Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters. By Kate Brown. Oxford: Oxford University Press, 2013. x, 406 pp. Notes. Index. Photographs. Maps. $27.95, hard bound.

In this passionately written comparative study of the American and Soviet plutonium-producing cities—Richland, the residential community associated with the reactors at Hanford, Washington, in the Pacific Northwest, and Ozersk, off the map but located in the Urals between Cheliabinsk and Ekaterinburg (Sverdlovsk that was)—Kate Brown argues that these towns served as templates for planned communities in which consumerism and state-subsidized corporatism anesthetized a working class while unconscionably poisoning them with radioactivity. It is a big argument and it sweeps across the entire nuclear age—from the early 1940s to the present—in forty-three short chapters that shuttle between the two superpowers. Her double narrative draws from archival repositories, the vast published primary and secondary literature on both the nuclear archipelagos and radiation medicine, and interviews with residents (and former residents) of both sites.

One can read Brown's presentation as twin rise-and-fall narratives. Both sites were selected by military officials with a brief for secrecy, deliberately placed near water but far from any other urban area where spies might disrupt the work. Construction in such remote sites would have been difficult under ordinary circumstances. In these cases, however, it was exacerbated by limited materials—linked to the war for the Americans and postwar reconstruction for the Soviets—and scarce labor. Brown argues that the labor shortages on both sides were manufactured by political decisions derived from blatant racism or worries about political "reliability." When the reactors went online and the fences went up, Soviet and American nuclear officials confronted a different kind of labor problem, namely how to keep people there. The answer in both cases, according to Brown, was bribery: "As the Cold War promises of affluence, upward mobility, and the freedom to consume materialized in plutopia, anxious residents gradually came to trust their leaders, the safety of their plants, and the rightness of their national cause. As plutopia matured, residents gave up their civil and biological rights for consumer rights" (5). So much for the "rise."

The "fall" that ensues is inexpressibly depressing. Serene landscapes turned into environmental disasters of unprecedented severity as fission byproducts, reactor effluent, and deliberate contamination leached into the soil and groundwater. (In the case of the notorious "Green Run," Hanford spewed isotopes to the winds just to see what would happen.) Brown spares no detail in recounting the cases of birth defects, cognitive impairments, cancers, and ecological disruption. Here, however, the twinned stories diverge. Hanford was a slow-motion disaster, transforming a wasteland of scrub and brush into the nation's largest Superfund site—which, ironically, is now experiencing a second boom as the cash to produce the fuel for nuclear warheads has been replaced by an influx of funds to clean up after them. Ozersk was just as, if

not more, polluted in the slow-motion sense—witness the horror of the Techa River and the surrounding hamlets that were evacuated from its mephitic watershed. But it was also the site of the most devastating nuclear accident in history: the "Kyshtym Belch," during which a nuclear waste dump went critical with vastly worse consequences than the much more well-known meltdown at the Chernobyl′ Nuclear Power Plant in 1986. As to whether Ozersk is experiencing a second boom, it is hard to know; Brown was not permitted to visit the site and few besides some courageous activists were willing to talk to her about the inner workings of the city (and they were not interested in telling boomtown tales). Antinuclear and public-health activists pop up with greater frequency as the book progresses, and their interviews with Brown comprise ever more of her evidentiary base.

At *Plutopia*'s best, that evidence is substantial, and Brown is especially insightful in her account of Ozersk, which has been strikingly absent from the historiography of the global nuclear complex, subsisting as it does under three penumbrae of scholarly neglect: the Soviet complex is less studied than the American; the humdrum manufacture of nuclear fuel is often sidelined by the glamour of weapons production; and the very secrecy that makes Ozersk so special inhibits historians' inquiries. Particularly interesting is her inversion of the standard equation of secret military cities with the gulag. Yes, says Brown, the Soviets were forced by necessity to rely on the slave labor of the prison empire and to deploy gulag methods in constructing the site, but we should build on recent historiography to understand what that meant. Ozersk, in its early stages, was a chaotic mess, with convict bosses, "bronze-age" tools, and transient labor (this porosity of the zone is ironic, given the project's supposed secrecy). "In short," says Brown, "the Gulag branded the Soviet nuclear project with its shabby, infectious disorder, with insubordination, violence, theft, and inefficiency. In its particular way, the Gulag imprinted the Soviet plutonium project, dooming it to a future of calamity" (96). For the story of Hanford, Brown keeps her focus tight, drawing from regional repositories as well as the excellent scholarship produced in recent years by Bruce Hevly and other historians in Washington state. This helpfully emphasizes local actors, but has the side effect of ignoring extensive uncertainties raised within the decidedly non-monolithic Atomic Energy Commission in the other Washington.

