

Van der Waerden in the Third Reich

Reinhard Siegmund-Schultze

The Scholar and the State. In Search of Van der Waerden

Alexander Soifer with forewords by Dirk van Dalen, James W. Fernandez, Branko Grünbaum, Peter D. Johnson, Jr., and Harold W. Kuhn
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Bartel L. van der Waerden (1903–1996), the Dutch mathematician best known for his textbook *Moderne Algebra*, was a professor in Germany during the entire period of the Third Reich (1933–1945). Later, he was heavily criticized for not leaving Germany. What exactly was his attitude toward the Nazi regime, and after the war, how did he explain his decision to stay? Seeking an answer to such questions requires deep understanding not only of Van der Waerden the man, but also of the history of the turbulent times in which he lived and of the social and mathematical milieu in which he worked.

It is exactly these questions that Alexander Soifer addresses in his book *The Scholar and the State. In Search of Van der Waerden*. While the book is in many ways an admirable effort, it is also deeply flawed, exhibiting insufficient understanding of the historical and political era of Van der Waerden and of the languages he spoke, and lacking proper attribution to other work on which the book depends. The topic clearly resonates with Soifer, both politically and emotionally, driving him to amass a tremendous amount of material and to endow the book with great passion. Unfortunately, that same passion has compromised his objectivity and judgment.

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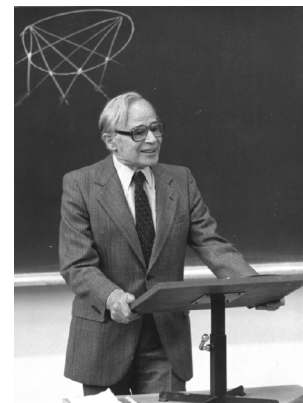
Van der Waerden, Post-1933

Starting in 1933, thousands of Germans, many of whom had been arbitrarily defined by the Nazis as “Jews” and thus excluded from society, had to leave their country. They saved their lives, but they lost their positions and their homeland. Most of the émigrés were closely attached to the German language and culture, and only a few of them spoke English.

If one seriously recognizes the hardships they endured through emigration, one should also acknowledge that the “non-Jewish” Germans, even if they despised the Nazis and even if they had alternatives abroad, had good reasons to stay. In fact, very few of the latter left unless expelled by force.

Van der Waerden (henceforth VdW) was not German, but he had long connections to Germany, particularly Göttingen. His wife was Austrian, he became a professor in Leipzig in 1931, and the book that made him famous—his *Moderne Algebra* (1930/31)—was written in German. Although he had offers from America, VdW decided to stay in his adopted country of Germany. The exciting scientific atmosphere in Leipzig, with Werner Heisenberg and later Eberhard Hopf, plus a low teaching load, contributed to this decision.

In a quagmire of denunciation, careerism, and terror, increasingly directed not only against Jews but also against political dissenters, VdW tried to keep his moral values. Traces of resistance against the Nazi regime not only are documented by VdW’s warm and courageous obituary for his Jewish teacher Emmy Noether, published in 1935 in the *Mathematische Annalen*, but can also be found in his less public protest against the dismissal of Jewish colleagues in Leipzig, discussed in



Bartel L. van der Waerden

Author: Gerd Fischer. Source: Archives of the Mathematisches Forschungsinstitut Oberwolfach.

chapter 15, “One Faculty Meeting at Leipzig” (pp. 113–139) of the book under review.

After the collapse of the Hitler regime in 1945, embittered émigrés and traumatized Dutch compatriots, mostly politicians and students rather than colleagues, attacked VdW for having stayed in Nazi Germany. Absurd alternatives were presented to him, such as that he should have gone into the Dutch underground and left his family behind. VdW reacted with indignation, as well as with tactlessness and naiveté. He misrepresented his nonemigration retrospectively as a deliberate decision aimed at protecting German culture against the Nazis.

Predictably, this confrontation did not prepare the ground for VdW to be self-critical about his behavior in the Third Reich. By turning down the offer of a full professorship in Baltimore (USA) in 1948 (a fact discovered by Soifer), where he had stayed for one year, and returning to the politicized and socially insecure atmosphere of Amsterdam, VdW confirmed his strong emotional attachment to Europe and to the two languages he knew best. No doubt this attachment had also influenced his decision in 1933 to turn down an offer from Princeton, a decision that thus appears more understandable in hindsight. After returning to Amsterdam in 1948, VdW and his family still had to cope with attacks by compatriots. So it did not come as a surprise that VdW seized the first opportunity of an offer, in 1950, of a professorship in the relatively apolitical, German-speaking city of Zürich, where he and his family were protected from further attacks.

