'The energy war has begun'

La Guerre de l'énergie est commencée
by Lionel Taccoen
Paris: Flammarion, 1978
305 pp.

There are a number of true and important statements in this book, which was written for a broad audience by the director of an energy information center affiliated with the giant state utility Electricité de France. Taccoen insists that the underdeveloped countries are "too poor to forego nuclear energy," in the book, whose title in English means "The Energy War Has Begun." They cannot afford enough oil at current prices. Extraction and distribution of coal is too expensive, and hydropower can meet only a fraction of their needs. For lack of energy sources for industry, the "famine chain" begins: deforestation and use of dung for fuel leads to erosion, lack of fertilizer, drought, starvation, and epidemics.

The danger of nuclear arms proliferation, Taccoen says, is not a question of materials, and should not obstruct Third World civil nuclear power. Furthermore, Europe should stop acting "hypnotized" by Third World trade competition and adapt to the potential markets in that sector. To meet the advanced sector's own energy needs, giant long-term investment must be mobilized—for example, to develop international liquefied natural gas transport networks—and this above all requires elimination of military tensions.

But the principles and the concrete policy measures implied by these observations are, throughout the book, undercut or contradicted outright. Taccoen is not a partisan of nuclear and hydrocarbon development because they provide the energy volume and intensity required for world industrial growth. On the contrary, he sees nuclear fission as an adjunct to energy conservation—and energy conservation as a dictate of the slow-growth world he advocates, supplanting "naive faith in technology" in the advanced sector and a Third World with currently "too many children and not enough ancestors."

Taccoen argues that we are not in an energy crisis: the post-1973 world scarcity of affordable fuel is the normal state of affairs. The era of cheap, abundant oil and the "blind revolution of oil-primed growth" if allowed constituted "an extraordinary fluke." The environmentalist movement represents no conspiracy, he says, but a "powerful and sincere" demand for a society with "a human face": environmentalism has the great merit, exemplified by the Friends of the Earth, of posing the necessity for conservation of resources.

The point is not simply that with friends like Taccoen it would appear the partisans of nuclear power need few enemies. What the book expresses and exploits is a pervasive continental European mentality that feeds the cowardice exhibited in the persistent European endorsement of James Schlesinger's U.S. energy policies by the French and West German governments. For that mentality there is a fixed universe, and Europe got a rotten piece of it in terms of raw materials and indigenous fuel sources. Therefore Europe must cut back to survive; therefore Raymond Barre must be allowed to proceed with austerity and rationalization in France; therefore the antigrowth Jusos (Willy Brandt's Young Social Democrats) must be welcomed as a legitimate element in West German political life.

"Leave some for the others"

Taccoen deplores Japanese nuclear power cutbacks because they will increase "the crowd at the Mideast wells" and impel Japan to grab more Mideast industrial contracts away from France to cover its balance of payments. The same is true of less-developed countries whose workers slave to pay national oil bills and undersell French manufactured exports. As for the United States, "from a strictly European point of view"

it should switch to a coal-based economy, since an all-out U.S. nuclear commitment would squeeze world uranium markets!

By the same token, the virtue of developing a full fast-breeder, waste retreatment nuclear cycle in France does not lie in economic expansion—Taccoen insists that France will not and should never again experience a period of rapid growth—but in the enhancement of French "independence." At the same time solar power, wind and water mills have "a role to play" in ensuring that not only the nation but individual villages and buildings have "autonomy" from the breakdowns threatened by central power grids.

On the international level, Taccoen concludes that the "population explosion" is an act of defiance by the oppressed, who will insist on industrializing; but they can never reach the U.S. level of living standards, and the best hope that "Westerners" can disabuse the less-developed countries of this aim is the current disunity among the latter. The North-South dialogue is futile; what is needed are "strong international organizatons" to control multinational corporations and promote redistribution of fuel to the poorest, while the Arabs properly cut back their total production.

This perspective not only inverts Taccoen's call for cooperative long-term investment, but belies his introductory comments on energy applications. There, he views industrial output gains as an exponent, not a one-to-one function, of energy consumption, given the right kind of energy: "From earning a doctorate in thermodynamics, I recall that different forms of energy have very different values. With one glass of water at 60 C. two glasses at 30 can easily be made. The reverse is difficult. How to explain to the starving inhabitants of the Sahel that the calories they receive from the sun on their poor carcasses are mathematically equivalent to those contained in a good steak?" The introduction goes on to summarize the benefits of French postwar mechanization of agriculture, including the transformation of the peasant labor force.

But for the future, entropy is the thermodynamic principle. The book tallies available world energy resources in the year 2000, including 4.5 billion tons of oil, coal equivalent to 3.6 billion, nuclear 1.5 billion, gas, 3 billion, hydropower, 1 billion, and "alternative energies," .5 billion. The total proves that "the energy future is going to be disagreeable." This superficially adjusted projection from 1977 involves no real analysis of possible investment strategies—including crash international development of Siberian resources—or differential returns on investment in various energy sources. Thermonuclear fusion power is mentioned in a single paragraph which blandly states that fusion will be unfeasible before 2000, period; this compares with prolonged examination of such options as introducing solar power to the grey northeast of France.

It should not be necessary to spell out the fact that transfer of nuclear technology to the Third World is incompatible with austerity and "conservation" in the advanced sector, or that the autarkic economics mooted by Taccoen are on NATO's blueprints for war. It should not be necessary to state that the alternative to accelerating the rate of technological advances which permits increasing rates of tangible social surplus is not a nice, clean "steady state," but genocidal breakdown. Since this effort is, however, urgently necessary, the European Labor Parties' electoral campaigns for the Strasbourg European Parliamentary elections are starting to make it into the stuff of continental politics. The energy war—which is essentially the battle for universal reason against Taccoen's Malthusian scramble—has begun in earnest.

Would de Gaulle have countenanced chatter about "productivism," "hierarchization," and "basic needs" issuing from what ought to serve as a major French center for mass education? Whether M. Taccoen himself should be spanked, tutored, or charged with abetting "sincere" terrorist attacks against nuclear advocates and installations is one question. The larger question is when the European Monetary System founders will join in mobilizing a population eager enough to rid itself of the half-a-loaf, centimes-in-the-heater outlook and bring in a scientific age.

—Susan Johnson