

Fritz Stern, and others) contributed much to the establishment of the inverted *Sonderweg* paradigm in the late 1950s and early 1960s.

Kroll claims that this is precisely what he is not interested in. He is not looking for origins and roots, for continuities in German history that can explain the success of National Socialist ideology. Now it is true that this approach is, indeed, not without its problems. In particular, the almost total lack of comparative studies has made it nearly impossible to validate those arguments that refer to peculiarly German traditions of ideas. Only in the last decade or so have comparative studies been forthcoming on a larger scale. However, Kroll's explicit exclusion of these questions is even more problematic. By choosing not to locate Nazi ideas in the broader context of German history, National Socialism quickly becomes a phenomenon *sui generis*, unconnected with the German past and future. As, in this perception, German history can add nothing to explain National Socialism, it is easy to exculpate German national history from its twelve darkest years. This is precisely why Nolte's writings were championed by the new Right after 1989–90.

Furthermore, Kroll's whole approach leads him to a history of ideas where the ideas fly high above social, economic, and cultural-material developments. They are discussed in a sterile vacuum. It is undoubtedly important not to underestimate the importance and success of National Socialist ideology, in particular its ideologies of race. But again, this is hardly news, as unorthodox Marxists and Social Democrats alike perceptively commented on Nazi ideology as early as the 1920s and 1930s (e.g., Julius Brauntal, Arkadij Gurland, Rudolf Hilferding, and August Thalheimer). Yet they never neglected to discuss ideas with reference to their links to social, economic, and cultural-material factors. They also emphasized the heterogeneity of National Socialist ideas. Such diversity was important, as it allowed the movement to appeal to very disparate constituencies and their irrational hopes and desires.

Indeed, Kroll's exclusively biographical approach to his topic robs him of any possibility of explaining the success of these ideas in striking a chord with millions of Germans. Instead, what we are left with is an often tediously trivial pursuit of the question of where these individual Nazis acquired their confused and muddled ideas. As ideas, they are, of course, totally uninteresting, and the minutiae of Kroll's attempts to distinguish, for example, different concepts of race in Goebbels (marginal), Rosenberg (metaphysical), Darré (materialist), and Himmler (biological) are often excruciatingly boring, in particular for those readers who are not taken in by the intentionalist illusion. Overall, it is a pity that so much laborious effort has resulted in so little gain.

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Heisenberg and the Nazi Atomic Bomb Project: A Study in German Culture. By

Paul Lawrence Rose.

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Once the Hiroshima bombing demonstrated to the world the reality of nuclear weapons, the question was asked, Why did Hitler's Germany fail to produce the deadly device? Proposed answers varied from assertions that ideological influences had subverted the renowned capabilities of German science to rumors of conscious sabotage of the project by responsible physicists. Later historical studies (in particular, Mark Walker, *German National Socialism and the Quest for Nuclear Power, 1939–1949* [Cambridge, 1989])

attributed more importance to the 1942 assessment by Nazi officials that an atomic weapon, even if remotely possible, had no chance of contributing to their ongoing European war. As the American bomb project was being reorganized into an all-out industrial undertaking with military management, German uranium research slipped far down on the Wehrmacht priority list and concentrated on the primary goal of constructing an experimental reactor. The entire project remained academic in style, decentralized, and comparatively miniscule, which effectively ruled out any chance for the Nazi bomb.

The historiographic controversy seemed settled with this conclusion, yet Paul Rose revives once again the old thesis that the Nazis actively strove toward the bomb but failed due to mistakes by Werner Heisenberg, the famous physicist. Since revelations from previously unknown documents are rare in this intensively researched field, Rose relies instead on the power of hermeneutic reinterpretation of the existing body of sources. Selectively choosing information and arguments from earlier studies (by Walker, Samuel Goudsmit, David Cassidy, and Jonothan Logan in particular), he draws together the most comprehensive—even if not entirely self-consistent—case for the guilt of German physicists, one also distinguished by the harshness of its judgmental tone. According to Rose, Heisenberg tried to design a winning weapon for Hitler in more than one way. He initially considered enriched uranium as explosive but abandoned the scenario after estimating the chain reaction to require tons, rather than kilograms, of the separated isotope 235. Consequently, German physicists are alleged to have been working on a “reactor-bomb” (reactor run amok, Chernobyl-style). Finally, they expected a working reactor to produce a better explosive material, currently known as plutonium.

