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Perspectives on Teichmüller and the Jahresbericht

2nd Edition

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Perspectives on Teichmüller and the Jahresbericht, Second Edition

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Abstract. This issue collects various materials which derived from a controversy about how to deal professionally with a mathematician like Oswald Teichmüller (1913-1943), who was mathematically brilliant but as a Nazi did much harm to other people.

The *Jahresericht der Deutschen Mathematiker-Vereinigung 94* (1992) published an article on the 'life and work' of Teichmüller to which I wrote a very critical addendum (*Document 1*). I criticized the *Jahresbericht* memorial for giving insufficient information on the broader mathematical and historical context and showed that in general whitewash and downplaying of the German Nazi past is an integral part of recent publications by the Deutsche Mathematiker-Vereinigung.

The editor of the *Jahresbericht* rejected to publish my addendum for reasons and in a manner which I find unacceptable (*Document 2*).

I published my supposed addendum separately in this series (*IMFUFA tekst 249/93*) and circulated it among colleagues from whom I received many comments. I quote some of these comments in my newly written introduction to the controversy (*Memories and Memorials*, to appear in *The Mathematical Intelligencer 1995/2*) which opens this documentation.

I also reprint four open letters concerning the controversy. Three of them were first published in *DMV-Mitteilungen* (*Document 3*, H. Tietz's criticism of the Teichmüller memorial and the authors' reply) and the fourth in *The Notices of the American Mathematical Society* (*Document 4*, a collective letter).

For permission to quote from personal communications I thank W. Abikoff, L. Ahlfors, J. Cerf, P.J. Davis, W. Fuchs, F.P. Gardiner, J. Høyrup, J. Jost, J.-P. Kahane, I. Kra, D. Laugwitz, R. Lohan, L. Lorch, H. Mehrtens, J. Radkau, S.L. Segal, T. Söderqvist, and L. Zalcman.

Wherever arrogance of the intellect mates with the spiritual obselete and archaic, there is the Devil's domain. ... This very thing was the characteristic and menacing factor: the mixture of robust timeliness, efficient modernness on the one hand and dreams of the past on the other, - in a word, highly technological Romanticism.

Thomas Mann in an address on 'Germany and the Germans', delivered in Washington D.C., in the Library of Congress on the evening of May 29, 1945

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Memories and Memorials[1]

B. Booss-Bavnbek

Remembering Teichmüller

The international mathematical community possibly has more urgent concerns than discussing the Nazi involvement of a German mathematician who died a long time ago. Should we not leave to our German colleagues the necessary work of preserving the history? Reading a series of memorials published by the official journal of the German Association of Mathematicians, the *Jahresbericht der Deutschen Mathematiker–Vereinigung*, I do not think so. They suggest to me that, on the contrary, renewed international interest should be taken in the German attitude toward the Nazi past.

A recent perspective on the "life and work" of the German mathematician Oswald Teichmüller (1913–1943) was provided by the *Jahresbericht* in [10].[2] Now Teichmüller is remembered by some mathematicians and physicists for his original contributions especially to the theory of Riemann surfaces. Others, some of them refugees from Nazi Germany, remember Teichmüller primarily as a member of the Nazi party since 1931 and in 1933 deputy leader of the science students' council at

[1] To the memory of a dear friend, Ludovica Koch (1941–1993), who was vibrant with intelligence, knowledge, and compassion.

[2] Some years ago, a summary of Teichmüller's political engagement and a survey of some aspects of his mathematical thinking for the nonspecialist were given in this magazine [1].

Göttingen University, who with earnest resolution initiated and led the campaign to expel from academic life Richard Courant, Edmund Landau, Emmy Noether, Otto Neugebauer, and others. At age 20, heading a mob of brownshirts drummed together by him, he blocked Landau from entering the auditorium and told him the students refused to take instruction from a Jew.[3]

The *Jahresbericht* memorial contains 11 pages of biography by E. Scholz; comments on Teichmüller's mathematical publications by various authors, particularly by F. Herrlich on the problem of moduli of Riemann surfaces ("Teichmüller theory"); two letters by Teichmüller, one of Nov. 3, 1993 to Landau, the other of Dec. 12, 1938 to a former classmate from Göttingen; a list of Teichmüller's publications; and a bibliography on the impact of Teichmüller's work. The memorial comprises material from two seminars: one organized by M. Kneser in Göttingen, the other by H. Helling in Bielefeld.

When I first read the memorial I was appalled and wrote a rather harsh—maybe too harsh—addendum [3], which I circulated among mathematicians and historians. I'm grateful for the many reactions I received, which have been taken into account in the present paper.

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[3] In a letter to Landau, Teichmüller added that he personally would have no objections to being taught by Landau in advanced subjects. Wolfgang Fuchs of Cornell recalls another "example of Teichmüller's utter insensitivity and self-centeredness: In the summer of 1933 after Professor Emmy Noether had been dismissed due to Teichmüller's henchmen, he approached her and suggested that she should give a private seminar to him and a few of his fellow students. And she, being a saint and utterly selfless, gave this seminar."

My Objections

The Teichmüller memorial is at any rate more candid than many other memorial articles published in the *Jahresbericht,* in that it does not pass silently over Teichmüller's support for Nazism. What then were my objections?

These objections consisted of partly omissions and/or questionable appraisals in the historical presentation of what is now called Teichmüller theory. I compared the account of Lipman Bers:

> The theory of quasi-conformal mappings is about half a century old. Its originators were Ahlfors, Grötzsch and Lavrentyev.... The celebrated theorem by Teichmüller, obtained about ten years after Grötzsch's results, should be considered as a far-reaching deepening and extension of Grötzsch's beautiful but simple papers.[4]

Note too that Schiffer's interior variation of a Riemann surface (1938) is the same as a quasi-conformal variation.[5] In the memorial of 1992, however, the contributions of Teichmüller's predecessors M. A. Lavrent'ev and M. M. Schiffer were not mentioned at all and H. Grötzsch only in passing. Lavrent'ev was a Soviet mathematician; Schiffer was a Jew forced to emigrate by the Nazis; Grötzsch was dismissed as an anti-Nazi and worked at Halle after the War.

Second, I felt that the Nazi state was represented as

[4] This is from his foreword to [6].

[5] See [5] and [9] (p. 276). Schiffer's paper [11] was carefully studied by Teichmüller, according to some witnesses, and grudgingly quoted by him in another context.

an anonymous machine which could act as it did independently of support from individuals. Scholz wrote, for instance, on the boycott organized by Teichmüller in November 1933 against the number theorist Edmund Landau: "His activities could only attain their dreadful effect to the extent that they were parallel to the institutional intervention of the Nazi state." I also missed any awareness of the broader impact of attitudes like Teichmüller's for the Nazi ideology: racial supremacy, the Blitzkrieg concept, the Holocaust.

Finally, I objected to the authors' deliberate renunciation of moral statements, as when they announced their intention "not to make an arch-villain of Teichmüller."

Teichmüller was mathematically brilliant, but as Lipman Bers says, quoting Plutarch,

> ... it does not necessarily follow that, if the work delights you with its grace, the one who wrought it is worthy of your esteem. [2]

Larry Zalcman (Bar-Ilan) elaborates:

> In ancient and medieval times it was widely recognized that a bad man could still do notable things and that high achievement was no guarantee of moral virtue. My conjecture would be that Calvinist theology and German Romantic thought played a role in the development of the equation "genius" = "virtue". In any case, it would be of some interest to investigate this matter. I believe that this is behind the attempt to rehabilitate Teichmüller, if there is such an attempt, rather than a sinister neo-Nazi agenda.

Jens Høyrup (Roskilde) gives another possible reading of the *Jahresbericht* memorial: "The emphasis on Teichmüller's distinction between politics (incl. the planned takeover of professional power) and subject (i.e.,

Book-burning under the windows of the Mathematics Department of Berlin University, 1933.

theorems[6]) functions — no matter how it may have been intended — as a legitimation of Teichmüller's admission on equal terms to the club."

Revision of the Past

One is reminded of the "historians' dispute" of the late eighties. E. Nolte, a prominent German historian, provoked the dispute by his controversial interpretations of Nazism and the Final Solution, and his defense of the German philosopher M. Heidegger's deep and long-lasting commitment to Nazism and anti-Semitism. Nolte claims (I quote [12]) that he is not trying to justify the Holocaust and other Nazi atrocities but only to stop the "demonization of the Third Reich," to free Germans from their "pathological condition" of still living in the shadow of Nazism, and to help Germany, with a clear conscience, to "become a spiritually vital nation again." Nolte insists that Heidegger was "a normal Nazi, . . . only a middle-man" in establishing Nazi power and persecutions. He can also distinguish between a "normal anti-Semite" and the more nefarious kind "for whom aversion to Jews or the struggle against them stands at the center of his thought and activity." Clearly, under this strict criterion Teichmüller is (like Heidegger in Nolte's understanding) absolved from anti-Semitism, for he never linked any of his mathematical thoughts with it.