Moral Impulse and Historical Judgment

The facts just described were basically known when, in 2004, Alexander Soifer, Professor of Mathematics, Art & Film History at the University of Colorado at Colorado Springs, began to publish about VdW’s political biography. Soifer’s writings appeared initially in his own journal *Geombinatorics*, which was largely protected against professional historical criticism.

Soifer has strong political and emotional motivations. He writes in a direct, easy-to-read style, at times becoming patronizing and at times including fictitious dialogues with the readers and with the mathematicians described. With no less than five enthusiastic prefaces, written by (mostly not historically trained) colleagues, the book receives much credit in advance. A tendency of self-congratulation can be found everywhere in the book.

In his book Soifer rarely goes into VdW’s mathematical accomplishments. His previous book (2009), from which he reproduces much material in the book under review, intertwines more closely both aspects, the social-political and the mathematical (for a rather critical review in English see Ziegler (2014)). The title of Soifer’s book is very

apt, because it stresses the political dependence of publicly financed science both under dictatorships (Germany) and under democracies (Netherlands) and thus gives the book a broader focus.

Soifer is disgusted by apologetic biographical accounts and self-representations of Nazi mathematicians such as Helmut Hasse (pp. 190–194) who said, in a 1939 letter circulated widely among mathematicians in the US, that there was “war between the Germans and the Jews.” In his book Soifer repeatedly criticizes the “Mathematik über Alles” (mathematics above all) ideology, which denies the moral responsibility of mathematicians in modern society. Soifer frequently alludes to his own experiences as an émigré from another dictatorship, the Soviet Union. He is also critical of the post-WWII McCarthy-era witch-hunts in the US. The reviewer sympathizes with this moral impulse and deems political positions and actions of scientists as legitimate themes of historical research.

Because VdW was obviously not a Nazi, one needs a great ability for nuanced historiographic analysis in order to understand his behavior in the Third Reich and to come to critical, but nevertheless just, conclusions. Soifer adopts this task enthusiastically and claims the attitudes of a professional historian (p. 255 “my first allegiance as historian”). He is less than satisfied with the work of many contemporary historians of mathematics (p. 48 “a thorough historian of mathematics (if such an endangered species exists)”).

Soifer therefore has to be critically judged according to his own standards. On the positive side, he has shown great perseverance in searching for biographical material on VdW, inducing various historians to share with him their partly unpublished research and to provide him with translations of texts written in languages (Dutch and German) that he can read only partly, and encouraging various archives to send him copies of unknown material. The most impressive and newest material the book has to offer are Dutch documents, several from VdW’s family, that shed light on his early life before he went to Germany in 1925, on his contacts with his Dutch compatriot Peter Debye during the 1930s, and on the aftermath of the war. Although known in general terms, this part of VdW’s life has never been documented in detail before (except in Soifer’s own previous publications). VdW’s rejection of an offer of a chair in Utrecht in 1944 is aptly described by Soifer as missing “the last chance to distance himself from Nazi Germany” (p. 178). The “dialog in letters” in chapter 26 (233ff.) between VdW and Johannes van der Corput, who had a leading role in the re-organization of Dutch mathematics after liberation, gives fascinating insight into the post-war psychology of Dutch mathematicians and of VdW. Throughout, the book carries attractive illustrations including facsimiles and documents

from the family's possession. The most impressive may be the two juxtaposed pictures of the Van der Waerden family of five in exactly the same position around the table in their living room in Amsterdam in 1916 and in 1925 (pp.18/19).

Despite these positive aspects, the reviewer cannot hide his impression that the book is not, and could not be, fully successful. The main reason is that the author has never been immersed in the two cultures most important for the book, the Dutch and the German, and he does not know the history and the languages of the two countries well enough. While modern mathematicians usually cannot be expected to read languages other than English or their native tongue, and probably do not need to, the historian should be held responsible to read his sources or at least to get dependable help from native speakers. As is clear from the very restricted bibliography, which contains exceedingly many emails from correspondents who supported his research, Soifer bases his work on very little secondary historical literature.

