

the definition of truth associated with the hard sciences.

However much I may agree with many of the authors participating in the Hastings Center discussions on ethics in society that a stronger presence of the humanities in non-academic settings is desirable, I must also express disquiet. The humanities are deeply flawed, which is precisely why advocates always pluck from an unmanageable corpus of thought, institutions, and values those virtues in agreement with their predispositions and remedies. The reader forewarned, I can now say that I myself am most comfortable with humanistic teaching that singles out those productions of history, philosophy, art, and literature that illuminate or ennoble the human condition but am not very comfortable with activities that further the well-being of particular disciplines because they rank as humanities in an inherited taxonomy. No subject is inherently humanistic. That label must be earned by engagement in circumstances involving difficult moral roles, impossible choices, and dilemmas. The sense of quiet struggle that elevates life and lends it dignity cannot be acquired on the cheap.

Seen in this way, it appears as if the "applied humanities" may be a leg up on the academicians.

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Engineers in the Social Order

Mechanics of the Middle Class. Work and Politics among American Engineers. ROBERT ZUSSMAN. University of California Press, Berkeley, 1985. viii, 269 pp. \$27.50.

This book analyzes the work, the career paths, the social position, and the political potential of American engineers, an occupational group that the author sees as prototypical of the middle levels both of industry and of our society. The book is based on six months of fieldwork in two companies, one a metalworking firm representative of "old" industry and the other the electronics division of a "new" high-tech business. The author observed engineers at work and interviewed 40 of them in each firm.

The argument of the book is unsurprising. The author frames a great deal of his discussion in refutation of earlier theories and speculations about the role of engineers in our social order. Although he signals early on his own suspicion of such ideas, he returns repeatedly to two notions. He argues that engineers, contrary to some fanta-

sies of the political left, have not become "proletarianized," that is suffered such a devaluation of skills or economic position that they identify with labor. Nor have they, as some social scientists have predicted, become "professionalized," that is developed a solidarity based on shared, self-conscious guardianship of applied science. Rather, the author finds engineers principally concerned with their own careers; whether in old industries or new, they have no particular loyalties either to specific organizations or to engineering itself. They respond, as do most other groups in big organizations, to the premiums that bureaucracy places on administrative skills. In short, most engineers want to become managers; as it happens, this is an ambition more likely to be fulfilled in positions requiring technical supervision rather than executive leadership. Thus, as a group, engineers are a poor bet to become the core of a "new working class" that might transform the American class structure; they are even less likely to emerge as the defenders of some sort of "higher rationality" of technological efficiency that might challenge the irrationalities of the profit-maximizing business ethos.

However, the author believes that engineers might represent a different, still emergent social phenomenon. Engineers try to compartmentalize work from life, adopting a nine-to-five orientation toward their jobs; yet they are distinctly middle-class, locked into generally stable, orderly careers. Zussman thus sees engineers as examples of a "working middle class." In such a view, the social consciousness and eventual political action of engineers and other middle-level groups is shaped not by their work but by

particular interests that touch their lives through their families or places of residence—like the quality of schools or property taxes. In closing, he suggests therefore a "moratorium on industrial anthropology" for those concerned with the "broader issues" of stratification and its social and political consequences. He feels that the "bounded world" of the plant cannot give us insight into the multiple social identities that the working class and, in particular, the middle levels form in their residential communities.

In my own view, few people seem able to escape "the long arm of the job," as Martin Meissner once put it, whatever public claims they make to the contrary. Bureaucratic work, in fact, shapes consciousness in decisive ways. Among other things, it regularizes people's experiences of time by engaging them on a daily basis in rational, socially approved purposive action; it brings them into daily proximity with and subordination to authority; it shapes their measures of prestige and overall social status; and, in the case of engineers and particularly of the managers they hope to become, it places a premium on a pervasively pragmatic habit of mind. Such aspects of consciousness seem scarcely unimportant for an understanding of social stratification, social integration, or eventual political action or passivity. Instead of fewer studies, we need, I think, more detailed, better-framed, and especially more imaginative analyses of how work shapes consciousness and the social world.

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Processes of Persuasion

Psychology and Deterrence. ROBERT JERVIS, RICHARD NED LEBOW, and JANICE GROSS STEIN, with PATRICK M. MORGAN and JACK L. SNYDER. Johns Hopkins University Press, Baltimore, 1986. xii, 271 pp. \$27.50. Perspectives on Security.

After 40 years of nuclear peace, it may be tempting to take deterrence for granted. Such optimism may be misplaced, despite the success we have enjoyed thus far and the deductive elegance of the "theory" that explains it. In this collection of essays, three political scientists marry psychology and history to argue that the standard version of deterrence theory is far too simple to be of much use as a predictive theory or policy tool. Worse still, their study suggests that

the traditional explanation for "how deterrence works" may be dangerously misleading if political leaders do not recognize its limitations.

As their title implies, the authors view deterrence as a psychological process; it is the act of persuading opponents not to take a specified action by threatening to punish them if they do. According to the classic deterrence model, the decision to challenge a deterrent threat is the result of a rational calculation: do the prospective gains outweigh the likely costs? Jervis begins by noting the obvious flaw in this conception: political leaders rarely make "rational" calculations. Information is usually ambiguous, decision makers lack the time necessary to survey all their options completely, and the