[6] Høyrup's own footnote: "Here, I think, one could dig deeper. Teichmüller must have found the ideas of special intuitive features of German mathematics convenient to himself, so he could defend writing his big treatise, bypassing all details in semi-Ramanujan style."

For all the parallels between Nolte's Heidegger book and the Teichmüller memorial, one must not overlook the differences between them: the philosopher Martin Heidegger surely was a pivotal figure, so any investigation of the relations between his thought and action as philosopher and as Nazi can be fruitful; Oswald Teichmüller was, however brilliant a mathematician, a relatively minor figure in history, and there may not be very much to be learned from looking more closely into his Nazi engagement.

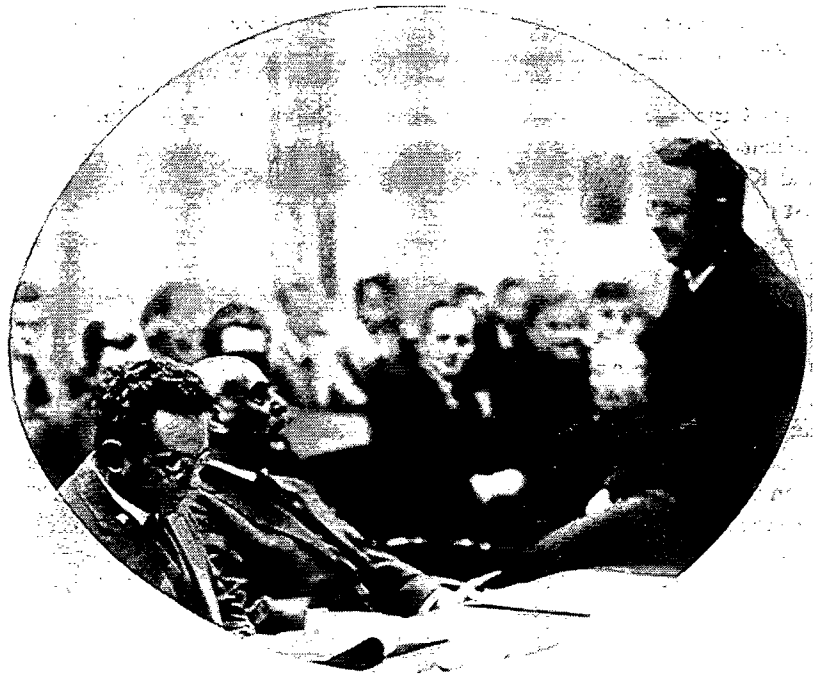
From the memorial, at least, nothing could be learned. As Horst Tietz (Hannover) puts it in a letter to the German Association of Mathematicians [14], it "did not penetrate the fog of incomprehension which lies over the inferno." To do so it needed, at least, an addendum.

Addendum and Aftermath

The addendum I submitted to the *Jahresbericht* was rejected. In his letter, the editor W. D. Geyer criticized me for providing only few new "facts" about the life and work of Teichmüller, for making "offensive evaluations," for "questioning the scientific honour of the offended persons," and for a "hardly tolerable attitude of moral superiority." He made it clear that any further discussion of my article and its rejection was unwanted.

Herbert Mehrtens (Braunschweig) described the *Jahresbericht*'s letter of rejection as "a mix of arrogance and political ignorance."

Of course historical judgments may vary radically. Opinions may also differ on the style in which criticisms should be expressed. But here there was no offer of help in adapting the style, only a blunt rejection, and



The "Courant–Landau Clique," the main target of the Germanification campaign. Foreground: Courant, Landau, Weyl.

I was made to feel that deviating perspectives were not wanted.

I therefore published my proposed addendum separately in a little booklet [3] which colleagues can order from me, without cost.

Many of my colleagues have told me I should have written a different article, focusing more on what is happening now in Germany. Thus William Abikoff (Storrs, Connecticut) wrote, "I don't think I would write the correction as you did. I would write of historical evils that may make possible the expulsion (by the government) and killings (by the neo-Nazis) that are now [1992] oc-

curring." Similarly, Wolfgang Fuchs (Cornell): "At a time in which there are so many important things to criticize in modern Germany, we should concentrate our criticisms on these. To pour scorn on an effort that may be maladroit, but is well intentioned is a waste of ammunition."

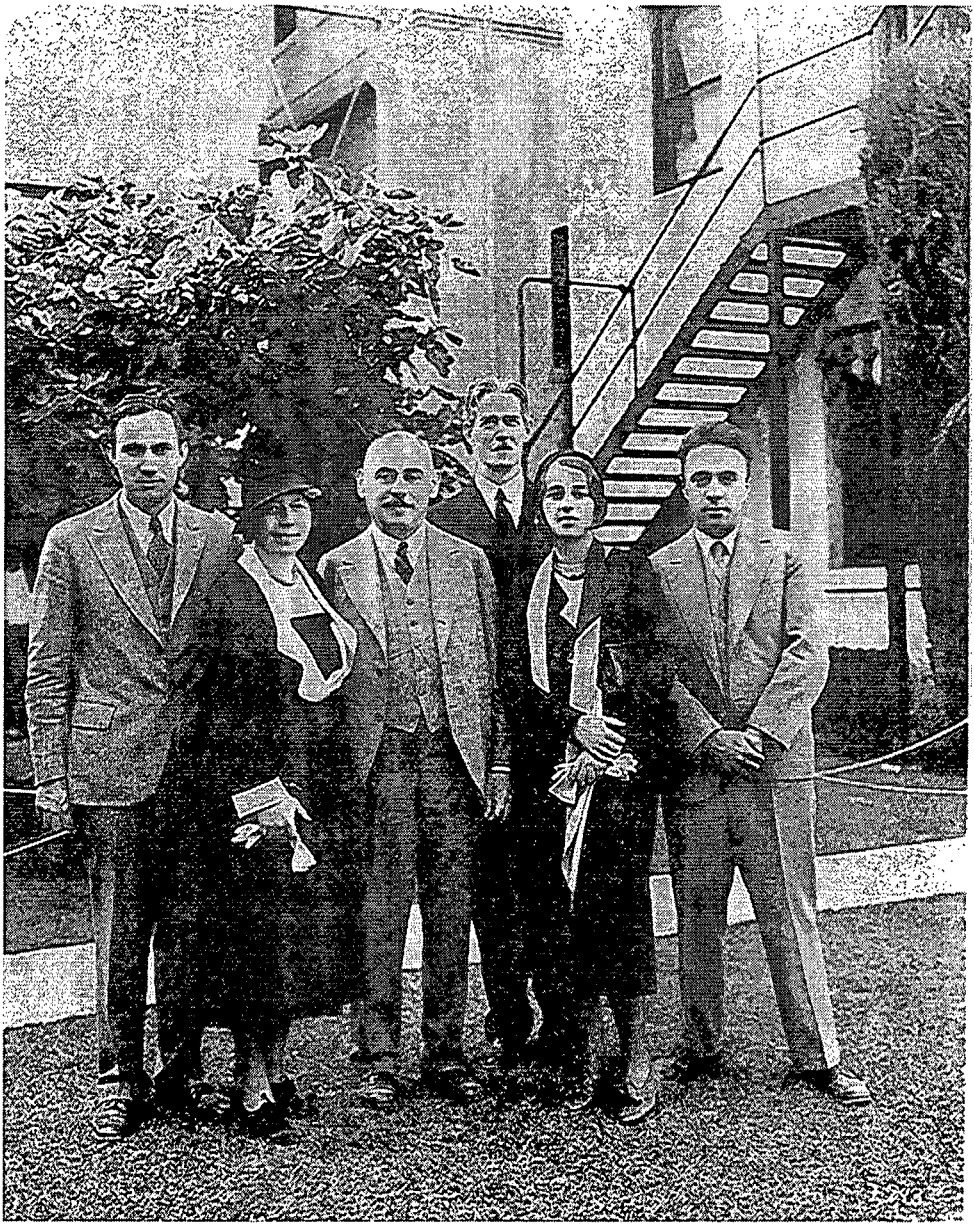
I accept this criticism. Today I would write my essay differently. My message did not really get across, namely (i) that the *Jahresbericht* memorial should not stand as the last authoritative word on the life and work of Teichmüller, and (ii) that the editors of the *Jahresbericht* are strangely stubborn in defending the nationalist tone in some articles and in the editorial line.

