularly harsh forms of exploitation (see also von Werlhof, 1991).

To discuss service work without an analysis of the sexual division of labor as a prime organizing principle of this type of work grossly distorts an assessment of its humanizing potential. It leaves, once more, unmentioned that much of this certainly important work has been and is still socially devalued precisely because it is associated with women.3 Ironically, the presumably new and more humane kinds of abilities required of the new service worker have traditionally been associated with “feminine” qualities, shaped and practiced by women in their unique experience of work, especially by the work of mothering and care-taking: “interactive competence, consciousness of responsibility, empathy and acquired practical experience” (Offe, 1985, p. 138). Are so-far-devalued abilities now seen as harboring humanizing potential because they have become attached to paid work and men are now performing this work as well? Predictably, “old” service work, likewise requiring the competencies listed by Offe, can remain obscured and unacknowledged by society at large. For instance, childcare workers, certainly immersed in work that requires sensitivity and strong interactive
skills, are among the lowest paid workers in the U.S. (Modigliani, 1986). It is not a coincidence that 98-99% of childcare workers are women.

This example illustrates two important issues. First, it reinforces the fact that social divisions persist through the many changes that have occurred in the world of work, and continue to be prime organizing factors for the way this world is structured. Secondly, while it cannot be disputed that this type of work requires a rationality that differs from that of industrial production, it is nevertheless integrated into the overall rationality of the economy as a whole. In other words, service work is and remains exploited, and the conditions of exploitation not only directly contradict the nature of this work, but also inevitably erode its very substance. Thus, instead of “discovering” new value orientations in work where exploitation and devaluation have already most intimately settled, eroding the very possibility for sustaining such an orientation, we need to trace the history of this exploitation and devaluation. Such an historical examination will have to come to grips with the fact that it is precisely this kind of work that has been exploited the most, and in the process destroyed or seriously eroded; and the examination must investigate whether and how the dynamics behind this exploitation are still in operation.

While disagreeing with Offe’s romanticization of service work, I agree with his basic idea that work that is structured by a communicative rather than technocratic rationality can indeed provide a model for alternative ways of working and living. As discussed elsewhere (Hart, 1992), such work can provide a model for education that is likewise characterized by a “subsistence orientation.” Such an orientation would structure learning processes that draw out each individual learner’s potential within an interactive and cooperative environment. While these themes are echoed in the writings discussed in this paper, they are kept in the confines of a conceptual framework that is not only characterized by omissions and distortions, but also, in the last analysis, contradicts the radical imperatives of these themes by remaining ensconced in the overall — decidedly strategic — context of profit maximization. This context precisely does not allow for a full unfolding of communicative structures, as they would explode its very foundation. Marsick (1987a, pp. 24-27), therefore (in my mind honestly and correctly), spells out some limits to workers’ autonomy in the new paradigm of workplace learning, as they may conflict with the goals of “the organization.” However, while marking the boundaries within which critical reflectivity is permitted to occur, Marsick does not see how the very existence of such boundaries erodes the substance of critique itself (for a more detailed discussion of this point, see Hart, 1992).

Likewise, her descriptions of “feelings” and the expression of emotions as an integral part of learning speak of a strategic, ultimately authoritarian context, turning any “dealing with feelings” into something that more closely resembles manipulation rather than free self-expression. At the same time, however, I believe that her descriptions adequately reflect what is possible in an organizational context that is itself “miseducative” when measured against the imperatives of critical reflectivity, reciprocity, cooperation, and the full development of individual potential. The overall miseducative context of work will continue to settle into the interior of relatively isolated, more “democratic” workplace organizations, which are often held together by
however subtle (and sometimes not so subtle) forms of coercion. I believe it is no coincidence that the advanced work settings Hirschhorn describes are all non-unionized, and, at close scrutiny, have established an elaborate system of supervision that has transformed management control into a combination of internalized individual as well as mutual control and supervision. Combined with the "great pressure" on the work group due to the high probability of failure (Hirschhorn, 1984, p. 100), this situation closely resembles the one Parker and Slaughter (1988) describe in their critique of the team approach as "management-by-stress."

In contrast with Welton, I therefore find Hirschhorn's description of the cybernetic workplace profoundly "miseducative." His is a rather masculinist vision where anxiety and uncertainty vis-à-vis the potential dangers of technology are depicted as creating a kind of "tension" in the workers, allegedly a prime motivator for learning (1984, p. 128). The thrill of danger and of losing one's life in the battle with natural (or, in this case, technological) forces, strongly reverberates in this idea. While people may indeed be led (or forced) to learn under such conditions, it is a severely limited kind of learning, and certainly does not provide an alternative model for truly educative processes.

There is another contradiction that needs to be reconciled by a critical analysis of work and education, and of the miseducative context in which work and production occur. Particularly in discussions that emphasize the new learning potential of work structured by new technologies, certain abilities are celebrated as "higher" or more complex than those they replace. Ironically, it is often precisely those that Offe describes as harboring the potential for humanizing work and society that are destroyed by computerized or symbolically mediated work: experience-based knowledge, empathy, and other interactive capacities (Zuboff, 1988). It seems the "old" devaluation of these abilities is carried a step further by glorifying their elimination into higher forms of work or mental functioning. While Zuboff acknowledges the psychological pain experienced by workers who literally lose physical and emotional "touch" with their work, she sees this as a necessary transition to higher, more "intellective," ultimately superior kinds of work. Hirschhorn (1984), on the other hand, is not quite content with the elimination of all concrete, somatic dimensions of work in the cybernetic workplace. His vision allows him, however, only rather Orwellian solutions. He writes, for instance, that "for operators to develop good diagnostic skills in symbolically mediated environments, compensatory technological innovations should return 'feeling' to the operator's experience" (p. 96). This "sensing technology" can connect the worker's body to the plant in such a way as to become "a cybernetic extension."