The main problem with Soifer's historical judgments lies in the fact that he reads the history of the Third Reich very much from its end, from Auschwitz, insinuating knowledge of the Holocaust in individuals who, in reality, were gradually drawn into a criminal system. He thus falls back into some clichés about the Third Reich long thought to be overcome in the historical literature. Formerly, acts such as signing declarations of loyalty to the "Führer" Hitler (see facsimile p. 105 in VdW's case) had been considered as important markers of "collaboration". However, starting in 1933, such declarations had to be signed even by Jews, such as the mathematician Issai Schur, if they wished to (at least temporarily) keep their positions—and they did sign. It goes without saying that people under the Nazis who were not willing or not flexible enough to adapt to these rituals (for instance the mathematician Ernst Zermelo in Freiburg) and who suffered as a result deserve our respect and sympathy. Like everybody else, VdW was forced by the Nazis to provide proof that he was "Aryan". Soifer calls VdW's compliance "not noble" (p. 89). But how about all the Jewish Germans who desperately tried to hide their Jewish ancestry in order to evade dismissal? Not noble? Or the political dissenters (Liberals, Social Democrats, Communists) who tried to downplay their political role during the Weimar Republic? Not noble, too? This borders on blaming the victims. Instead Soifer should have referred to the fact that these devilish Nazi stipulations would draw even anti-Nazis such as VdW gradually into the system, and that these measures were bound to produce feelings of privilege and of guilt and led to compromise.

It seems surprising that this lack of sensitivity should be found in a person brought up under the Soviet regime. Or perhaps not so surprising:

Historians agree that the latter regime became much less repressive after Stalin and certainly much less terrorist than the Nazi regime. The reviewer, who lived in East Germany until 1989, can confirm this from his own experience. But this shows the dangers of judging from one's own experience alone and not studying conscientiously the historical period under investigation. Deeply disturbing for a German reader is when Soifer unfavorably compares VdW's wish to be cleared from the suspicion of being Jewish with the alleged behavior of the eighteenth century historical figure Jud Süß. The latter became the main character both in a 1925 novel by Lion Feuchtwanger (who was forced into emigration in 1933) and in the infamous Nazi propaganda film by Veit Harlan made during the war. Soifer attaches Nazi terminology to Jud Süß ("in reality he is Aryan", p. 89) and betrays that he is unaware of the differences between religious and racist persecution of Jews and the role of conversion to Christianity before the Nazis came. Soifer manages not to mention the Harlan film at all.

Problems with Historiographic Methodology

Throughout the book the level of accuracy of documentation leaves a great deal to be desired, which may be partly explained by poor editing on the part of the publisher. I will now present some examples from the book that illustrate these problems. After brief remarks about VdW's youth and study in Amsterdam, the book goes very quickly to his time in Hamburg, where he attended Emil Artin's algebraic lectures in 1926. Soifer's chapter "The Story of The Book" raises the interesting question of why the original plan that Artin and VdW would co-author *Moderne Algebra* was not realized. As is well known, VdW became in the end the sole author of this influential book, duly acknowledging on the title page that in writing the book he used lectures by Artin and Emmy Noether. This acknowledgment also appears in the second edition, which was published in 1937 during the Nazi years and during Artin's emigration. Soifer is justified in expressing doubt about VdW's explanation in hindsight (1975) that Artin was "perfectly satisfied" with VdW's draft and that he had asked VdW, "Why don't you write the whole book?" (p. 39). But Soifer now begins to fabricate and claims without evidence that Artin was "dissatisfied" with VdW's draft (p. 40), that there was even an "explosion" on Artin's side and a "refusal to write *his* [Soifer's emphasis] book with this student." (p. 43). It does not help that Soifer mistranslates a letter written by Richard Courant to VdW in 1927, which could have given some basis for cautious interpretation. In this letter, Courant reports about a message received from Artin, which is not specified but seems to refer to a conflict between

the two prospective authors, Artin and VdW. Soifer publishes the letter in German facsimile (p. 41), but he mistranslates “Hoffentlich haben Sie sich nicht geärgert” as “I hope you have not angered him”; the correct translation is “Hopefully this did not anger you.” Soifer interprets this as being in accordance with a remark that VdW made much later in 1993, namely that VdW expected Artin to contribute in equal measure to the manuscript (p. 43). Soifer now brings in his own experience as a mathematical author and seems to be critical of VdW’s alleged pushiness that finally led to him being the sole author.

What is not mentioned in Soifer’s discussion is that VdW, at least in his later years, had second thoughts about having become famous only for this influential textbook while his real research in algebraic geometry had comparatively less impact on mathematics (Schappacher 2007, p. 249). This sheds a possible light—in the opinion of the reviewer—on the question of why Artin finally did not become a co-author: it might have been that he was simply more interested in his research than in writing textbooks. Soifer draws a comparison between the Artin-VdW “affair” and the often-discussed and criticized Göttingen mathematicians’ habit of “nostrification”, or of using mathematical results by others (foreigners, assistants, etc.) and publishing them under their own names. Basing his discussion on Constance Reid’s biography of Courant, Soifer criticizes Courant for supporting “nostrification” by exploiting students for his publications. But this leaves open the question of why Courant then did not support Artin’s rights vis-à-vis VdW, who was the “underdog” in that relationship. Was VdW himself already sufficiently “nostrified” that he could count in Courant’s eyes as a Göttinger?