Comments from Correspondents

I was not the only one made uncomfortable by the *Jahresbericht* memorial. Irwin Kra (Stony Brook) in a letter to editor W. D. Geyer: "The original article on Teichmüller has left a bitter taste in many mouths, mine included. The picture presented there is far from historical accuracy.... It would certainly be unfortunate if the *Jahresbericht* article were the last word on Teichmüller's life to appear in the *Jahresbericht*."

I mentioned before that the Teichmüller article was far more candid than some other memorials in the *Jahresbericht*. Herbert Mehrtens [8] was the first to comment in public that there is a bias in these memorials. He cited as characteristic the failure of the *Jahresbericht*, "not lacking in obituaries," ever to publish an obituary for the statistician and pacifist Emil Julius Gumbel, while a comprehensive Bieberbach memorial celebrating Bieberbach's mathematical work passed over his Nazi activities in 3

The Göttingen mathematicians in happier times. Left: Emmy Noether on the steamer for Königsberg, 1930. Right: Edmund Landau's visit to Hollywood, 1931. (Left to right: G. T. Whyburn, Marianne Landau, Edmund Landau, Earl Hedrick, Susanne Landau, Karl Menger.)



sentences out of 16 printed pages.[7] Mehrten's comment: "The official memory registers the person 'as a mathematician'; for anything else 'this is not the place'; neither political nor moral judgment enters into it... The collective memory of the sciences — not only of mathematics — produces the concept of the pure scientist."

Many mathematicians were puzzled by the pattern of belittling or concealing the Nazi past as in the centenary article for Bieberbach and the obituary for K. Strubecker.[8]

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[7] Bieberbach became notorious for providing a theoretical justification, based on a pseudo-psychological typology of mathematical work, for the persecution of Landau: "Representatives of too different human races do not fit together as teacher and student. The instinct of the Göttingen students felt in Landau an epitome of an un-German approach to the topics." And such calls from Bieberbach were published again and again: in the reports of the Prussian Academy of Sciences, in the widely read notices of the German Medical Doctors and Science Teachers, in a newly founded journal *Deutsche Mathematik*, and reprinted or summarized in numerous articles in German newspapers. After the end of the Third Reich, Bieberbach denied for 15 years the truth of the Holocaust and other Nazi crimes. Nothing of this is mentioned in the Centennial. Its author, the late H. Grunsky, mentions that Bieberbach was a Nazi, declares that he later recognized and deeply regretted these "errors," and asserts that "this is not the place" to go deeper into the matter. Bieberbach himself was not so tactful when, on January 11, 1938, he demanded of the editor Grunsky of the reviewing journal *Jahrbuch f. d. Fortschritte d. Math.* "to finally get rid of the Jews (and homosexuals) among the reviewers." [See Refs. 7 and 13 (p. 217).]

[8] The obituary for Strubecker, to quote [4], "casts a warm glow over his appointment and services as Professor in the 'newly-founded Reichsuniversität' in Strasbourg during the Nazi occupation of that city. It describes those years as the happiest and most productive of his life. To top it off, the obituary characterizes the liberation of Strasbourg in 1944 by the French as an 'occupation' (Besetzung) by allied troops! This evaluation of his life is completely silent on the content of his lengthy obituary on E. A. Weiss... In it, Strubecker glorifies the Hitler regime and praises Weiss fulsomely for his activism and leadership in the storm troops (S.A.)..."

Sanford L. Segal (Rochester), regarding the Strubecker obituary: "The characterization of the liberation of Strasbourg as *Besetzung* is particularly offensive. The city has, of course, been fought over many times, but this sort of unreconstructed arch-nationalism should not find a place in an obituary. Once again, the editors did not edit appropriately and this may well reflect a bias on their part — incidentally, why did Strubecker merit this obituary in the first place, was he that prominent as a geometer?"

Even more recently the *Jahresbericht* has published an obituary for Avakumović, a Yugoslav mathematician who emigrated to West Germany in the 1960s. The authors of the obituary, J. Brüning (Augsburg), entrusted with the liquidation of the Academy of Sciences of the former GDR by the German federal government after reunification, and W. Eberhard (Duisburg) know to report, "The end of the war brought also for the Avakumović family deep-going slashes with the communist seizure of power under Tito." Lee Lorch (York University) notes concerning the Avakumović obituary, "There is nowhere any reference to the German occupation, nor even any indication that Yugoslavia was in any way involved in the war. There is no statement as to what happened to Avakumović during the war, nor even where he was then. The bibliography excites my curiosity on this; it lists five publications in 1940 (one in *American Journal of Mathematics*, four in *Mathematische Z.*), one in 1941 (apparently early in the year), in Yugoslavia. Then there are none until 1945, again in Yugoslavia. What was happening in his life during those several intervening harsh years of the (unmentioned) German occupation? The obituary does not tell us. The authors do not hesitate to slap at the left again and even to praise the monarchy, to say nothing of by-

passing the fascists. The only mention of Tito is intended as a condemnation, nothing of his great war leadership which did so much to hamper the Nazi military."

Detlev Laugwitz (Darmstadt) writes, "I have been reading the obituaries in the *Jahresbericht* also with occasional astonishment, especially since I am well acquainted with a few of the authors and respect them as otherwise quite reasonable people. It is not clear for me from which visual angle the editors select those among the many deceased members of the German Association of Mathematicians for a hagiography. (Probably old Kamke spins in his grave—he who brought the German Association of Mathematicians after 1945 to new democratic life and watched carefully lest mathematicians 'implicated in the system' take over again.) Some years ago I wrote a short biographical note on the occasion of the 100th birthday of my teacher in Göttingen Th. Kaluza (creator of the 5-dimensional field theory and highly regarded by Einstein), but the *Jahresbericht* was not specially interested." It was published elsewhere. "Of course the years 1933–45 were not omitted. I think I treated them quite sensibly."

Another comment reads, "There seems to be a spate of obituaries appearing in the *Jahresbericht*, on mathematicians whose passing was for one reason or another not previously acknowledged in that way. There must have been some conscious decision to solicit such articles, which appear to reflect a change of policy aimed to some extent at removing derogatory connotations to particular names."

In a long letter [4] to the *Notices of the American Mathematical Society*, objections similar to mine against the *Jahresbericht*'s editorial policy were presented by David

Brillinger, Chandler Davis, James A. Donaldson, Robert Finn, Wolfgang H. Fuchs, Mary Gray, Raymond L. Johnson, Jean-Pierre Kahane, Linda Keen, Irwin Kra, Klaus Krickeberg, Lee Lorch, B. Prum, Cora Sadosky, and Michael Shub.

Certainly, many mathematicians, myself included, feel like H. Mehrtens: "Personally, I'm slowly getting tired of dealing with German fascism in science history...." But he goes on to say, "...but I can't escape it because the topic is not at all closed but repressed as ever." That is the problem.

It is not easy to write a biography. If one chooses to, here is the methodological approach that Thomas Söderqvist (Roskilde), a science historian, suggests:

> The life and work of a thinker cannot be treated as independent entities; nor can the life of the thinker be treated without a thorough understanding of the social, cultural, and political context in which his life and ideas were embedded. To pursue intellectual biography without these qualifications is not only scientifically unsatisfying — in the case of thinkers who devoted their lives to totalitarian causes it is also morally suspicious. History of science was founded on the belief that science is a progressive force towards democracy and human understanding. Even if this naïve belief has been brutally refuted many times in this century, it is nevertheless an ideal which historians of science should keep in mind when they evaluate the lives and achievements of past generations. Without commitment to such moral standards of evaluation history of science easily turns into cynicism.

Although sympathetic to Söderqvist I would incline still more to the view of Jens Høyrup:

> ...[the perspective of the weekend seminars on Teichmüller] dictates that the presentation of his work glorifies the originality of his achievements at the expense of pointing out

other peoples' prior and independent discoveries. And so if the aim of the seminar was indeed historic—and not hagiographic—it should not have focused on Teichmüller's mathematics but, e.g., on Teichmüller theory and the associated history of ideas.... On the given conditions [of the seminars], all that Scholz and Schappacher could do ... was probably to include the Teichmüller letters, which, when carefully read, reveal him as one who would gladly make soap out of his victims and enjoy the profits.

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Bernhelm Booss-Bavnbek did his mathematical studies at Bonn, where his major professor was F. Hirzebruch. He was a charter member of the new faculty of Bielefeld in 1971, and remained there until forced out for his political opinions by the State Security Agency. Since then he has been at the University of Roskilde. He has published many research papers and two monographs on global analysis, mathematical physics, and mathematical modeling. His new book with K. P. Wojciechowski presents a systematic approach to elliptic boundary problems for operators of Dirac type over manifolds with cylindrical boundaries. He has also written occasionally on mathematics in other sciences and ethical considerations in our profession.

