being enemies of the state. The will allow students to explore the heart of the complex political role played by "the enemy." Students could search for similar incidents in history or in the contemporary world.

Fighting the Invisible Enemy: Understanding the Effects of Conditioning on Young People, by Terrence Webster-Doyle. Middlebury VT: Atrium Society Publications, 1990; 0-942941-18-7; $12.95. This is a workbook designed to assist students in learning about psychological conditioning.

Dear Oklahoma City, Get Well Soon: America's Children Reach Out to the People of Oklahoma, edited by Jim Ross and Paul Myers. New York: Walker and Company, 1996; 0-8027-8436-4; $16.95. This book will provide students an opportunity to use what they have learned from this unit of study, and to exercise their critical faculties. The book is a good example of the political innocence or naivete of U.S. children. Questions to ask about it might be: Who did the perpetrator of this horrid act think was his enemy? Why did he think that way? Do any of the writers in *Dear Oklahoma City* say anything about the person who did the bombing? Why or why not? What might a child from South Africa or the West Bank write about a similar incident? What does this bombing say about our country?

Compiled by Elaine Harger

Class Warfare in the Information Age, by Michael Perelman. New York: St. Martin's Press, 1998.

Reviewed by Steve LaBash

In *Class Warfare in the Information Age*, economist Michael Perelman takes issue with those who would suggest that the "new" age of information, particularly the use of computers, electronic databases, and instantaneous communication, will necessarily lead to a "liberated" society. Rather, he suggests, we need to look at the issues of control and distribution of these elements of the "information age," particularly the struggle over corporate control of information resources and services. Perelman flatly states that the current "information age" will reinforce existing class structures rather than lead to a utopia of widespread information and direct democracy unless there is a popular movement to ensure such democratic tendencies (p. 4).

Why is this true? For Perelman, it is because the issue is less that of technology and its potential than the way information is used in a capitalist society. In a capitalist society information is geared to providing owners and management with mechanisms for control over production and financial processes. These processes are designed to be outside the control of society as a whole, and more particularly, outside the control of those workers that develop and manipulate these processes.

In the past, information was often held by the worker through learning and experience. Further, such information was often the property of a particular worker, one that was experienced in a particular task or process. This information was not readily transferable to management. For example, skilled workers in a steel mill, through years of experience and tutoring by older workers, were able to recognize by sight when an ingot had reached the appropriate temperature for processing by examining its color. Now, however, through the monitoring of temperature and

chemical composition by electronic sensors, a relatively unskilled worker can identify when the ingot has reached its optimum condition. Through such technological monitoring the knowledge is easily transferred to management.

The use of information technology also allows owners and managers to rapidly manipulate economic resources in a manner the jeopardizes the ability of working and middle-class people to influence their destiny. Financial markets show this most clearly. The ability of financial institutions and corporations to manipulate flows of capital to firms, sectors, and nations on an almost instantaneous basis creates massive obstacles to democratic controls of economic policies. The ability of these institutions to create crises, as has happened in Indonesia, Brazil, and other countries, provides formidable roadblocks to setting economic policy.

In the domestic economy, the dominance of these financial institutions and their use of information technology, has profound effects. For example, the lowest volume day on the New York Stock Exchange in 1987 had greater volume than any month in 1960. In fact, during the stock market crisis of October 19 and 20, 1987, more shares were traded in the first 15 minutes than during any week in 1960! (p. 15) This ability to control financial resources has enabled the international financial community to undermine firms and economies in a matter of hours.

This new information process has also broken down information in a way as to restructure the work process itself. By allowing access to information by employees only in discrete and particular "bundles" that are directly applicable to their job, workers have lost the ability to conceptualize the whole process of production. Also, an ideology of complexity is promoted throughout the organization. The worker is told that she is incapable of seeing the "big picture," which can only be comprehended by managers privy to the necessary information.

In discussing how economists have traditionally applied economic analysis to the role of information, Perelman points out that the economics of information was not considered important as long as it was so closely held by workers. Once management had the means of storing and

manipulating this information, however, it moved into the realm of "efficiency" calculations and then became "important."

The information revolution has also allowed for a tremendous intensification of labor. The employee can now be reached in a distant hotel, on a plane, or in her car. The introduction of cell phones, laptop computers, and other technologies require the worker to be "productive" at home and while traveling. The workplace is everywhere and anytime, and the willingness to work in such an all-encompassing environment has now become a requirement for advancement.