Her body would shake with plant vibrations reduced electronically to a human scale, and she would feel warmer or cooler as the factory temperature changed.

Pressure and sounds could be similarly transmitted. (p. 96)

The challenge here is for the worker to "distinguish her own internal body cues from the messages of the plant," leading her to greater "self-awareness" (p. 97). A model for educative work? I believe not. Rather, these suggestions strike me as yet a step further in the worker's alienation from any concrete, sensual, and holistic involvement in her work.
We cannot reduce the loss of vital abilities that allow for a direct involvement with the material and organic conditions of production, and thus of life, to psychological pain associated with a temporary period of transition. These competencies and the knowledge that has been accumulated in work that allows for direct, sensual involvement, cannot simply be discarded as obsolete once we have reached a higher stage of technological development. In one of the most influential books dealing with the introduction of modern technology to the workplace, *In the Age of the Smart Machine*, Zuboff (1988) frames the multi-layered, complex transition to a technological workplace in terms of a “problem of the body” rather than in light of a view of the body as a part of nature and, as such, an obstacle in the way of technological progress. Her complex analyses entirely leave out the problems of the immense violence that is committed against the body, against nature and against those associated with nature (for instance women or Third World people). This violence is internally connected with the conventional Western view of progress, technology, and development.

**Summary and Conclusions**

The current debate on work and education has opened up questions and contains suggestions that are important and useful, but that, in the absence of a more comprehensive critique of the overall social and economic context of work and production, remain limited. No doubt, a workplace where learning and development of abilities can occur is better than one where this opportunity does not exist, and an analysis of the kinds of conditions that enhance or hinder such learning is useful as well. However, as I have tried to show in this essay, these opportunities constitute, once again, the opportunities of privilege enjoyed by a number that appears very small when seen within a global perspective. While it is certainly true that the content and organization of work is becoming more challenging, enriching, or “developmental” for some, it remains or is becoming more “miseducative” for others. In both cases, new technology may play an important part, i.e. may be used for “informating” or “automating” (Zuboff, 1988) the workplace. If we want to identify possibilities for fundamental change, we need to examine the mechanisms that underlie and reproduce this very division and the nature of the relationship that exists between these different kinds of work. Such an analysis has to proceed from an understanding of the complex, contradictory, and multifaceted nature of the current reality of work and production, and must examine the broader context that unifies this contradictory reality. As mentioned earlier, this means that rather than focusing exclusively on only one aspect of work, or on one type of work, we have to look at different kinds of work in relation to each other. For instance, we have to look at work that is deskilled in relation to work that is reskilled or highly skilled, but also at work that is relatively stable and long-term in relation to work that is unstable or precarious. And there are many other relationships that have to be considered together: for instance, work that carries social value and esteem needs to be looked at in relation to work that lives in the shadow of social recognition; or work that is oriented towards producing for immediate needs has to be understood in relation to work that is oriented towards the accumulation of capital. Within this comprehensive as well as differentiating framework the question of what constitutes “educative” or “miseducative” work will point beyond existing
workplaces to the structure of privilege, a context of hierarchy and exclusion that
infuses and thus impoverishes a notion of educative work that does not challenge this
structure.

More fundamentally, however, in this essay I questioned whether we can find at all
a model for good or educative work in an environment oriented solely towards the
maximization of profits and driven by the need to employ the latest technology no
matter what the environmental or social costs or risks involved; where questions
regarding the usefulness of what is being produced are never asked. As I suggested
here, it is precisely these concerns that must be at the core of a critical and future-
oriented notion of educative work.

I therefore think we must begin to develop a concept of educative work that starts
from an examination of the nature and ultimate purpose not only of work, but also of
"the economy." In such a way we will assume a standpoint that allows for a thorough
critique of current purposes and realities of work and production, a realistic assessment
of their educative potential and the beginnings of an alternative vision for working and
living.

Notes
1 The journal, magazine or newspaper articles taking up the theme of a partnership between business
and industry are too numerous to count. For a representative sample see Clark (1983), Fell (1989),
Hersh (1983), and Wise (1981).

2 Moreover, the exclusive focus on the demanding skill requirements of new and future technology
leaves out the fact that the work at the actual production site of these new technologies is anything
but glamorous. Work in the "clean rooms" of Silicon Valley and in the militarily organized global
factories in South East Asia is characterized by an intense lack of autonomy, is excruciatingly boring
and stressful, with extremely low pay, and very hazardous to the workers' health (Hayes, 1989;

3 And, to the extent to which it is still performed by women, it will remain devalued. The history of the
feminization of certain categories of work, like healing, clerical support, or teaching, amply testifies
to the pervasive social bifurcation between men's and women's work. As women enter into previously
male-dominated professions, the attractiveness of these occupations drops as well. For instance,
Philipson (1991) describes the currently growing feminization of psychotherapy, seemingly inevitably
leading to an "undervaluing" and "underfunding" of this profession.

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