Document 1 - The Submitted Addendum

PERSPECTIVES ON TEICHMüLLER AND THE JAHRESBERICHT. ADDENDUM TO SCHAPPACHER, SCHOLZ, ET AL.

B. Booß-Bavnbek, Roskilde

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1991 *Mathematics Subject Classification.* 01A60, 01A65; 30C60, 30F20, 32G15.

[Submitted to the Jahresbericht May 2, 1993, declined June 3, 1993.]

Introduction

The *Jahresbericht der Deutschen Mathematiker-Vereinigung (JB)* in vol. 94 (1992) published an article on the 'life and work' of the German mathematician Oswald Teichmüller (1913-1943), who some mathematicians and physicists remember for his original contributions especially to the theory of Riemann surfaces. Others, some of them refugees from Nazi Germany, on the other hand remember Teichmüller for the resolve with which he, member of the Nazi party since 1931 and in 1933 deputy leader of the science students' council at Göttingen University, initiated and led the campaign to expel from academic life Richard Courant, Edmund Landau, Emmy Noether, Otto Neugebauer, and others. The article contains a short biography by E. Scholz; comments on Teichmüller's mathematical publications by various authors, half of the comments by F. Herrlich on the problem of the moduli of Riemann surfaces ('Teichmüller theory'); two letters by Teichmüller, one of Nov. 3, 1933 to Landau; the other of Dec. 12, 1938 to a former classmate from Göttingen; a list of Teichmüller's publications; and a bibliography.

When I first read the article I was appalled for

several reasons and wrote a rather harsh, maybe too harsh, draft reply which I circulated among mathematicians and historians. I received very different replies, some of them dissenting, most of them adding new dimensions to my objections. The reactions I got form an integral part of this paper.

One would expect from an article in the *JB* that it should at least live up to professional standards of editorial practice, of mathematics, and, in the case of the article on Teichmüller, also of history. It does not, as I argue below. Thus, my criticism is not only mathematical but in particular ethical and political. I feel that the *JB* authors' portrayal of Teichmüller is irresponsible.

I begin by discussing the professional standards of the *JB* and delineate three different attitudes towards Teichmüller. In Sections **2-4** I comment on each of these attitudes: their legitimacy, methodological requirements, and relevance in casu Teichmüller. In Section **5** I finally suggest an agenda for a normalization of attitudes towards the past.

For permission to quote from personal communications I thank W. Abikoff, L.V. Ahlfors, J. Cerf, P.J. Davis, W. Fuchs, F.P. Gardiner, J. Jost, J.-P. Kahane, R. Lohan, L. Lorch, J. Radkau, and T. Söderqvist.

1. Professional Standards

The *JB* article gives the impression that it was done as a rush-job. That happens in mathematics as in other fields, but the editors of a journal should ensure that only material which is sufficiently well investigated be published. The scholarly community must trust that the editors of a scientific journal do not print false, unchecked, or misleading articles as the one on Teichmüller's life and work.

I recognize that the *JB* article contains many valuable and remarkably well checked details. Compared to other *JB* obituaries[1] it is distinguished by at least treating a leading German mathematician's Nazi involvement as problematic. This paper is therefore not so much a criticism of the authors of the article as of the *JB* and its editorial policy which does not ensure the professional standards required and expected from learned journals.

Three different editorial approaches are defensible in case of Teichmüller, who was mathematically

[1]See e.g. Ludwig Bieberbach zum Gedächtnis, *JB 88/4* (1986); Oskar Perron, *JB 90/4* (1988); Helmut Grunsky *JB 91/4* (1989); Karl Strubecker zum Gedenken *JB 94/3* (1992); Otto Volk 1892-1989 *JB 94/3* (1992).

brilliant but did so much harm to other people:

(I) Simply ignore both the man and his work, even in spite of deeply shared mathematical interests! That was André Weil's option in his autobiography (cf. [Weil 1991]).†

(II) Restrict the reference to Teichmüller's mathematical work [Ahlfors 1953/54]! But shouldn't one do it like Ahlfors did: pay due regard to other contemporary contributions and thereby avoid the *JB* authors' biased mathematical 'Heroisierung' of Teichmüller?

(III) Or one might choose the holistic approach and write on Teichmüller's life and work as an inseparable whole. But then one must live up to what the historian of science Thomas Söderqvist (Roskilde) describes as professional standards of modern history writing "with its emphasis on the personal and cultural context of intellectual achievements. The life and work of a thinker cannot be treated as independent entities; nor can the life of the thinker be treated without a thorough understanding of the social, cultural, and political context in which his life and ideas were em-

†[This reference might be misplaced. *(Added in proof)*]

bedded." [Söderqvist 1992]

Each of the approaches has its own legitimacy, but also its own methodical rules which must be observed. Unfortunately, the *JB* article breaks them all.

2. Passing Over in Silence?

I do not prefer the first approach, but find it conscionable either from an ethical, personal, or narrow mathematical point of view.[2]

First the *ethical* reasons to pass Teichmüller over in silence. Since he joined the Nazi party (NSDAP) and the Storm Troopers (SA) in 1931 and until his death in October 1943 as a Wehrmacht volunteer in Russia, Teichmüller never dissociated himself from his actions as a Nazi and the ideology of brutality and racism, which led to the mental and physical destruction of people he knew personally and of millions of others in Germany and German occupied territory. Enough reason to let his name sink into oblivion although no court has ever found Teichmüller guilty of collective or personal crime.[3]

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[2]Some of my correspondents doubted it worthwhile to criticise at such length an article about Teichmüller. As Fred Gardiner (New York) writes: "I don't think it comes as a surprise to ordinary people that geniuses can be immoral and that they are just as susceptible to faulty judgment and human weakness as any of the rest of us." [Gardiner 1993]

[3]From Nov. 20, 1945 to Oct 1, 1946 the Nuremberg Tribunal discussed the question of branding as criminal various organizations of Nazi Germany, such as the SA, but ended

With regard to the *personal* aspects, clearly no jury can reduce or remove the pain or antipathy with which Teichmüller's contemporaries remember his personality. As William Abikoff (Storrs, Connecticut) recounts:

> Teichmüller was a horrible person. He carried hatred with him into the Mathematics Institute of Göttingen. I tried to talk to Neugebauer about him in 1988, and I watched as the pain consumed that old man. [Abikoff, 1992]

Ralf Lohan (Hangelar near Bonn), 10 years older than Teichmüller and for several years at the same Berlin department, wrote to me:

> Sie behandeln da ein grundsätzlich sehr schweres Thema: Beurteilung eines Menschen nach Leistung *und* Charakter. Erhard Schmidt hat

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after months of controversy with the refusal to declare the SA collectively guilty of *planning, unleashing, and waging aggressive wars* - the only internationally agreed criteria for conviction. For the analysis of the general criminal, inhuman nature of the SA see *The Trial of German Major War Criminals*, Proc. Int. Military Tribunal, London 1950, especially Part 3, p. 98; Part 21, pp. 106, 345; Part 22, pp. 1, 212, 219f, 264, 273, 276f, 356f. Teichmüller's individual case was never tried.

> einmal in seiner Rektoratsrede gesagt, das entscheidende sei der Charakter.
>
> Wie Sie wissen erlebte ich Teichmüller in Berlin. Mir war er so widerlich, daß ich niemals mit ihm gesprochen habe und ihm gerne das Betreten der Seminar-Räume verboten hätte. Aber dazu hatte ich nicht die Macht. [Lohan 1993]

One should know and acknowledge that some of Teichmüller's contemporaries personally have imperative reasons for having his name forgotten.

Teichmüller's *mathematical* importance must be judged from three different angles:

(1) the service he has done to our field;
(2) his share in the misdeeds against the scientific progress of mathematics as initiator and leader. Generally speaking, mathematics did not flourish in the Third Reich. The *Mathematical Reviews*, founded in 1940 in the U.S.A., twisted the name of the previously world famous and outstanding German journal *Fortschritte der Mathematik* to *Rückschritte der Mathematik*. However, not all 'Rückschritte' of mathematics in Nazi Germany were harmful to the field itself. It se-

ems that some of the most promising theoretical directions flourished in their foreign asylums. Other sprouting mathematical ideas and practices fell victim to Nazi disruption and seem to be irretrievably lost.

(3) his contributions to the 'Rückschritte' as a normal Nazi supporter.

Some of the greatest challenges and achievements of mathematics in the 20th century are connected with pre-Nazi Göttingen. Roughly speaking, pre-Nazi Göttingen represented three seminal concepts of mathematics. The *first* was the struggle for logical foundations of mathematics, for understanding the role of formalism and symbolism in sciences, language, conception, thinking, and technology. In Göttingen that research was closely connected with the name of David Hilbert and labelled as 'formalism'. There is no evidence of Teichmüller's direct participation in this discourse, but he played a role in the violent disruption of an emerging international and interdisciplinary discourse[4], in my view the greatest Nazi induced tragedy in science history.