The acid test of comparative history is whether one learns more from the juxtaposition of two stories than from treating each separately. To be sure, Brown shows us resemblances, but there are different types of resemblances. Consider the whale's flipper. It is similar to a shark's fin because the selective pressures of the marine environment have engineered an efficient means of navigating through water; biologists call this *analogy*. The whale's fin also resembles the human hand, possessing a similar bone structure that bespeaks our common mammalian heritage; this is *homology*. The question is whether the similarities between Ozersk and Hanford are analogous or homologous.

Brown wants it to be the latter: the two sites "shared common features, which transcended political ideology and national culture and were derived from nuclear security, atomic intelligence, and radioactive hazards" (8). True, plenty of intelligence was leaked to the Soviets via espionage, but that mate-

rial concerned the reactors, not the structure of the later towns. The Soviets eventually purged Ozersk of most of its gulag elements, but Brown offers no concrete evidence that this was done in order to replicate the bourgeois respectability of Richland, Hanford's model village. She instead relies on what others have dubbed the *nuclearity* of the sites: the pressures of secrecy, the presence of hazardous materials, and the lure of shallow consumerism drove both sites to mutual resemblance. But this is analogy, not homology. In fact, it is possibly even less than that. The problem with analogy is that it only works as an explanation if you get the comparative environments right. The Soviets routinely used dachas and plentiful products as rewards for elites, so there is nothing necessarily "nuclear" about their turn to this ready-to-hand solution to stabilize unrest at Ozersk. Likewise, American planned communities hardly started with Richland. Company towns built by mining concerns, chemical plants, and even the Tennessee Valley Authority provided obvious templates for DuPont's and General Electric's choices on the Columbia River. Captivated by nuclear power herself, Brown leaves unexplored any deeper history on the American side, beginning her story with the Manhattan Project. Nor does she dwell on the homologies within the Soviet story, such as a comparison with Magnitogorsk. Richland and Ozersk are united by the polluting legacy of plutonium production, but it is not obvious that we learn much from the history of the one that helps explain the other.

A final point about tone. Brown is openly and generously sympathetic to those who have suffered because of the pollution, and she champions their perspectives. Yet she consistently dismisses as deluded those who claim that they are skeptical of the harms to health, or who declare that they stayed in Richland out of a patriotic duty to build nuclear weapons in order to defeat the Soviet Union. The only voices we hear are those of the disaffected—a minority in both cities. Based on the same logic, Brown provides a detailed critique of the scientific data that both superpowers used to argue that radiation was not harmful and that employees were not being exposed to unacceptable hazards. She convincingly demonstrates how biased samples, cooked data, and inadequate controls produced grossly misleading public health information in both cities. Yet, when it comes to the claims of "downwinders" about their health problems, Brown exhibits no such critical distance from the data that she cites without an equivalent inquiry into methods and sample sizes. As Brown's book slips from the historical past to the present, it shades into a deeply personal activist brief. This intimacy powers her narrative, but at some cost.

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Romani Routes: Cultural Politics and Balkan Music in Diaspora. By Carol Silverman. Oxford: Oxford University Press, 2012. xxvii, 398 pp. Notes. Bibliography. Index. Photographs. Figures. $55.00, hard bound.

The visibility of Roma has increased exponentially since the collapse of communism in eastern Europe twenty-five years ago. While Romani identity was