out. When a liberal democracy goes to war, he points out, it is likely to call the enemy's democratic standing into question. That happened when democratic England and France went to war in 1914 against a Germany that had seemed to some American scholars "the very model of a modern democratic state," but now "turned out not to be a democracy of the right kind," at least in British, French, and American eyes. At other times, democracies wage war in the name of democracy, as America did, for instance, in Vietnam. The spread of democracy, Waltz says, may not mean "a net decrease in the amount of war in the world."

Economic interdependence? It promotes war as well as peace, Waltz observes. Increased contacts can produce conflicts as well as mutual understanding. In any event, he says, interdependence is overrated. "Interdependence within modern states is much closer than it is across states," yet, for instance, it did not prevent the disintegration of the Soviet Union.

International institutions also remain relatively unimportant, Waltz says, having little effect independent of the states that found

and sustain them. Some analysts point to the North Atlantic Treaty Organization (NATO), which has survived the disappearance of its original Cold War purpose, as evidence of independent life in such institutions. In fact, contends Waltz, "the ability of the United States to extend the life of a moribund institution nicely illustrates how international institutions are created and maintained by stronger states to serve their perceived or misperceived interests." (For domestic political reasons, he says, the Clinton administration pressed for NATO expansion, even though that unwisely "pushes Russia toward China instead of drawing Russia toward Europe and America.")

Despite claims that realism is dead, Waltz concludes, "the world . . . has not been transformed; the structure of international politics has simply been remade by the disappearance of the Soviet Union, and for a time we will live with unipolarity." Realists know that "in international politics, overwhelming power repels and leads others to try to balance against it." That is already happening in Asia, he says. The American effort "to keep the world unipolar is doomed."

## Spreading Sunshine

"Will Globalization Make You Happy?" by Robert Wright, in Foreign Policy (Sept.—Oct. 2000), Carnegie Endowment for International Peace, 1779 Massachusetts Ave., N.W., Washington, D.C. 20036.

Thanks to globalization, many of the world's have-nots are smiling a lot more these days, argues Wright, a visiting scholar at the University of Pennsylvania and the author of Nonzero: The Logic of Human Destiny (2000), and he has the scientific assays of global sunshine to prove it.

"Psychologists have gone to dozens of nations, rich and poor, and asked people how satisfied they are with their lives," he explains. The results indicate "a clear connection between a nation's per capita gross domestic product (GDP) and the average happiness of its citizens"—but only up to the point where GDP per capita reaches about \$10,000 a year. That's about where Greece, Portugal, and South Korea are today.

Money evidently *can* buy happiness, when poor people can turn their increased income into a fairly comfortable standard of living,

with improved diets, medical care, and shelter, and perhaps even more political freedom—but after that, the happiness payoff rapidly vanishes. Above the \$10,000 per capita level, "additional dollars don't seem to cheer up nations," says Wright, "and national differences in happiness hinge on the intangibles of culture" (which, for instance, make the Irish, though less wealthy, significantly happier than the Germans, the Japanese, and the British).

Not only does rising national income fail to make rich nations happier, says Wright, but even as their average level of happiness stays the same, "the small fraction" suffering from chronic depression and other serious mental illnesses expands. Globalization, in short, seems "good for the poor and, if anything, bad for the rich."

Of course, globalization has its discontents, but Wright insists that growing poverty among poor nations is not one of them. Although some poor nations "have shown alarming stagnation," Wright says, "the economic output of the average poor nation has grown in recent decades."

While the *gap* between the richest and poorest nations has increased, globalization is not to blame, he says. The most stubbornly poor nations, as in sub-Saharan Africa, seem "underglobalized." Those nations "most thoroughly plugged into the global market system," as in East and Southeast Asia, have grown the fastest. They haven't left their poorer citizens behind, either, says Wright, citing a recent study by World Bank economists, who

"found that, as national income grew, the fraction of the economic pie going to the bottom fifth of the income scale didn't shrink."

Still, Wright concedes, rapid modernization may be having a disorienting effect in developing nations, perhaps "neutraliz[ing] much of



The same globalization that made protesters in Seattle mad may make poor people in developing nations happier.

the happiness brought by growing income." That, he says, might be an additional argument for worthwhile policies—e.g., environmental and labor provisions in trade agreements—that have the side effect of slowing globalization down a little.

## ECONOMICS, LABOR & BUSINESS

## The Diesel Revolution

A Survey of Recent Articles

Future historians of our time may find it odd that, as Maury Klein, a professor of history at the University of Rhode Island, notes, scholars in recent decades have expended more effort assaying the social significance of TV's *Brady Bunch* than they have illuminating the great impact that the diesel locomotive had on railroading and American life. Klein and his colleagues try to rectify that imbalance in this special issue of *Railroad History* devoted to "the machine that saved the railroads."

Rudolf Diesel (1858–1913), the Parisianborn German engineer who gave the machine his name, never built more than a few crude prototypes. "The consensus is that his science was ahead of his engineering: he had to cope with poor metal and crude manufacturing that did not keep pace with his ideas," writes Mark Reutter, editor of Railroad History, which is published by the Railway & Locomotive Historical Society, with editorial offices at the University of Illinois. But Diesel's ideas — first advanced in an 1893 manifesto, Theory and Construction of a Railroad Heat Engine-eventually proved revolutionary. With the steam engine then at the height of its influence, he pointed out how extremely inefficient it was, losing most of its fuel's heat energy up the stack. He developed a theory of internal combustion, in which the fuel would be mixed and ignited in the same vessel that moved the piston-resulting in a much more efficient engine. His test engines attracted international attention in 1898; St. Louis beer baron Adolphus Busch paid him about \$240,000 for exclusive U.S. and Canadian rights.

But to provide high thermal efficiency,