Soifer uses the occasion to criticize Courant for continuing his bad habits of nostrification during his American exile. Here one can notice that Soifer’s enthusiastic and suggestive style has its dangers. In a typical manner, he writes about the book by Courant and Herbert Robbins *What is Mathematics?*: “I hold in front of me a copy of its first 1941 edition.... The preface is signed by Courant alone and nowhere even mentions Robbins.” (p. 45). Persuaded by the emphatic writing style, the reader is unlikely to check the veracity of this upsetting claim. But such a check reveals that almost an entire paragraph is devoted to Robbins. A few lines below, on the same page, Soifer writes, again using Reid as a source, that Courant handed Robbins for his collaboration “from time to time...a modest check.” In fact, Reid, based on an interview with Robbins, had talked about a “personal check” without any mention of an amount. Criticism of Courant is surely justified but it is not the task of the historian to further embellish or (in this case) darken the facts.

In many cases Soifer reproduces material that was previously published in German without mentioning the source. For example, he devotes chapter 10 to a topic discussed in my 1998 book, namely, VdW’s opposition to Richard Brauer’s publication of an algebra textbook, which as a consequence failed. Unfortunately, the new discussion remains incomplete because Soifer does not emphasize that VdW and the Jewish émigré Brauer belonged to distinct and somewhat opposed algebraic schools. Exploring this dimension would have enabled the author to look more broadly at the effects of Nazi rule on mathematics and how VdW partially benefited from staying in Germany. In connection with VdW’s decision of 1933 to turn down an offer from Princeton, Soifer tells the reader that he had heard about it only “from the grapevine...but no evidence has ever been published.” (p. 97). Then he presents his interesting additional findings from the Princeton mathematical institute, but he also republishes (p. 104), without mentioning the source, part of an undated 1933 letter by VdW to Courant, which appeared in my 1998 book and of which I sent him a copy as well. In Soifer’s English translation, the passage that contradicts Soifer’s claim about the “grapevine” is: “I believe I will suggest to the Americans that this time they could spend their money better than to get me out because I still have a position that I can keep.” The reader does not see the original letter and therefore has no way of knowing that Soifer has mistranslated “in dieser Zeit” as “this time”; the correct translation is “in these times”. The mistranslation obviously distorts the meaning.

Quite often the author quotes already published work by archival call numbers without mentioning previous publication or specifically acknowledging help from colleagues. Maybe he thought he had covered himself by the general acknowledgement of help at the beginning of the book. Soifer thus creates the impression that, as a historian would usually have done, he has made systematic studies in these archives and selected the material from extensive sources. This is not only unfair toward colleagues who earlier published the material but it also deprives the reader of seeing the quoted passages in their original languages and thus checking the translations. The most benevolent interpretation here is that Soifer, in trying to cope with masses of material, somehow lost track of their origins.

The transcription by the author of the archival material at his disposal is not always reliable either. On p. 253, Soifer magisterially corrects passages from VdW’s clearly faulty English letter to Courant from December 29, 1945. Soifer does this from a copy that I gave him, a fact he does not mention. In the original is VdW’s important and clearly legible admission: “I have made some mistakes. But I have never pactified with the Nazis.”

The German reader would immediately recognize from the German word “paktieren” that VdW wanted to say: “I never made a pact with the Nazis.” Instead of simply quoting the original (maybe with a question mark beside the obvious mistake in the English) Soifer writes: “I have never pacified the Nazis.”

German secondary literature is often treated carelessly by Soifer, if not ignored altogether. He took the central document of his chapter 27 from Martina Schneider’s important book on VdW’s work on quantum mechanics (2011). The document is a revealing undated letter that VdW wrote shortly after the war to his compatriot and historian E. J. Dijksterhuis. Here one finds the most self-critical statement that VdW seems ever to have made: “There still remains this one complaint, that I have assisted the Germans through my lectures. I know in the bottom of my heart that this complaint is just.” (p. 257)

