remains the number one cause of death in the United States.)

Litwak, a professor of cardiothoracic surgery at Mount Sinai Medical Center in New York, is careful to note that the machine's makers stood on the shoulders of others. Still, the efforts of Leland C. Clark, head of the biochemistry department at Antioch College's Fels research institute, and physician-investigator Frank Gollan were seminal: Much of their "technical and conceptual" work "is being used today."

The basic task of a heart-lung machine is to oxygenate and circulate the patient's blood while the heart is stopped during surgery. The design that Clark and Gollan pioneered, the "bubble oxygenator," called for exposing the patient's venous blood to oxygen forced under pressure through a porous disk. But the process created bubbles that had to be eliminated before the blood could be returned to the patient's body, a problem that defied solution. A key to Clark and Gollan's success was their decision to pass the oxygenated blood through a chamber containing glass beads coated with a new "defoaming" resin created by Dow Corning Laboratories. The first use of such a machine came in 1953. Only 14 years later, Christiaan Barnard, a U.S.-trained physician in South Africa, performed the first human heart transplant.

A second feature of heart-lung machines is their ability to cool the body and reduce its need (especially the brain's need) for oxygen. Normal body temperature is 37.5° C; most ordinary bypass operations are conducted at a body temperature of 30–32° C, but more serious procedures, such as the replacement of the aortic arch, can require temperatures down to 12° C. Surgeons had resorted, without much success, to ice packs and other techniques; Clark helped pioneer methods that allowed heart-lung machines to pass the blood through a heat exchanger, similar in concept to a car radiator (the first one actually was built by a manufacturer of auto radiators).

For all the tedious labor of research, great passions were at work. Addressing a new generation of heart researchers, Gollan once quoted the 1859 words of Antioch College president Horace Mann: "Be ashamed to die until you have won some victory for humanity."

Arts & Letters

The All-American Con Man

"Being Claude Dukenfield: W. C. Fields and the American Dream" by Paul A. Cantor, in *Perspectives on Political Science* (Spring 2002), 1319 18th St., N.W., Washington, D.C. 20036–1802.

Some people consider William Claude Dukenfield Hollywood's all-time greatest con man. But the man we know as W. C. Fields (1880–1946) would have taken that as a compliment. "He loved to cast a spell over an audience," says Cantor, an English professor at the University of Virginia, but he "took equal delight in exposing his own magic as a fraud." It was this peculiar mix of illusion and disillusion that allowed Fields to make the often difficult transition from his early days as a vaudeville juggler and comedian, through a successful middle period with the Ziegfeld Follies, and, finally, to modest success in the movie business with a string of hits in the 1930s and '40s.

He was, in a sense, the first postmodernist. In Cantor's view, "the construction of identity is the principle that unites Fields the man and Fields the artist." His onscreen persona was "basically the all-American con man, part carnival barker, part patent medicine salesman, part circus showman, part cardsharp, and part stockbroker." This gave his comedy "a distinctly dark side," says Cantor, and may also explain why he never matched the success of Buster Keaton or Charlie Chaplin. Unlike those other comedians, Fields "never developed a truly cinematic imagination," and many of his movies "feel as if they are merely filmed versions of stage plays"—though, to be fair, he never had the creative control that, for instance, Chaplin enjoyed.

Films such as *The Fatal Glass of Beer* (1932) and *The Bank Dick* (1940) still afforded the comedian delicious opportunities to

lampoon America's absurdities. In *The Fatal Glass of Beer*, Fields—whose reputation as a notorious drinker was exaggerated—struck back at the Prohibition-era "demonizing of rum, beer, and other alcoholic beverages." The wild plot of *The Bank Dick* at one point lands Fields's character in the director's chair on a movie set, where he deadpans: "We've got a 36-hour schedule and a stinko script . . . and it opens in this very town the day after tomorrow."

The wisecrack reveals how Fields never fully embraced the movie medium. Already in his fifties when he moved to Hollywood, he remained suspicious of its rags-to-riches promises, and his films "debunked a variety of incarnations of the American Dream" even as he lived it. That wasn't his only paradox, Cantor concludes: It was "ironically the very medium whose reality he questioned—the motion picture," that "allowed him to create images of himself that have fixed him in the public eye forever."

W. C. Fields spent his entire show business career, from stage to screen, perfecting his role of consummate con man.

EXCERPT

The Bearable Lightness of Exile

Being overseas isn't only nonrestricting, it's actually stimulating. Maybe stimulation comes from restrictions. It's possible. [But] when I look back now on the pieces I wrote in China, I find so much that could be changed, such as an impure use of language, or an awareness of language that just isn't strong enough. . . .

When other factors no longer exist, you're left facing only your language. I'd say a writer has a responsibility only to his language; he is not responsible for the "motherland" or the "people." A writer not only becomes removed from the social environment of his original language, he is also removed from his readers and essentially ends up in a state of "absolute separation." When you're only responsible for language, your demands on language are far more rigorous. . . .

Leaving a society and readers makes writing lose all its practical significance. If you still want to write, it has to be purely for yourself. It's extremely valuable to maintain that pleasure and luxury for yourself, and that, naturally, places great importance on it. So your approach towards language becomes an ever more onerous burden. That's the positive side of "exile"; I'd even say it doesn't have much of a negative side.

—Gao Xingjian, the Nobel laureate for literature in 2000, who was exiled from China in the late 1980s, in an interview in *Index on Censorship* (No.3, 2002)