The *second* concept was that of deep underly-

[4]See [Carnap et al. 1931] and e.g. [Booß-Bavnbek, Pate 1992].

ing interrelations between pure mathematical research and other fields, especially physics. Richard Courant and Hermann Weyl were two leading exponents of that concept. Teichmüller's fight against the 'Courant-Clique' was victorious in Göttingen. This was a tremendous scientific loss for Germany. However, Weyl, Courant, and Neugebauer were able to build new carreers and extremely successful new schools elsewhere.

The *third* concept was the idea of restructuring, i.e. a completely new way of thinking in mathematics. The idea is usually attributed to the French School from Bourbaki to Grothendieck and became decisive for all of mathematics in the second half of our century. Two very different flag bearers were Edmund Landau and Emmy Noether. In their hands all was redefined. Famous great theorems suddenly became lemmata or were otherwise 'perturbated' and 'adapted'. Familiar definitions disappeared or were replaced by radically new ones.

Teichmüller probably understood how this strong structuralism may trouble the learning of the classics.[5] In November 1933 most of the mathematici-

[5]See e.g. the strange, but fascinating analysis class book [Landau 1934] with its famous and deliberate 'liberation' of

ans, who were unwanted by the Nazis, had already left Göttingen; Edmund Landau stayed, possibly feeling too old to emigrate. On November 2, 1933 he tried, with the consent of the government, to resume his teaching after the forced break in the spring semester. On the same day, Teichmüller personally led a paramilitary action of Nazi students to block Landau and force him to resign. Teichmüller succeeded and wrote in, to quote the *JB* authors, a 'bizarre' letter to Landau:

> Es handelt sich für mich nicht darum, Ihnen als Juden Schwierigkeiten zu machen, sondern lediglich darum, die deutschen Studenten des zweiten Semesters unter möglichster Schonung aller übrigen davor zu bewahren, gerade in der Differential- und Integralrechnung von einem ihnen ganz fremdrassigen Lehrer unterrichtet zu werden. (p. 29)

But Teichmüller could also see the seminal importance of the Landau/Noether concept and wanted to benefit personally from it. In the same letter he

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the standard transcendental numbers and functions like π and sin of the geometric origin and meaning. The book was published in Holland after the pogrom-like boycott against Landau's lecturing in Göttingen.

wrote:

> Aus dieser meiner Einstellung folgt auch, daß wenig dagegen einzuwenden wäre, wenn Sie höhere Vorlesungen, die auf vorhandener Geisteseinstellung aufbauend für Anwendung oder Erkenntnis wichtige mathematische Tatsachen erarbeiten, nach wie vor im besten Einvernehmen mit den Studenten an unserer Landesuniversität halten wollen. (p. 30)

Wolfgang Fuchs (Cornell) recalls another "example of Teichmüller's utter insensitivity and self-centredness: In the Summer of 1933, after Professor Emmy Noether had been dismissed due to Teichmüller's henchmen, he approached her and suggested that she should give a private seminar to him and a few of his fellow students. And she, being a saint and utterly selfless, gave this seminar." [Fuchs 1993]. Quod licet Jovi non licet bovi.

3. Do It Like Ahlfors!

Another defensible attitude towards Teichmüller is to ignore his person and concentrate on his mathematical achievements. Since I work in the field of global analysis, my criticism 'from within mathematics' deals only with the *JB* article's treatment of the problem of moduli of Riemann surfaces (*Teichmüller theory*).

The *JB* authors know Teichmüller's deep historical roots, dating back to Bernhard Riemann's *Theorie der Abelschen Funktionen* (1857): "Seit Riemanns berühmter Bemerkung, daß die kompakten Riemannschen Flächen vom Geschlecht g stetig von $3g-3$ komplexen Parametern abhängen, haben sich viele Mathematiker um Präzisierung und Lösung dieses Problems bemüht" (p. 22). However, in striking contrast to e.g. Y. Imayoshi's and M. Taniguchi's *Introduction to Teichmüller spaces* ([Imayoshi, Taniguchi 1991; see especially pp. vii-viii and 14-71, quoted from the English translation 1992]), the *JB* authors do not trace the extensive pre-Teichmüller investigations and the considerable progress within the theory of Riemann surfaces and differential geometry spurred by the moduli problem.[6] The *JB* au-

[6]For a modern presentation of these aspects, see [Tromba

thors do not mention the work of Felix Klein and Henri Poincaré where the Teichmüller space $\mathcal{T}_g$ appeared implicitly already in the 1880s; nor the work of Robert Fricke from the beginning of the century and of Werner Fenchel and Jacob Nielsen preceding Teichmüller in the 1930s in constructing $\mathcal{T}_g$ $(g \geq 2)$ as a real $(6g-6)$-dimensional manifold; nor the uniformization theory of Riemann surfaces perfected by Henri Poincaré and Paul Koebe around 1907. Thus the *JB* authors expose themselves to the critique that they present a Teichmüller hagiography and claim Teichmüller's ideas to be unique - at the expense of a balanced view.

The *JB* authors admit the limitations of their main mathematical section on Teichmüller theory and that Frank Herrlich, a specialist in algebraic geometry, had to write it with little notice. The result is that the relationship of Teichmüller's achievements to the work of many other mathematicians of that time is omitted, unless indispensable for algebraic geometry.

It is especially unfortunate that the *JB* article

1992]; for a non-technical introduction to the concept of the Teichmüller space $\mathcal{T}_g$ and to some of its ramifications in modern geometry and quantum field theory, see [Nash 1991; Chapter V and Chapter IX].

is silent about the essential contributions by Herbert Grötzsch (born 1902).[7] In the late 1920's and early 1930's he was a leading exponent of the geometric approach to complex analysis, which turned out to be of particular relevance for the development of mathematics during the rest of this century. Central to Grötzsch's work is the local-global aspect when he e.g. relates the characterization of the global behaviour of a mapping, taking the vertices of a square to vertices of a rectangle that is not a square, to locally defined dilatation coefficients. Gaier [1990; pp. 383 ff] gives an illustrative example.

Fred Gardiner (New York) develops the point:

> I know that Teichmüller's mathematical insights and contributions to deformation theory were extraordinary. Now his name is the title for a large field developed by many other people as well and it is a field which keeps branching out into new areas, most recently in Thurston's applications to low dimensional topology and rational dynamics and Sullivan's theory of convergence of renormalization for one-dimensional

[7] The hagiographic overestimation of Teichmüller remains even when the *JB* in a later issue mentioned Grötzsch more adequately (R. Kühnau, Einige neuere Entwicklungen bei quasikonformen Abbildungen, *JB 94* (1992), 141-169).

> unimodal mappings in a given topological class.
>
> But any exposition or serious application will always come back to the so-called *Grötzsch argument*, an argument which enables you to control the distortion of global shapes of geometric objects by knowing bounds for the local dilatation. This idea is fundamental to the theory and it keeps getting repeated and his name is mentioned over and over again. [Gardiner 1993]

In the biographical part of the *JB* article there is exactly one line and one footnote mentioning Grötzsch; the mathematical part of the article attributes only the analytical definition of quasiconformality to him. In various other connections he is not mentioned at all, not even in the list of 78 secondary references. This is in remarkable distinction to the seminal survey article by Ahlfors [Ahlfors 1953/54] in which he introduced the terms Teichmüller spaces and Teichmüller theory, but did not suppress the decisive and seminal contributions by Grötzsch to the field of extremal quasiconformal mappings, i.e. to the problem of minimizing the maximal dilatation in a given class of mappings and to the investigation of conformal classes of Riemann surfaces which after all is the very heart of Teichmüller theory (see [Grötzsch 1928], [Grötzsch 1930], [Grötzsch 1932]). Today Lars

Ahlfors even says: "It is all my fault for not quoting Grötzsch in my 1935 paper in the Acta. At that time I was well aware of Grötzsch's idea and I had even looked at some of his papers, but did not read them because I thought they were poorly written. What terrible youthful arrogance!" [Ahlfors 1985].[8]

Another deplorable omission is that the *JB* authors also fail to mention the important contributions by Menahem Max Schiffer to the field [Schiffer 1938].[9] These preceded Teichmüller's work a little and it is evident from one of Teichmüller's papers (see [Ahlfors, Gehring 1982; p. 264]) that he knew

[8]By the way, Grötzsch is also interesting as a personal counterexample to the majority of opportunistic or brutal Nazi mathematicians striving for academic positions in Germany in those years. In 1935 he was dismissed by the Nazis in Gießen and after 1945 restored in Halle where he still lives. [He died in 1993. *(Added in proof)*]

