

Tom Dwyer: *Life and Death at Work*. New York, Plenum, 1991.

Workers are devoured by demons
Paracelsus
"De Res Metallica"
1546

The author analyzes the systematic production of industrial accidents, waste and other undesirable outputs as "a prism through which to view rationalization and modernization." Seveso, Bhopal, Flixborough, Chernobyl, and Three Mile Island evoke "images of massive destruction of civilian populations and the fear of things to come. Each was the result of an accident occurring in industry." But what is the basis for these accidents?

The starting point of this work is the premise that *accidents are produced by social relations of work*. This startling thesis challenges widely held assumptions about personal responsibility for accidents by individual workers (e.g., "human error" at Three Mile Island) and of the "irrationality of the victim" assumptions held by safety campaigns, workplace specialists and inspectors, and even by labor unions. Structural considerations are virtually ignored in accounts of industrial accidents, especially when reform measures are proposed in the aftermath of a tragedy. Dwyer's important contribution is the creation of a space for a general theory of industrial accidents.

The author's interest is also political — we are made to feel that "accidents" are not accidental. Some conclusions are "structural," based on macro and quantitative methods: important declines in accident rates are shown to be caused by reductions in working hours; technological changes may produce lower or higher rates of industrial accidents, depending on other factors. Other findings are "ethnographic." For example, supportive environments, in contrast to constraining ones, reduce the production of accidents. Also, worker knowledge of the workplace, refusal of financial incentives, and worker resistance to authoritarian policies mitigate the production of accidents.

Prior to the 20th century, industrial accidents were best represented by mining accidents; they directly hurt and killed workers, but not the outside population. The institution of accident compensation (the first step of modern welfare) served to buffer social tensions between capitalists and workers.

Dwyer's reconstruction of the modern notion of industrial accidents is a rare gem of historical research. Here he carefully outlines the relation between workers and nature. Collectively, miners "learned the smell of theoretically odorless firedamp or how to identify hidden strata and seams in the mine by tasting water." They developed a "sixth sense" with regard to safety — generating necessary knowledge, sharing and transmitting information, and consolidating "a sense of truth and justice" about their conditions and struggles.

Dwyer continues: the accident compensation process is inseparable from the breaking down of community and family by industrial societies and, with this, a change in the signification attached to death. Increasingly the workplace "began to be seen as producing death."

At the same time, death was made less visible. Sometimes, more resources have been wasted in the attempt to "suppress the technical sources of rare and spectacular disasters than in the less visible but eventually far more murderous non-disaster accidents."

Industrial death was produced invisibly by triumphant capitalism until the explosion of workers' movements during the late 1960s and 1970s in the U.S., Canada, Italy, France, Sweden, Australia, and even in developing countries like Brazil. The absence of safety practices became something that nobody wanted to be paid for. The compensation ideology was disrupted by new theories of "quality of life" and the critique of work environment.

Dwyer discusses health as a global question focusing his questions on the criteria that dominate the production of education and health. He criticizes the concepts of (capitalistic) rationality and progress embedded in those dominant criteria and looks forward to the creation of a new sociological school where the dialogue with different disciplines — engineering, medicine, psychology, ergonomics — can help us to discover new solutions and new limits, both theoretically and in terms of research.

The author questions extended work, the "second job." How does it affect the production and reproduction of the labor force? What emerges very clearly is that extended work, disorganization, and routine work are social relations that cause accidents. The workers pointed to "tiredness, boredom and poor maintenance," but also to the sense of pressure and the feeling of being pushed to produce. This

perception was dominated by the presence of "people standing over you."

Job rotation on the shopfloor is a ground battle — anybody who has been in such a work environment knows how controversial it is. On the one hand, workers correctly perceive that dull work routines produce accidents; on the other hand, job rotation is a solution which produces a feeling of powerlessness. Workers are left without personal control over the implementation of workplace changes.

Dwyer concludes that "whenever the workers develop a sense of truth and are knowledgeable of their task's dangers, they can decide to accept or reject them." In their choice, they choose also for the communities. As Perrow writes in *Normal Accidents*, where there is an impossibility of worker access to truth for those productive activities that expose the general public to catastrophic risks the industry should be abandoned — if there are low-cost alternatives (the example made is nuclear power and nuclear weapons). Where the benefits are not replaceable, restrictive measures should be taken to ensure workers' control. Here two processes look interesting to me (in the unlikely event capitalism considers abandoning nuclear power and weapons): on one side, there is the level of risk that we are asked to assume "rationally" in order to live in the world at present; on the other, the responsibility of the risk is shifted onto the worker's shoulder, not just individually but as a class. — **Laura Corradi**