Despite numerous insights into commodities and the market economy, the left historically has always embraced the industrial, energy-intensive system originally generated by private capitalism as a “progressive force” that would lay the basis for a free and abundant society. According to this schema, humanity has always lacked the technological basis for freedom that industrial capitalism, for all its negative aspects, would create. Once that basis was laid, a revolution would usher in communism (or a “post-scarcity” society) using many of the wonders of technology that were capitalism’s “progressive” legacy. Presently, capitalism has allegedly outlived its progressive role and now functions as a brake on genuine development. Hence it is the role of the left to rationalize, modernize, and ultimately humanize the industrial environment through socialization, collectivization and participatory management of mass technics. In fact, in societies where the bourgeois class was incapable of creating the basic structures of capitalism — urban-industrial-energy development, mass production of consumer goods, mass communications, state centralization, etc. — the left, through national revolution and state-managed economies, fulfilled the historic mission of the bourgeoisie.
In the leftist model (shared by Leninist and social democrat Marxists, as well as by anarcho-syndicalists and social ecologists), the real progressive promise of industrialization and mechanization is being thwarted by private capitalism and state socialism. But under the collective management of the workers, the industrial apparatus and the entire society can be administered safely and democratically. According to this view, present dangers and disasters do not flow from contradictions inherent in mass technics (a view considered to reflect the mistake of "technological determinism"), but rather from capitalist greed or bourgeois mismanagement — not from the "forces of production" (to use the Marxist terminology) but from the separate "relations of production".

The left, blinded by a focus on what are seen as purely economic relations, challenges only the forms and not the material, cultural and subjective content of modern industrialism. It fails to examine the view — one it shares with bourgeois liberalism — that human freedom is based necessarily on a material plentitude of goods and services. Parroting their profit, Marxists argue that the "appropriation" by the workers of the "instruments of production" represents "the development of a totality of capacities in the individuals themselves". Conquest of the "realm of necessity" (read: conquest of nature) will usher in the "realm of freedom". In this view, the material development of industrial society ("the productive forces") will make possible the abolition of the division of labor; "the domination of circumstances and chance over individuals" will be replaced by the "domination of individuals over chance and necessity". (Marx and Engels, "The German Ideology") Mastery of nature by means of workers’ councils and scientific management will put an end to oil spills. Thus, if mass technics confront the workers as an alien power, it is because the apparatus is controlled by the capitalist ruling class, not because such technics are themselves uncontrollable.

This ideology, accompanied usually by fantasies of global computer networks and the complete automation of all onerous tasks
machines making machines making machines to strip mine the coal and drill the oil and manufacture the plastics, etc.), cannot understand either the necessity for strict and vast compartmentalization of tasks and expertise, or the resulting social capacity and stratification and the impossibility of making coherent decisions in such a context. Unforeseen consequences, be they local or global, social or ecological, are discounted along with inevitable errors, miscalculations, and disasters. Technological decisions implying massive intervention into nature are treated as mere logic problems or technological puzzles which workers can solve through their computer networks.

Such a view, rooted in the 19th century technological and scientific optimism that the workers’ movement shared with the bourgeois, does not recognize the matrix of forces that has now come to characterize modern civilization — the convergence of commodity relations, urbanization and mass technics, along with the rise of interlocking, rival nuclear-cybernetic states into a global mega-machine. Technology is not an isolated project, or even an accumulation of technical knowledge, that is determined by a somehow separate and more fundamental sphere of “social relations”. Mass technics have become, in the words of Langdon Winner, “structures whose conditions of operation demand the restructuring of their environments” (Autonomous Technology, 1977), and thus of the very social relations that brought them about.

Mass technics — a product of earlier forms and archaic hierarchies — have now outgrown the conditions that endangered them, taking on an autonomous life (though overlapping with and never completely nullifying these earlier forms). They furnish, or have become, a kind of total environment and social system, both in their general and individual, subjective aspects. For the most part, the left never grasped Marx’s acute insight that as human beings express there lives, so they themselves are. When the “means of production” are in actuality interlocking elements of a dangerously complex, interdependent global system, made up not only of tech-
nological apparatus and human operatives as working parts in that apparatus, but of forms of culture and communication and even the landscape itself, it makes no sense to speak of “relations of production” as a separate sphere.

In such a mechanized pyramid, in which instrumental relations and social relations are one and the same, accidents are endemic. No risk analysis can predict or avoid them all, or their consequences, which will become increasingly great and far-reaching. Workers councils will be no more able to avert accidents than the regulatory reforms proposed by liberal environmentalists and the social-democratic left, unless their central task is to begin immediately to dismantle the machine altogether.

The left also fails to recognize what is in a sense a deeper problem for those desiring revolutionary change, that of the cultural context and content of mass society — the addiction to capitalist-defined “comforts” and a vision of material plenitude that are so destructive ecologically. The result is an incapability to confront not just the ruling class, but the grid itself — on the land, in society, in the character of each person — of mass technics, mass mobility, mass pseudo-communications, mass energy-use, mass consumption of mass-produced goods.

As Jacques Ellul writes in “The Technological Society” (1980), “it is the technological coherence that now makes up the social coherence... Technology is in itself not only a means, but a universe of means — in the original sense of Universum: both exclusive and total”. This universe degrades and colonizes the social and natural world, making their dwindling vestiges ever more perilously dependent on the technological that has supplanted them. The ecological implications are evident. As Ellul argues, “Technology can become an environment only if the old environment stops being one. But that implies destructuring it to such an extreme that nothing is left of it”. We are obviously reaching that point, as capital begins to pose its ultimate technology, bioengineering and the illusion of total biological control, as the only solution to the ecological crisis it has created. Thus, the important insights that come from a class analysis are incomplete. It won’t be enough to get rid of the rulers who have turned the earth into a company town; a way of life must end and an entirely new, post-industrial culture must also emerge.