

most famous yet nebulous expression, “*Erfurcht vor dem Leben*” (“reverence for life”), and identifies at its root a mystical yet experiential impulse—what Schweitzer called a “living truth”—that propels the individual, rather than the collective, to moral action (p. 161); in an invigorating investigation, Michael Thate uses Georg Simmel’s idea of “the stranger”—as a figure of both attachment and detachment, closeness and distance—to explore Schweitzer’s dual and uneasy relationship with modernity (p. 196).

A few authors approach Schweitzer’s spiritual-ethical pursuits from other angles. Harald Schützeichel argues that Schweitzer’s fascination with Bach was an integral part of his ethics. Seeing Bach as a great mystic, Schweitzer insisted on playing Bach in a way similar to how the music was composed, which allowed him to extract its inherent ethical power. Predrag Cicovacki explores Schweitzer’s interests in the ideals of non-Western religions. While Schweitzer stressed the superiority of Christianity, Cicovacki points out that he failed to recognize fully the extent to which other religions contributed to his ethics, most notably his sense of life’s interconnectedness and the idea of reverence for life.

The essays in the last third of the book discuss various aspects of Schweitzer’s personal life. Anthony Steinhoff interprets Schweitzer’s expressions of “patriotism” with regard to his native Alsace while at the same time he resisted the political demands of imperial Germany. Thomas Saueremann brings Schweitzer’s political engagement to the fore, particularly his opposition to nuclear arms after World War II.

Whether this anthology will succeed in stimulating a revival of Albert Schweitzer’s significance remains to be seen. But with its blend of rigorous scholarly analyses and fascinating life stories, it does have the potential to spark an interest in Schweitzer and ethics in general—and thus possibly reach beyond the somewhat narrow circle of theologians and religious studies scholars to which most of the authors belong. But most important, we should hope for a revival of appreciation for Schweitzer because his ethics remain very relevant today. Though Schweitzer was of course a thinker of his time—his ethics were a response to the urgencies of the time and provided moral guidance to a shell-shocked world—few thinkers have shown more persuasively how dangerous it is to live fully in the spirit of one’s age.

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Martijn van Calmthout. *Sam Goudsmit: Zijn jacht op de atoombom van Hitler.* 285 pp., illus., bibl., index. Amsterdam: Meulenhoff, 2016. €24.99 (paper).

Although the title and the dust-jacket blurb suggest that this book is a biography, the subtitle provides a more accurate description. It centers on the physicist Samuel Goudsmit’s “chase” after Hitler’s bomb. In 1944 Goudsmit got one of the most spectacular war assignments ever when he became the head of the “Alsos team.” This Allied mission had the task of determining the status of the German nuclear program. After all, fear of a successful Nazi program was the reason the Americans started their own program. Aware of the reputation of German physics, embodied by men like Werner Heisenberg and Otto Hahn, the co-discoverer of nuclear fission, the Americans were taking no chances. While the Manhattan Project worked toward developing nuclear weapons, Goudsmit was sent to the European theater of war.

Why was Goudsmit chosen? As Martijn van Calmthout explains, Goudsmit was well acquainted with European physics. A gifted student from a middle-class Jewish family, he was fascinated by atomic spectra as a doctoral student in Leiden. In 1925, together with his fellow student George Uhlenbeck, Goudsmit postulated a groundbreaking idea: electron spin. Their mentor Paul Ehrenfest urged him to leave for the United States, where he was welcomed by Robert Oppenheimer in 1927.

By 1944 Goudsmit knew his way around the world of nuclear physics, at least well enough to judge whether the traces of scientific endeavors he might come across were evidence of bomb-building activi-

ties. The Alsos team proceeded just behind the shifting Allied front, piecing together the yet-unknown picture from bits and fragments left behind in empty laboratories or taken from interrogations with captured scientists. Among the more memorable scenes Van Calmthout depicts are the uncomfortable rendezvous Goudsmit had with his German colleagues, which involved chatting about family and gathering intelligence at the same time.

The search for the most-wanted German physicist, Heisenberg, deepened these tensions. Before the war Goudsmit had a friendly relationship with him, and as late as 1939 Heisenberg visited the American Goudsmit family. When war broke out Goudsmit's parents were living in the Netherlands. Sam tried to get them to the United States but was thwarted by the German invasion. Concerns about their safety reached Heisenberg in 1943, and presumably he made an attempt to rescue them. His effort were in vain, however: Goudsmit's parents had already been murdered in Auschwitz. The next year, their son started hunting Heisenberg down.

Ultimately the Alsos team would capture Heisenberg—without finding any trace of a bomb design. Together with other top German physicists, Heisenberg was put in a bugged farmhouse, where Allied intelligence groups hoped to overhear conversations that would establish whether indeed the Germans had managed to construct anything more than a half-working reactor.

After the adventurous war years, Goudsmit headed the Department of Physics at Brookhaven and founded the *Physical Review Letters*. But the war was never far away. Van Calmthout describes the postwar debate with Heisenberg, in which Goudsmit idealistically blamed the German nuclear failure on the lack of freedom. He also reconstructs Goudsmit's involvement in the Cellastic affair. A couple of Dutch scientists had shown a striking lack of judgment in doing wartime work for a shadowy German-run company. It got them into such trouble afterward that one of them, Jacob Kistemaker, asked Goudsmit to testify on his behalf.

A skilled journalist and himself a physicist, Van Calmthout explains complex notions such as electron spin in an accessible manner. But he had more trouble in structuring the story. Obviously, a linear chronology is not the ideal way of building up momentum for the many intertwined storylines, such as Goudsmit's search for the bomb and his efforts to save his parents, his scientific career and family life, and the debates about science and democracy. But as the reader is faced with dozens of flashbacks and flash-forwards, keeping a grip on the overarching story becomes difficult.

The broader context of the Goudsmit story has been getting some attention in the last decades. Apart from scholarly discussions between historians and physicists, nuclear war stories have been popularized in theater productions such as *Copenhagen* and TV series such as *The Manhattan Project* and *The Heavy Water War*. Without notes and with only a short bibliography, Van Calmthout's book aims to reach a wide audience. But if this account, written in Dutch, is to be translated, there are quite a few minor mistakes that need to be corrected. A picture of Ehrenfest can't possibly date from 1939 because he died in 1933; and the uranium-235 isotope makes up 0.7 percent of natural uranium, not a "few percent." The predating of both the Alsos mission and the first controlled nuclear chain reaction by some years is another example of mistakes that might distract the reader.

Sam Goudsmit will not be the authoritative biography of the scientist Goudsmit, but this tale full of heroism and tragedy offers a good read for those who want to know how science rapidly became part of a much larger history, and it is definitely a fine contribution to the history of Dutch-born physicists.

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