[9]Schiffer (born 1911 in Berlin, now retired in Stanford) was then at The Hebrew University, Jerusalem, and in the 1950s co-editor of the young Israeli (and Rockefeller Foundation sponsored) *Journal d'Analyse Mathématique* where Lars Ahlfors published his mathematical discovery of Teichmüller, see [Ahlfors 1953/54]. When, so few years after the holocaust, Schiffer did not stop the publication, one must keep in mind that it was the Western Zeitgeist of the early fifties to put a stop to the past. [The formulation of this footnote is unfortunate. *(Added in proof)*]

Schiffer's work, but apparently only realized its relations with the complex coefficients problem (now de-Brange's Theorem), and not its importance for what is now called 'Teichmüller Theory'.[10] One example: To use Schiffer's interior variation is one of the most explicit methods of deforming the complex structure, as accounted for e.g. by [Nag 1988] and [Imayoshi, Taniguchi 1991]. We can nowadays see that Schiffer's approach provides a key to the principal problem of the moduli of Riemann surfaces, namely to find good ways of parametrizing the complex structures on the surface. Admittedly, the interrelation between Schiffer's and Teichmüller's work was not clear until some 30 years later when Gardiner [Gardiner 1975] showed that Schiffer's interior variation by attaching a cell to a Riemann surface is the same as quasiconformal variation. This is only one example. As explained by e.g. Gardiner, Schiffer's ideas actually went considerably further. Mentioning Schiffer in the *JB* article would have placed Teichmüller's work in a historical

[10] In a letter to Lipman Bers on the *JB* issue, Lee Lorch (Toronto) recollects some remarks made to him by Mary Cartwright: "If I recall them correctly, she said that she had refereed Schiffer's c. 1938 for the London Math Soc and felt rather pleased with herself that she had recognized its importance." [Lorch 1992]

context and helped the reader to find out whether Teichmüller's ideas were actually as unique as often claimed, or paralleled by various other approaches, each with its own merits.

Not all my correspondents supported my draft reply with respect to Grötzsch and Schiffer, but expressed mathematically dissenting views which are of an intrinsic interest:

Jürgen Jost (Bochum) writes:

> Ihre Einwände gegen den Teichmüllerartikel ... kann ich ... nicht vollständig teilen. Auch im Vergleich mit Äußerungen anderer Mathematiker über Teichmüller erkenne ich in diesem Artikel das Bemühen, ein einigermaßen unvoreingenommenes Bild von Werk und Persönlichkeit Teichmüller's zu zeichnen...
>
> Zu Ihren Fragen bezüglich der Beiträge von Grötzsch und Schiffer möchte ich wie folgt antworten: Grötzsch hat das Problem der Bestimmung extremaler quasikonformer Abbildungen, welches er in Spezialfällen behandelt und gelöst hat, wohl nur als isoliertes Problem im Rahmen der Funktionentheorie gesehen. Es ist das mathematische Verdienst Teichmüller's, den Zusammenhang dieses Problems mit dem Problem der Moduln Riemannscher Flächen gesehen und es damit auf eine qualitativ ganz neue Stufe gehoben zu haben. Es ist auch so, daß das, was heute

als Teichmüllertheorie bezeichnet wird, nicht unbedingt das Konzept der extremalen quasikonformen Abbildung zu seiner Begründung braucht. So ist es nicht ausgeschlossen, daß ohne die Idee Teichmüller's der Beitrag von Grötzsch völlig in Vergessenheit geraten wäre... Die Gedanken von Schiffer, die sicherlich nicht ohne Originalität und Bedeutung sind, haben dagegen in der Entwicklung der Teichmüllertheorie, soweit mir bekannt, keine wesentliche Rolle gespielt. Dies ist wohl bedauerlich, denn wenn sie früher aufgegriffen worden wären, hätten sie vielleicht die Entwicklung wesentlich befruchten können. In dieser Hinsicht ist es vielleicht von Interesse zu bemerken, daß in den Dreißiger Jahren auch in der Theorie der Minimalflächen in den Untersuchungen von Douglas und Courant und seinen Schülern das Problem der Moduln Riemannscher Flächen von großer Bedeutung war. Jedoch waren in diesem Kreise anscheinend die Gedanken Teichmüllers nicht bekannt, und so ist hier die Entwicklung über 40 Jahre lang praktisch stehengeblieben. Zumindest Courant war übrigens mit den Arbeiten von Schiffer vertraut, und dies scheint zu zeigen, daß der Ansatz von Schiffer alleine wohl nicht genug Kraft hatte, um die Theorie voranzutreiben. [Jost 1992]

Similarly Wolfgang Fuchs (Cornell):

> I completely share your feelings about the inadequacy of the 6th section of the article, on Teichmüller Theory. The authors also share our feelings and they explicitly apologise right on the second page... This is very regrettable, but it seems to have been the best that could be managed at the time. The omission of sufficient references to the work of Grötzsch is indeed a severe blemish, particularly in view of the fact that Teichmüller himself made it very clear how much the work of Grötzsch inspired his ideas.
>
> On the other hand I feel that you are not quite fair to the achievement of Teichmüller. T-space is rightful named after him and its metrisation by the T-metric is a major discovery entirely due to Teichmüller, even though it had a precursor in Schiffer's Theory of inner variation. [Fuchs 1993]

Irrespective of the different positions regarding the importance of Grötzsch, Schiffer et al., it was certainly the responsibility of the *JB* to let their readers be informed of the broader historical context.

4. On Teichmüller's Personality

The third defensible attitude towards a person like Teichmüller is to treat his life and his work as a whole. Possibly this is what the *JB* authors aimed at, but their attempt is not successful. Indeed, it *is* a difficult alternative. The *JB* authors claim "eine Ausarbeitung vorzulegen, die wesentlichen Aspekten von Teichmüllers Leben und Werk sorgfältig nachgeht" (p. 2), but frankly admit one limitation:

> Dieser Bericht kann auf die Charakterisierung der gespannten und widersprüchlichen Persönlichkeit nicht weiter eingehen; er wird sich ganz auf eine Darstellung der belegbaren Ereignisse des Lebens und der wissenschaftlichen Entwicklung Oswald Teichmüllers beschränken. (p. 3)

The goal of such a random extract of Teichmüller's life, of such 'mindless focus on the chronology of events' ([Söderqvist 1993]) remains unclear. There is not much to learn for the reader, and I wonder what the *JB* authors learnt themselves: The result of their investigation of Teichmüller's personality are (in alphabetical order) the attributes *aufgeweckt; begabt; bizarr; exzentrisch; gespannte und widersprüchliche Persönlichkeit; hartnäckig und aggressiv* (in matters

of the German Association of Mathematicians against other great Nazis like Hasse and Bieberbach); *impulsiv; intellektuell; konnte auf andere Mathematiker zugehen; lakonisch; originell; politisch unsensibel; selbständig; weltfremd.* There are no other attributes to Teichmüller's personality in the *JB* article. I would call that 'Positivheroisierung' - de mortuis nihil nisi bene.

Maybe this 'Positivheroisierung' is a consequence of the *JB* authors' choice and use of sources. But maybe also it is a consequence of their explicit ambition to avoid Teichmüller's political 'Negativheroisierung':

> Um keiner Negativheroisierung Teichmüllers und seiner studentischen Mitstreiter das Wort zu reden, ist zu bemerken, daß der nun folgende NS-Aktionismus unter der Hülle der Fachschaft in den Jahren 1933/34 nur insoweit seine fatale Wirkung entfalten konnte, als er mit dem institutionellen Eingriff des Nazi-Staates parallel lief. (p. 4)

Here we also see *how* the *JB* authors avoid the 'Negativheroisierung' of Teichmüller, namely by loosing sight of historical dimensions and treating the 'Nazi-Staat' as if it were a historical subject of its

own. Exactly this concept of the 'Staat' is the very nucleus of my dissent with them, the point where our views of the role and responsibility of science and scientists are completely irreconcilable. The 'Nazi-Staat' was, like any other state, made of people: in the case of Germany mostly of the members of the NSDAP and the SA. There was no other 'Staat' than these people and their activities, and the inevitable consequence of the *JB* authors' concept of state is for instance the playing down of Teichmüller's personal responsibility for his Nazi actions against Courant, Landau, Noether, and many others.