Soifer mentions Schneider’s book, but he does not give a page number where the above-mentioned letter appears and does not include the book in the bibliography. He does not inform his readers that, unlike in his own book, Schneider’s book reproduces the Dutch original of the letter as well. (In general, this reviewer would like to have seen the originals behind Soifer’s translations from Dutch too, after having seen his translations of German quotes.) It hurts the serious historian to see Soifer treat such meticulous work so carelessly. Instead, he uses this occasion, while making only passing reference to Schneider’s fine and scholarly book, to boast about his own historiographic methodology, pointing to the fact that he included in his translation of VdW’s letter a few (in fact not very important) passages that VdW had struck out in the draft. Soifer could have learned much more from Schneider’s book, for instance (Schneider p. 161) that VdW in 1933 signed a petition against Courant’s dismissal, a fact that escaped Soifer (p. 89). Schneider refers to Soifer’s publications on VdW since 2004 in detail. She is partly critical of them but recognizes Soifer’s findings of new sources. While Schneider’s book concentrates on the mathematical theory of quantum mechanics and group representations, she uses for the more political passages much scholarly literature. For instance, she uses literature on the general history of Dutch science and society, mostly written in Dutch, such as works by Alberts, Berkel, Bertin, Fühner, Harmsen, Heijmans, Hirschfeld, de Keizer, Klomp, Knechtmans, Maas, Meertens, Willink. It was no trivial effort for Schneider, who is German, to read the Dutch. All literature of this kind is missing from Soifer’s account, with the exception of two books in Dutch by Peter J. Knechtmans, a historian at Amsterdam University, who has apparently explained the content of these books to Soifer in English in

six emails that are in the bibliography. However, Soifer’s popular and opinionated account would have very much benefited from secondary literature of exactly that kind, which would have provided broader historical background.

Relevant Publications Overlooked

A reviewer should judge a book above all for the intentions of the author and not for what it should contain. Toward the end of his book Soifer points rightly to the fact that a (political) biography of VdW has to remain a “report on research in progress” and cannot treat all possible topics completely (p. 435). However, it seems legitimate for the reviewer to point to published sources that the author could have used for his investigation and that would have served him in answering his questions. One important source that Soifer does not use, although its topic is crucial for his inquiry, is the German collection with the telling title *'Foreign' Scientists in the Third Reich*, by Dieter Hoffmann and Mark Walker (2011). This collection would have aided Soifer’s discussion of the role of VdW’s compatriot, the physicist Paul Debye (chapter 11). It also contains my extensive paper on VdW’s role in the Third Reich. From it Soifer could have gathered, among other things, the following information: An analysis of the text of VdW’s obituary of Emmy Noether in the *Mathematische Annalen* (1935); the correct transcription of VdW’s English letter to Courant from 1945; the changing conditions of reception of *Moderne Algebra* during the Third Reich and thus reasons for the differences in the various editions of that book, noticed but not analyzed by Soifer; VdW’s second thoughts about his textbook as mentioned above; and several crude utterances by VdW from 1967 concerning mathematical talent in Jews as opposed to non-Jews. On the latter two, Soifer could have found information already in publications by Norbert Schappacher, among them an article in English from 2007 on VdW’s work in algebraic geometry, which are not mentioned in Soifer’s book.

To his credit, Soifer occasionally quotes alternative, counterbalancing views, as expressed for instance in testimonies by VdW’s son Hans. In a letter to Soifer that Hans van der Waerden wrote about his Austrian mother and grandmother, it clearly transpires that the two were much more prone to falling into the traps of Nazi propaganda than was VdW himself (p. 427). If, however, one takes seriously feminist criticism according to which many prominent scholars rely totally on their wives for their physical and mental well-being, for their careers, and for the up-bringing of their children, it should not astonish that these same prominent scholars, in turn, have to take into consideration their wives’ political feelings (and possibly their ignorance), including their preferences for where to live. Don’t get me wrong: criticism of VdW’s be-

havior in the Third Reich and, in particular, of his post-war apologia is legitimate. It is, however, the historian's task to discover the deep and nuanced reasons both for adaptation under the regime and for apologia afterward.

Conclusion: Merits and Limits Again

Soifer has collected, with substantial help from colleagues, a great deal of new and interesting material. He has seriously tried to give a convincing description of VdW's political behavior in the Third Reich and in the years before and after the regime. However, for someone who has not been immersed in the cultures in which VdW lived, who does not know the languages well and who has no training as a historian, it would have required superhuman abilities to succeed. Deficiencies in the immersion in foreign cultures create dependencies on other people's work that at the very least should result in clearly acknowledging that work. I am not sure Soifer was able to cope with this latter problem—or that he drew the proper conclusions from his discussion of Courant's "nostrification." In the end, VdW comes out of the book neither as a hero nor as a villain, which is not wrong as a rough estimate. But this is not necessarily a nuanced picture.

For all the criticism I have felt obliged to express I still have to admit that I am glad to have the book, which contains much interesting and hitherto unknown material. As a German, I am probably in a somewhat better position to understand the material than are non-Germans. I am not sure this book works for the general readership for which it is no doubt meant.

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