

understand their adult life in relationship to the past, how they narrate their experience in interviews, and how they fit into survivor networks. Clifford's survey of the development of memory agency since the 1970s is particularly insightful for understanding the difficulties arising for child survivors both from the testimonial framework and the rhetoric of legacies used by certain oral history projects. The construction of well-composed accounts aligned to set expectations of linear, coherent narratives with a redemptive message inevitably involves stylizing experiences and suppressing the sense of uncertainty, rupture, and loss inherent to child survivor stories. Some interviewees try to meet such audience expectations, while others choose to maintain the authenticity of their fragmented stories.

In analyzing key experiences of child survivors such as the immediate postwar resettlement in pan-European and global locations, the restitution process started with the West German Federal Indemnification Law of 1953, and the late recognition of the specific child survivor status in the 1990s, Clifford impressively balances the "telling" of the story from the children's perspectives with interludes focused on the visions and expectations of the adults. There is sometimes a slight tendency to amplify the aspect of child agency and the female voice. However, this should not detract from the fact that Rebecca Clifford has assembled a rich and timely examination of the long-term experiential drama of child Holocaust survivors that challenges in many ways commonplace assumptions about children, trauma, and victimhood.

doi:10.1017/S0008938922000279

Taking on Technocracy: Nuclear Power in Germany, 1945 to the Present

By Dolores L. Augustine. New York: Berghahn Books, 2018. Pp. xiii + 286. Cloth \$135.00. ISBN 978-1785336454.

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Germany is not the first country to phase out nuclear power voluntarily, a distinction that belongs to Italy, nor will it be the last, if Belgium, Spain, and Switzerland implement their current plans. Yet the breakdown of the "atomic consensus" (2) that started in the 1960s is undoubtedly an important development for modern Germany, tied up with vast changes in society, culture, domestic and international politics, the media, and the popular understanding of technology and its proper relationship with nature. Dolores L. Augustine has written an extremely useful study of Germany's nuclear phase-out from the perspective of both postwar German states. She concludes that the German government's decision in 2011 to close all nuclear power plants by 2022 was the result of "two converging, but in some ways contradictory, forces" that had developed over the preceding decades—"citizen's activism" and "environmentalism's professionalization and fuller integration into the capitalist system" (230). She gives citizen's activism its proper due by featuring the famous protests at Wyhl, Brokdorf, and Gorleben, as well as the lesser-known one in East Berlin in 1986–1987. She is, however, particularly interested in how the anti-nuclear power movement accepted, adopted, and popularized scientific arguments to contest the consensus of technocratic experts behind government energy policies.

Augustine argues that five factors explain why the new, negative view of nuclear power became predominant. Three of them are already familiar to students of postwar Germany.

The first was what some scholars have called the “German fear” (213), or the fact that Germans often associated nuclear power with nuclear war and other disasters.

Second, West German antinuclear activists, like their compatriots in other new social movements, started to question violent methods of protest in the mid-1970s. Eventually, most would abandon them, thereby making their cause attractive to wider social circles. Augustine shows how this debate arose in the context of the turbulent demonstrations at the Brokdorf nuclear power plant in Schleswig-Holstein in the mid-1970s. Although some opponents of nuclear power continued to resort to violence in the 1980s and 1990s, the trend was clearly in the opposite direction.

Third, the ecological movement and the Green Party had entered the German political mainstream by the 1990s, and other political parties now recognized environmental protections as an important political issue. In the early 1990s, the Christian democratic-liberal coalition under Helmut Kohl first committed Germany to international agreements to reduce carbon emissions and use more renewable energy, although their plans for an “energy mix” remained controversial domestically because it continued to include nuclear power.