Another example of how the *JB* authors do not fully bring to light the terrifying context of Teichmüller's activities, are their comments on Teichmüller's second reprinted letter from December 7, 1938 when he worked in Berlin. From there he wrote to a fellow student in Göttingen:

> Ihr habt ja Stöhr eine Weile da gehabt. Daß der dort nicht Hilfsassistent geworden ist, freut mich: zwar liegt kein Grund zum Haß gegen Stöhr vor, aber der Verlauf der Angelegenheit dürfte beweisen, daß in Bezug auf Euer Institut doch einiger Optimismus am Platze ist, daß Göttingen sich nicht zum Mülleimer Berlins degradieren läßt... Nun ist Stöhr, dessen mathe-

> matische Begabung feststeht, in Göttingen nicht Hilfsassistent geworden, obwohl er von Berlin abgelehnt wurde, voraussichtlich sogar deswegen bzw. aus denselben Gründen. (p. 31)

The *JB* authors explain in which sense Teichmüller meant that Göttingen did not degrade itself to being the 'Mülleimer' (garbage can) of Berlin: "Dies ist von einer politischen, nicht mathematischen Beurteilungsebene gemeint". That is all about the political context of a letter written one month after the 'Reichskristallnacht'.

Another 'belegbares Ereignis', which the *JB* authors call attention to, is that Teichmüller's actions did not bring him major personal gains.[11] But Teichmüller shared his 'selflessness' with a number of others according to Göring: "Denn hier, glaube ich, hat niemand, der angesteckt hat - also bei den Synagogen ist es selbstverständlich, aber auch bei Privathäusern wohl - an den eigenen Nutzen gedacht..."

[11] Actually, there were gains. But it is left to the reader to figure out for himself what they were worth; and who knows today what Teichmüller's special student grant of monthly 200 Reichs Marks was worth? My guess is that it was substantially higher than the average income of a worker. And the reader must guess himself that 'Abkommandierung zum OKW' means exemption from compulsory military front service.

[Heim, Aly 1993, quoted after the preprint in *Die Tageszeitung*, Nov. 7, 1992, p. 13] Reading the *JB* article again and again I wonder what message the *JB* and its authors wanted to convey.

Had the *JB* authors taken the historical context into account, they would have found that there is nothing special in the fact that Teichmüller's behaviour was not especially awarded in his scientific or military career immediately before and during the war. Göring's talk of December 6, 1938, *Der Jude kann nicht mehr in Deutschland wohnen* marked the transition from the pogrom - the speciality of Teichmüller's henchmen - to what Göring called the 'organische Lösung der Judenfrage', see e.g. [Hilberg 1961], [Pätzold 1983], [Deák 1989, 1992], and [Heim, Aly 1993]. Coercive measures were made considerably more extensive, penetrating, threatening, and systematic and so there was no longer any need for the Teichmüller type of 'Volkswillen'.[12]

I must also protest when the *JB* authors characterize the unlawful, criminal and brutal occupation of

[12] "Whether Teichmüller was privy to the then highly secret and perhaps not even explicitly formulated plans for the annihilation of the Jews, seems highly doubtful. Let us leave him the credit of being a first rate bastard on his own." [Fuchs 1993]

Norway only as 'beschwerliche Umstände' for Teichmüller (p. 12).[13]

To conclude: in the final outcome the *JB* authors separate Teichmüller's 'life' from his 'work' and remove the historical context of both, which makes Teichmüller's political life appear less appalling and his mathematical work more unique. Philip Davis (Providence) comments: "The separation of art, 'pure' science, technology from morals (or vice versa) has always been an attractive but potentially poisonous intellectual possibility." [Davis 1992].[14]

Therefore I find it necessary to challenge the *JB*

[13]The *JB* authors do not even get the political and military circumstances of Teichmüller's death in Russia in 1943 correct, when they differentiate between Hitler's occupation plans and those of a 'realistischeren Teils der militärischen Führung' (p. 13). As modern research indicates, the 'alternative' occupation plans were hardly more 'realistic' than Hitler's (accounted for e.g. in [Eichholz 1985; pp. 422-430] and the references given there).

[14]See also Herbert Mehrtens' analysis of 'purity without responsibility' as a typical trait of most Nazi mathematicians' self-concept and the dominant trait of German mathematicians' and physicists' way of 'coming to terms with the past' (Vergangenheitsbewältigung) after the fall of the Third Reich, [Mehrtens 1990]. A related (Peircean) view was presented in [Booß, Franke, Otte 1972], namely the need of each of us, also of the scientist in the specialized sense, to become theo-

article on Teichmüller, even when Wolfgang Fuchs (Cornell) warns me that "to pour scorn on an effort that may be maladroit, but is well intentioned is a waste of ammunition." He may be right, but to me the article is neither intellectually, nor morally acceptable.

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reticians of our extra-scientific practice also when young and probably producing our best mathematical ideas. It seems inappropriate to acquit Teichmüller of responsibility for his comportment at the age of twenty especially in the absence of significant revision in his remaining ten years.

5. Need for Normalization

The *JB* authors point out: "Teichmüller trennte ... anders als Bieberbach die fachlichen und die politischen Ebenen deutlich gegeneinander ab." (p. 9) To various mathematicians that is a 'redeeming feature', combined with the "charitable explanation that he was a politically naive victim of the disease that was rampant in his country".[15]

A different view was offered by Thomas Mann in his talk *Deutschland und die Deutschen* in the Library of Congress, Washington, June 1945. There he warned against the scientists' 'Weltfremdheit' and added:

> Wo der Hochmut des Intellektuellen sich mit

[15] [Ahlfors, Gehring 1982, p. vi]. Some mathematicians go further in discovering 'redeeming features': K. Strebel (Zürich) e.g. in his review of [Ahlfors, Gehring 1982] in *Mathematical Reviews*, Jan. 1984, p.14 does not mention the Nazi connection of Teichmüller, not even that 11 of the 20 Teichmüller papers explicitly mentioned in his review appeared in the telltale journal *Deutsche Mathematik*. But he did find it appropriate to remark that Teichmüller's place of birth, Nordhausen, and nearby Göttingen were "now separated by the Iron Curtain". Is that meant to suggest that Teichmüller after all backed the right horse? [There are other readings possible. *(Added in proof)*]

> seelischer Altertümlichkeit und Gebundenheit gattet, da ist der Teufel... Das Bedrohliche ist die Mischung von robuster Zeitgemäßheit, leistungsfähiger Fortgeschrittenheit und Vergangenheitstraum, der hochtechnisierte Romantizismus. [Mann 1947; pp. 14 and 33]

Alone, Teichmüller would have offered no threat to humanity. But he was one of many, including mathematicians, and that lead to the disaster of the Second World War and the Holocaust.

The unmistakable conclusion is that the *JB*, "das offizielle Veröffentlichungsorgan der Deutschen Mathematiker-Vereinigung (DMV)" as the editorial states, was not able to contribute to the analysis of the German past. Unfortunately, that is no exceptional faux pas when recent publications by the Deutsche Mathematiker-Vereinigung are examined. As Jürgen Jost notices:

> Ich teile grundsätzlich Ihre Auffassung, daß die Ereignisse an den mathematischen Instituten in Deutschland während des Dritten Reiches in der DMV im allgemeinen nur sehr unzulänglich und häufig sehr einseitig aufgearbeitet werden. Beispielsweise habe ich mich über das Heft 4 des 88. Jahrgangs des DMV-Jahresberichts sehr geärgert, in welchem in annähernd ähnlichem Um-

> fange Artikel über Hermann Weyl und Ludwig Bieberbach nebeneinander gestellt wurden. Während Weyl Deutschland bekanntlich 1933 verlassen hat, war Bieberbach wohl der schlimmste Nazi unter den deutschen Mathematikern. Über diese Tatsache wurde jedoch in dem Artikel über Bieberbach in der Einleitung mit einigen lapidaren und das Wirken Bieberbachs noch verharmlosenden Sätzen hinweggegangen. Von einem Protest hat mich seinerzeit nur die Tatsache abgehalten, daß der Verfasser dieses Artikels, H. Grunsky, bei Drucklegung des Artikels schon verstorben war. [Jost 1992]

Other obituaries provide further evidence of the lack of seriousness, professionalism, and decency on the side of the *JB* and DMV when looking back at the Nazi past. Without objection, the *JB* editor let pass a scandalous obituary for the Nazi Karl Strubecker. The author, Kurt Leichtweiß (Stuttgart), does not mention Strubecker's enthusiasm for the Nazis and the 'Wiederaufstieg des Reiches'[16] and calls the liberation of Strasbourg in November 1944 an 'occupation':

> Nicht zuletzt war es der Umsicht seiner jungen Frau zu verdanken, daß beide der Besetzung

[16]K. Strubecker, *Deutsche Math.* *7* (1942-44), p. 260.

> Straßburgs durch die aliierten Truppen am 23. 11. 1944 gerade noch rechtzeitig entkommen ... konnten. [*JB* 94 (1992), p. 108].