Perelman's economic analysis of information is especially enlightening. In a capitalist economy, he points out, most commodities are "rivalrous." That is, if I use it there is less for others. For example, when I use a gallon of gasoline, there is less for others to use. This is not the case for information. No matter how much I use the total amount available to others is the same. To "correct" this economic problem, the information producer and user extends to information scarcity through the use of trade secrets or value-added arguments. Thus, the database producer claims that his manipulation of the data enhances it to such a degree that he should be able to limit access to it. In addition, public domain information, such as that produced by the federal government, must be privatized to eliminate "unfair" competition with such producers.

While past economic theorists argued that free and open access to information was a necessary requirement of a successful competitive economy, especially for consumers, today's information economists argue the opposite. The control of information is necessary for successful competition between firms.

Perelman raises numerous other issues about the current economic and class elements of the information age, but in the end it reduces itself to a simple fact, that capital always seeks to control new technologies and processes for its own benefit. Where the information utopians err is in thinking that information technologies and processes can escape this process. The only real hope is that the information user and consumer will become conscious of this reality and consciously struggle against it. Listservs and e-mail are not substitutes for a conscious struggle against

the ruling class, whether in a Honduran sweatshop or on the internet. Class consciousness, the awareness of in whose interest information should be developed, is the only defense. The information age has not reached beyond the class struggle, rather it has created new arenas for it.

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Information Liberation by Brian Martin. London: Freedom Press, 1998

Reviewed by Rory Litwin

Freedom Press, the anarchist publishing house founded in 1886, has published a book on the issues of the information society from a radical democratic perspective. "Information is power" and "power corrupts" are two apothegms that deserve the intelligent coupling that Brian Martin, the Australian writer active in the environmental and radical science movements, has given them in *Information Liberation*. As Martin shows, the corruption of power is not merely a potential danger but a fact of life in the areas of mass media, intellectual property, surveillance, bureaucratic organizations, libel law, and the world of academic research. These are frequent topics of discussion on the left, but not often leading to the radical conclusions that Martin refreshingly draws, opening up new spaces for left-of-center thinking. The book is for a popular audience, and suitable for public as well as academic libraries.

Chapter 1, "Power tends to corrupt," expresses this basic premise, illustrating it with historical and psychological insights. Chapter 2, "Beyond mass media," discusses modern mass media, which Martin finds undemocratic by nature, because of its control by a group of people that is small in comparison with its audience. He cites numerous publications that expose media bias and advocate grass-roots action to create fairness and accuracy, but perceptively notes that these publications rarely find the root of this media bias in the basic structures of mass media control or advocate replacing these structures. Alternative mass media, though the imbalance of power between its audience and producers is moderated by its smaller scale, falls into this assessment of corruption by power, with powerful publications such as *Mother Jones* and *The Progressive* serving

as examples of the impossibility of democratically run mass media. The idea of participatory media, with David Andrews' concept of "information routing groups" given as an example, is offered as a replacement for mass media. The chapter also includes an outline of several strategies for achieving this replacement. Martin's radical position makes possible avenues of perception that are perhaps not open to reform-minded media critics, and asks questions seldom heard on the left that are critical of reformist and government-reliant strategies. Cynical readers like myself will begin to find that a leap of faith is required in order to follow Martin all the way to his conclusions, but this leap appears to have the character of a necessary courage against the backdrop of the status quo. A shift of mind is precisely what is required by any radical solution.

Chapter 3, "Against intellectual property," is concerned with the concept of intellectual property and argues for the alternative, "that intellectual products not be owned, as in the case of everyday language." Strategies for challenging intellectual property are outlined, including "civil disobedience, promotion of non-owned information, and fostering of a more cooperative society." The arguments against intellectual property in this chapter center on the corrupting influence of the ownership of ideas and the harm it can do to democratic relationships. Edwin C. Hettinger's responses to the standard justifications of intellectual property are summarized. The alternative to intellectual property (non-ownership of ideas) is discussed with reference to the perceived needs for it: protection against plagiarism, protection of royalties, and stimulation of creativity. Each of these is shown to be either answerable in other ways or not actually protected by intellectual property laws. Ironically, a copyright on this book is held by Brian Martin and Freedom Press. This is discussed at the end of the chapter, with permission given to copy the work for non-exploitative uses. It is plain that Freedom Press copyrights their publications out of a need to compromise with a world that has not moved "beyond intellectual property."

Chapter 4, "Anti-surveillance," examines the issue of the growing use of various surveillance technologies, including types of data collection not thought of as "spying," as an issue of power imbalance. Martin claims that the regulation of surveillance by professional ethics and by govern-