ious gases (such as sulfur oxide and carbon monoxide) that contribute to acid rain and global warming, burning coal releases mildly radioactive elements, including uranium. Were U.S. coal plants subjected to the same safeguards and restrictions on radioactive emissions as nuclear utilities are, Rhodes and Beller say, "coal electricity would no longer be cheaper."

Renewable energy sources also result in "significant, if usually unacknowledged" harm to the environment, the authors say. Making photovoltaic cells for solar collection, for example, produces highly toxic waste metals and solvents. A 1,000-megawatt-electric solar electric plant, over a 30-year lifetime, would generate 6,850 metric tons of hazardous waste from metals processing alone.

"Natural gas has many virtues as a fuel compared [with] coal or oil, and its [22 percent] share of the world's energy will assuredly grow," write the authors. But supply is limited, and it pollutes the air.

"The great advantage of nuclear power," Rhodes and Beller aver, "is its ability to wrest enormous energy from a small volume of fuel." One metric ton of nuclear fuel produces as much energy as two to three million metric tons of fossil fuel—and with less danger to the environment. Unlike fossil fuel plants, nuclear power plants release no noxious gases or other pollutants into the environment.

As for the radioactive nuclear waste, Rhodes and Beller say that the risk from *low-level* radioactive waste is negligible, while the relatively small volume of *high-level* radioactive waste "can be meticulously sequestered behind multiple barriers."

Unlike coal's toxic waste, which stays toxic, Rhodes and Beller write, the radioactive nuclear waste "decays steadily, losing 99 percent of its toxicity after 600 years—well within the range of human experience with custody and maintenance, as evidenced by structures such as the Roman Pantheon and Notre Dame Cathedral."

ARTS & LETTERS

The Culture Totem

"What We Talk about When We Talk about Culture" by Matthew Greenfield, in *Raritan* (Fall 1999), Rutgers Univ., 31 Mine St., New Brunswick, N.J. 08903.

For many in the tribe of literary critics, cultural studies is now the rage. The very word culture has taken on high totemic status, with "an almost magical power to confer authority and assuage anxiety," notes Greenfield, an English instructor at Bowdoin College, in Brunswick, Maine. "Merely to pronounce the word expands the territory of literary criticism," at the same time warding off doubts about the field's basic worth. It lets English professors venture into far-flung areas to take up subjects such as the "intertextuality" of rock 'n' roll or the history of images of physical disability. Universities, academic disciplines, and even campus bookstores have been busily rearranging themselves to show proper obeisance. Meanwhile, contends Greenfield, culture's intellectual day may be passing.

The concept of culture invariably shifts the focus away from "the agency and intention of individuals and toward the mapping of larger structures," he notes. Borrowing the concept from anthropology, literary critics often employ a "simplified, distorted, or undertheorized version" of it, with the vagueness quite possibly only enhancing its "tremendous authority" in the field. Literary critics see *culture* as collective "games," as collective "performances," or, most commonly, as like a "text"—and therefore susceptible to literary interpretation.

But as critics shift their focus away from individual writers, toward "larger cultural systems," they run into difficulties, Greenfield says. One is how to explain historical change, in Marxist or other terms, when the cultural theories presume a "culture" with a coherent function or structure that is static or at least resistant to change.

Second, he says, the concept of culture is at odds with literary critics' current conviction that "the borders drawn around" nations and other communities are "ideological fictions." To speak of "'early modern English culture,'" for instance, Greenfield says, is to treat "a political phantasm as if it were a fact," and to slight the various "groups, classes, and regions" on which the nationalist fiction is imposed.

"The third objection to the culture concept," writes Greenfield, "is that it leads investigation toward abstract generalizations and away from the insights, choices, and idiosyncrasies of individuals." It's not enough to describe cultural "tool kits," he maintains. Critics must tell "how the tools are used by individuals."

Ironically, as literary critics have turned to anthropology for ideas and (as they hope) the prestige of science, many anthropologists, Greenfield observes, have been moving away from science and remaking their discipline "in the image of literary criticism—as an interpretive practice."

Prominent anthropologists, he says, now suggest that the concept of culture "may have outlived its usefulness." Many, conscious of how imperialist powers and other outside forces have influenced the supposedly isolated, coherent, and stable "cultures," have begun, he says, "to accuse themselves of a blindness to politics that amounts to a complicity" with European colonialism.

Although elsewhere in academe, the prestige of "culture" seems still on the rise, this is deceptive, Greenfield suggests. More and more literary critics will find out, as the anthropologists have, that the concept "no longer does the work that [they] want it to."

In Deepest Beethoven

"The Sublime Beethoven" by Dmitri Tymoczko, in *Boston Review* (Dec. 1999–Jan. 2000), E53-407, Massachusetts Institute of Technology, Cambridge, Mass. 02139.

Ludwig van Beethoven (1770–1827) moved music far beyond the beautiful, into "the sphere of the Sublime," declared com-

poser Richard Wagner on the 100th anniversary of Beethoven's birth. But what precisely makes his music sublime? asks Tymoczko, a doctoral student in music composition at the University of California, Berkeley.

"Is it that we are simply overwhelmed by Beethoven's musicianship, the way that we are dazzled by Michael Jordan's athleticism? Or is it the music's passionate emotional content, the way it seems to access our darkest or most powerful feelings? . . . Is it the way Beethoven crosses boundaries, daring to do things--repeating a single melodic figure a dozen or more times, or writing 20-minute sonata movements-that, we imagined, no right-minded composer would ever think of doing? Or is it more a matter of content: the way the audacity seems to be spiritually motivated. . . ?"

As "a catch-all term for Beethoven's ferocity," *sublimity* can refer to all of the above, Tymoczko says. However, Wagner



Beethoven at the piano