Technological events are hard enough to predict, but political events are the very devil. "The dominant feature of international politics during this period," wrote Harvard's Samuel P. Huntington of the period from 1965 to 2000, "was the expansion of the power of the United States.... Future historians will, I think, view the Soviet Union, China and the United States as expansionist powers during this period, but they will view the U.S. as a highly successful expansionist power and the other two as frustrated expansionist powers." MIT political scientist Ithiel de Sola Pool, in a prediction

*"Toward the year 2000: work in progress," Daedaulus (summer 1967).

that has another 12 months to run, predicted in 1965 that "Around 1980, there will be a major political crisis in the Soviet Union, marked by large scale strikes, the publication of dissident periodicals... and an open clash between major sectors of the bureaucracy over questions of military policy and consumer goods." The same essay, however, also foresaw that "major fighting in Vietnam will peter out about 1967" and that Lyndon Johnson would be reelected in 1968.

A major development of the 1970's was the women's liberation movement. Which sociologists predicted that? One who did not was Harvard's David Ries-

man, who wrote in 1965: "For young women, the floor under their fall may be higher even though the ceiling over their rise is lower than that for men. For, to some extent, young women live within an enclave where even in the year 2000 it may be more damaging to be thought homely or lacking in sex appeal than to be stupid. . . . Their standing will still depend at least as much on the men to whom they attach themselves as on their own accomplishments in meritocratic terms."

Prediction, according to the delicate Chinese proverb, is very difficult—especially with regard to the future.

-NICHOLAS WADE

Trade Bans Are Hard Weapons to Use

Trade, being by nature of mutual benefit, is hard to turn into a weapon. However much grief the grain and high technology embargoes announced by President Carter on 4 January may cause the Soviet Union, there will also be a certain price to pay by the United States.

The essence of the Administration's game plan on the grain embargo is for the government to buy the 17 million tons denied to the Russians, at a cost of some \$2.2 billion, and to convert some or most of it into gasohol-ready ethanol. The production of ethanol will save oil imports and help get the grain out of the storage bins, where otherwise it would act as a permanent future dampener on farmers' prices.

The plan, which has yet to be described in detail, sounds fine in theory, but in practice there will be serious problems. Most existing distillery capacity in the United States has already been drawn into production by the 1978 federal tax exemption for gasohol. Building a new distillery seems to take at least two years and around \$50 million per plant. The government may seek to encourage investment in new plants by offering its corn, purchased at some \$2.50 a bushel, at peppercorn terms. But what will the new distillery owners do for feedstock when the government's cheap grain is used up? Further incentives, paid for by the taxpayer, will quite probably be needed to keep the new distilleries in business, especially if the Russians come back into the grain market in future years.

Another long range consequence of creating a gasohol distillery business concerns the economic impact of its by-products. The distillation process takes only the starch from the corn, leaving the protein to be sold in the form of a feed known as distillers dried grains. If large amounts of distillers dried grains enter the feed market from gasohol distilleries, they may drive out or depress the price of soybeans. Farmers who at present grow both soybeans and corn as a price hedge against falls in the price of either may be constrained to rely only on corn.

The embargoed grain amounts to some 4 percent of total Soviet needs. Since other grain exporting countries seem likely to respect the American embargo, the Soviet Union may not be able to find other suppliers. The grains were intended for animal feed; without them, livestock herds

will have to be reduced, and Russian consumers will have less meat to eat.

The details of the high technology embargo have also yet to be worked out. Whether or not the embargo has bite will depend heavily on the cooperation of Japan and the other western suppliers of high technology. As McGeorge Bundy observed to the Senate Banking Committee in November, "Our position is particularly unimportant in the field of high technology products; in 1977 our exports of such products to the U.S.S.R. amounted to less than 10 percent of such exports from the 'industrialized world'—we rank well behind West Germany, Japan and France."

"The capitalistic economy," Lenin observed, "plants the seeds of its own destruction in that it diffuses technology and industry, thereby undermining its own position." American governments have in general been so heedful of Lenin's dictum that high technology trade with the Soviet Union has been tightly controlled. Of about \$700 million of nonagricultural products exported to the Soviet Union in 1978, less than \$200 million involves products that could be classified as high technology. When political winds blow chilly and the Administration of the day seeks to punish the Russians, the trade stick is often found to be too short to make an effective weapon.

The picture may be different if other countries see their interest as lying in joining the high technology embargo. A framework for such collective action exists in the shadowy entity known as COCOM, the Coordinating Committee on East-West Trade. Its members are NATO countries, minus Iceland and plus Japan; it holds weekly meetings in Paris to pass or veto applications to sell items of strategic significance to the Eastern bloc.

COCOM "remains a viable, albeit imperfect organization," notes the Office of Technology Assessment in its recent report *Technology and East-West Trade*. The United States, if it could persuade its allies to extend and strengthen the COCOM list of controlled items, might well succeed in presenting the Soviet Union with the perceived threat of at least a serious inconvenience factor. Without such cooperation, the embargo may be of little significance to the Russians, who seem already to have made the United States a supplier of last resort against this very eventuality.—NICHOLAS WADE