Augustine’s two other factors break new ground. The first is her analysis of how the new media culture in West Germany in the 1970s created space for antinuclear activists to present themselves and their cause to the public. Coverage of the protests at Wyhl and Brokdorf in the mid-1970s by the regional television stations WDR and NDR drew the ire of the state governments of Baden-Württemberg and Schleswig-Holstein, respectively. Journalists portrayed protesters as a diverse group of concerned citizens instead of as radicals and aired footage of their clashes with security forces, which government authorities considered sensationalism rather than news. Not all media coverage was friendly to the antinuclear movement, as Augustine makes clear. Journalists were now much less willing to accept official positions on nuclear power or antinuclear activists as the unvarnished truth, however. When state governments temporarily reasserted their influence over local media coverage, as seemed to be the case in the early 1980s with NDR in Schleswig-Holstein, alternative left-wing media stood ready to supplement it.

Finally, scientific arguments and counterarguments played a vital role in the debates concerning atomic energy. In the immediate postwar decades, most East and West Germans accepted atomic energy, which they associated with economic modernization and a rise in status within the two Cold War blocs. Moreover, as Augustine’s analysis of articles in the West German *Stern* and East German *Neue Berliner Illustrierte* from 1945 to 1965 reveal, in the popular press, [atomic] science provided certainty in a time of great upheaval and evoked the traditions of a “better Germany.” Even though articles on the threat of nuclear weapons and radiation appeared in these publications, especially after the 1954 [American] Bikini test, the first generation of nuclear power plants in the Federal Republic was not associated with nuclear bombs or major environmental problems, whereas in East Germany they represented the socialist world’s technical and scientific expertise.

During the 1970s, however, scientific knowledge about atomic power became contentious, especially concerning the safety of radiation and the potential for nuclear accidents (Augustine contributes a very interesting chapter on the safety record of nuclear power plants in both Germanys). Both proponents and opponents of atomic power realized that they would have to win over the broader public with accurate information. So-called *Gegenexperte* (counter experts), including public intellectuals such as Robert Jungk and Ulrich Beck, came to prominence in the Federal Republic and challenged the establishment expert consensus. By the 1980s, increasing numbers of West Germans had become convinced that the opposition had the sounder scientific arguments. Augustine demonstrates that a similar process went on in the German Democratic Republic (GDR), where nuclear experts increasingly came to question the safety of the Soviet-designed reactors they were using. By the 1980s, the GDR had implemented international safety standards and procedures developed in the West. She also reveals that the GDR had a small group of its own

Gegenexperte which tried to promulgate accurate information in underground publications after the 1986 Chernobyl accident.

Augustine is a skilled synthesizer of information about a very complex topic, but at times this reviewer wished that she had provided more background on the myriad individuals, groups, and historical developments that figure in her story. In particular, it would have been interesting to learn more about the relationship between the antinuclear power activists, on the one hand, and the broader environmental and nuclear-disarmament movements in Germany, on the other. Her discussion of the rise of renewable energy (*Energiewende*) in Germany over the past twenty-five years is fascinating if necessarily preliminary, but one also wonders if future historians of atomic energy in Germany will see it as more important for the nuclear phase-out than the activities of antinuclear activists. A trinity of disasters—Three Mile Island (1979), Chernobyl (1986), and Fukushima (2011)—also figure prominently in this work, and Augustine makes clear that the last two in particular had a huge impact on German rejection of nuclear power. If the Germans are pioneers in terms of moving away from atomic power, as the author asserts, how much did exogenous and international as opposed to domestic factors determine this? These are just a few of the questions raised by this fine study.

Augustine succeeds in demonstrating how opponents of nuclear power were able to win the scientific argument and make their perspective the mainstream in Germany. Her broad chronological scope, coverage of both Germanys through 1990, and focus on nuclear power as opposed to simply antinuclear activism are all very welcome. Her findings on the GDR, as well as her use of various media archives to trace the development of public attitudes toward nuclear power, are especially impressive and important. The discussion of *Gegenexperte* also seems timely today, in our era of vaccine skeptics and coronavirus. However, the true lessons from this German case study are that scientific knowledge changes over time, that the public can be willing to accept science as a cognitive system, and that scientific positions can and should be contested so long as scientifically sound methods are used. The author herself is aware that the nuclear phase-out may not be the last word on the subject in Germany at a time of growing concern with global warming. Despite the dangers of radiation and the problems associated with storing nuclear waste, science also tells us that nuclear energy produces no carbon emissions.

doi:10.1017/S000893892000093X