As its subtitle suggests, the story transcends the issue of the bomb and Heisenberg’s professional qualifications. It intends to convey a general lesson regarding German culture, to which Rose acknowledges an aversion, citing his British background as the reason. In his opinion, the most penetrating thing ever said about German, particularly Kantian, philosophy—namely that it “has something of the Prussian drill sergeant about it”—needs to be complemented with a similar conclusion concerning German physicists as Hitler’s armorers. Rose reasserts the idea that the “profoundly un-Western,” antiliberal nature of the German political culture and mentality was originally caused by Martin Luther’s theological distinction in 1520 between “outer” and “inner” freedom. This deterministic model of historical causation—one may call it the “original sin” paradigm—also underlies his explanation of the failure of the Nazi bomb project by Heisenberg’s “fallacious mistake” back in 1939.

Since bias does not necessarily preclude one from finding important evidence, the book’s arguments should be evaluated in their own right. There were, indeed, “mistakes,” or rather deficiencies, in the German uranium project; after all, it did not succeed in its realistic objective of building a reactor. Rose’s specific choices of causes to blame for German fates do not strike me as good logic, since these “original sins” were universal. There was hardly any more liberalism outside of Germany than inside in Luther’s time. Heisenberg’s theory of 1939 was about as bad or good as the best approaches made elsewhere during that first year of inquiry. A more serious claim—that Heisenberg overestimated the critical mass throughout the entire period of the war years—requires further analysis that is not aimed at proving a preconceived opinion. German physicists did not produce a detailed calculation of the minimal amount of uranium-235 needed for an explosion. Their guesses and possible “back-of-the-envelope” estimates have to be reconstructed from indirect sources. Experts still disagree on this issue and on its importance for the Germans’ overall assessment of the difficulty

of building a bomb. In any case, a political and administrative decision was taken, in Germany as elsewhere, not just on the basis of very fragmentary and inconclusive scientific knowledge but with a number of additional factors and considerations taken into account.

With its resources already strained, Germany decided in 1942 to proceed cautiously with moderate funds in building the reactor rather than to embark on a large-scale gamble toward the bomb. Despite Rose's frequent reciting of the "Nazi Atomic Bomb Project," he does not bring about any new evidence of its existence. The imaginary "reactor-bomb" would have been a completely ineffective weapon even if one figured out how to transport the bulky pile close to a military target before letting it go overcritical. Rose's central claim here is frivolous to the degree that he himself sometimes seems not to really believe in it. Misinterpreted as blueprints for an intended military scenario are occasional remarks on the possibility of a reactor going overcritical (necessary safety considerations, as a matter of fact, only insufficiently present in German technical reports). Albeit unwillingly, the book confirms that "the myth of the Nazi bomb" (Walker's expression) remains a myth, although one that never dies or at least lives as long as the social demand for it.

Rose needs this myth for the unmasking of "typical German self-delusions, half-truths and outright lies" and German physicists' failure both as moral human beings and scientists. The book's moral argument could have been made much stronger had it considered the case of Wernher von Braun and the V-2, Hitler's real "wonder weapon," alongside Heisenberg's relatively pale political compromises with the Nazi regime. Rose undermines his accusations further by throwing samples from World War I anti-German propaganda plus occasional Cold War-style vocabulary into one pot with Nazi crimes. The challenge of writing about moral guilt, arrogant self-righteousness, and nationalistic insensitivity requires one to understand the difference between a moral stance and that of a prosecutor and between a "study in culture" and an exercise in cultural mythology, making otherness and demonizing others. "We must abandon our Western rationality and sensibility," writes Rose, in order to understand the German mentality and thinking (p. 227). I am afraid he took his own advice too literally, thus producing an ideological treatise under the cover of an academic publisher.

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Salzburg: Zwischen Globalisierung und Goldhaube. Edited by *Ernst Hanisch* and *Robert Kriechbaumer*. Volume 1 of **Geschichte der österreichischen Bundesländer seit 1945.** Edited by *Herbert Dachs, Ernst Hanisch, and Robert Kriechbaumer*.

Vienna: Böhlau, 1997. Pp. viii + 780.

Liebe auf den zweiten Blick: Landes- und Österreichbewusstsein nach 1945. Edited by *Robert Kriechbaumer*. Volume 6 of **Geschichte der österreichischen Bundesländer seit 1945.** Edited by *Herbert Dachs, Ernst Hanisch, and Robert Kriechbaumer*.

Vienna: Böhlau, 1998. Pp. 285.

National and regional identity has always been a problematic issue in Austria, both before and after 1918. The Habsburg monarchy sought to transcend the competing