Although Jean Cerf (Paris) [1992] kindly writes "Il est remarquable, et bien preférable, que des Allemands aient eux-mêmes réagi",[17] it is a sad fact that no reactions from German *mathematicians*, no excuses by the DMV leaders, no personal consequ-

[17]Cerf refers to the following sarcastic comment in the German science magazine *Forum Wissenschaft*: "Einen denkwürdigen Nachruf des Stuttgarter Professors Kurt Leichtweiß für den kürzlich auf dem Weg zu seinem Rotary-Club verstorbenen Mathematiker Karl Strubecker publizierte dieses Jahr das offizielle Mitteilungsblatt der Deutschen Mathematiker-Vereinigung. Besonders lobend erwähnt wird in Strubeckers Lebenslauf z.B. seine Mitwirkung an der 'Neugründung' der 'Reichsuniversität Straßburg' im Jahr 1941, wo er in selbstlosem Einsatz 'in einem leeren Wohnhaus ein mathematisches Institut mit einer großen Bibliothek aufbaute'. Man könnte über diese nationalsozialistische Kulturleistung glatt vergessen, daß Straßburg eine der ältesten und größten Universitäten Europas war, an der z.B. Pasteur und Goethe studiert und gelehrt haben. Kein Wunder, daß Strubecker die 'Straßburger Zeit' als schönste in seinem Leben begriff, die zudem auch noch so glücklich beendet wurde und keine negativen Auswirkungen auf seine spätere Karriere hatte, wie Leichtweiß zu berichten weiß..." [Koelschtzky 1992]

ences in the editorial board of the *JB* are known.

The (more informal) DMV-Mitteilungen passed an article by R. Kühnau (Halle) in which the leading journal of nazified mathematics in Germany, *Deutsche Mathematik*, is described as no more than 'embarrassing'.[18]

With that in mind, what otherwise might have been considered as minor inconsistencies gets a different weight as in the case of the Teichmüller article. An uninformed view may be quite understandable individually after so many years and with authors born after 1945. However, it can not be accepted in a professional journal.

What then would be a 'normal' attitude towards the Nazi past? The historian Joachim Radkau (Bielefeld) wrote me:

> Ich meine, da muß man unterscheiden, welche Art von Normalisierung man meint. Ein 'nor-

[18]Kühnau compares it with the former *Mitteilungen der Math. Gesellschaft der DDR*, in which he occasionally finds "politisch durchtränkte Artikel, die manchmal noch peinlicher sind, als was man in der *Deutschen Mathematik* lesen kann." (*Mitteilungen der Deutschen Mathematiker-Vereinigung*, Heft 2, April 1992, p. 59). Kühnau's belittlement of *Deutsche Mathematik* is quoted without any dissociation in the editorial part of the same issue of *DMV-Mitteilungen*, p. 50.

> males' historisches Phänomen - so kann ich nur inständig hoffen - wird der Nazismus niemals werden, wenn nicht Völkermord in Zukunft ein normales Vorkommnis wird. Eine andere Frage ist m. A. die, ob sich die heutigen Deutschen, insbesondere die jüngere Generation, als normales Volk unter anderen vorkommen sollten. Da würde ich ... eher zu einem Ja tendieren oder zumindest sagen, sie sollten versuchen ein normales zu werden. Ich habe schon den Eindruck, daß sich manche ... nicht genügend klar machen, daß es für das innere Verhältnis zur Nazi-Zeit ein großer Unterschied ist, ob man in den 30er und 40er oder in den 70er Jahren geboren ist. Das ist psychologisch ganz natürlich. Als ich 1984 in Perugia ein italienisch-deutsches Historikersymposium zum Thema 'Faschismus' veranstaltete und manche jungen deutschen Historiker ein tiefes Schuldbewußtsein bekundeten, sagte mir hinterher Amendola, der italienische Leiter (Resistenza-Forscher und langjähriger Kommunist), sowas sollten wir lieber lassen und uns als ganz normale Nation vorkommen - das wirke besser auf ihn. Manchmal denke ich, es gibt auch so ein *negatives* deutsches Auserwähltheitsbewußtsein, das Ausländern manchmal auf die Nerven fällt. [Radkau 1993]

A precondition of normality is, according to Radkau, "daß man nicht irgendwie bemänteln sollte, wenn

einer eine wirklich schlimme und infame Gestalt war, auch wenn er als Mathematiker - was ich nicht beurteilen kann - gelegentlich brilliante Ideen gehabt haben mag".

'Coming to terms with the past' is also a general cultural problem. Historian of medicine Anne Harrington (Harvard) observes:

> As historians, it seems we do not yet know how to write about Nazi medicine and racial hygiene policies without ultimately abandoning the cultivated relativism of our discipline and taking a moral stand. And perhaps we should thank God for that - because only when we can combine scholarship with uncomprimising moral principles do we stand a chance of truly 'coming to terms' with this blot on our century that has refused to settle down into the history books and let us in peace. [Harrington 1989; p. 505]

Or to quote Abikoff's letter once again:

> I think that the important thing is that young Germans have to face the evil in their history (by the way, Americans have to see the same in the treatment of the indigenous population by the 'civilizers') before they can enjoy the fruits of the great German tradition of culture and grace. I don't think I would write the corre-

> ction as you did. I would write of historical evils that may make possible the expulsions (by the government) and killings (by the neo-Nazis) that are now occurring. We have to express concern that even the worst accusations may be true and, as mathematicians, we have to condemn them — certainly we cannot be party to a whitewash. [Abikoff 1992]

The Deutsche Mathematiker-Vereinigung and the Jahresbericht should refrain from contributing to the uneasiness felt by mathematicians in Germany and abroad[19] and giving rise to suspicion that its journal is the organ of a group of amateurs or cynics.

[19] Jean-Pierre Kahane (Paris) writes in alarm: "Les vieux démons ne sont pas morts." [Kahane 1992]

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Sehr geehrter Herr Booß-Bavnbek,

beiliegend sende ich Ihnen das zur Publikation im Jahresbericht der DMV eingereichte Manuskript

„Perspectives on Teichmüller and the Jahresbericht
Addendum to Schappacher, Scholz, et.al."

wieder zurück. Ich habe es mit Interesse gelesen, doch mein Verständnis für einige Ihrer Kritikpunkte wurde bei weitem übertroffen durch mein Unverständnis für viele der von Ihnen aufgestellten Behauptungen. Da Sie das Manuskript bereits Herrn Scholz zukommen ließen, habe ich es auch Herrn Schappacher zur Kenntnis gebracht und es an einen von Ihren Vorwürfen nicht betroffenen, aber in der Sache kompetenten Referenten mit der Bitte um eine Stellungnahme gesandt. Diese liegt nun vor.

Der Referent urteilt: Der Artikel ist zur Veröffentlichung in einer wissenschaftlichen Zeitschrift nicht geeignet. Er belegt dies durch folgende kurze Zusammenfassung der Hauptgründe:

(A) Der Artikel enthält wenig sachliche, auf eigener Recherche basierende Information über das Leben und Werk Teichmüllers, durch welche der Artikel von Schappacher und Scholz in wesentlicher Weise ergänzt würde.

(B) Soweit sachliche Kritik an dem Artikel von Schappacher und Scholz geübt wird, ist diese wenig überzeugend, jedenfalls aber nicht zwingend.

(C) In zahlreichen Fällen wird unsachliche oder unzutreffende Kritik an dem Artikel von Schappacher und Scholz sowie am Herausgeber der Jahresberichte geübt.

(D) Auf der Basis dieser objektiv ungerechtfertigten Kritik nimmt Herr Booß-Bavnbek eine ganze Reihe von negativen Bewertungen der Arbeit der Autoren des Artikels von Schappacher und

Scholz und des Herausgebers der Jahresberichte vor, die kränkend und zum Teil beleidigend sind und die wissenschaftliche Ehre der Angegriffenen in Frage stellen.

(E) Maßstab für diese Bewertungen sind vorgeblich wissenschaftliche Standards und eine professionelle Ethik, die nicht expliziert werden, und deren Verletzung von Herrn Booß-Bavnbek auch nicht wirklich nachgewiesen wird.

(F) Maßstab sind aber in Wirklichkeit subjektive Überzeugungen von Herrn Booß-Bavnbek zu historischen, gesellschaftlichen, moralischen und wissenschaftspolitischen sowie methodologischen Fragen, die teilweise auch explizit geäußert werden, allerdings ohne Begründung in apodiktischer Form mit einer schwer erträglichen Haltung moralischer Überlegenheit.

(G) Der Artikel von Herrn Booß-Bavnbek enthält seinerseits auch, abgesehen von den beleidigenden Äußerungen und erwähnten Mängeln, Verstöße gegen die Standards wissenschaftlicher Redlichkeit.

(H) Der Artikel enthält eine Äußerung über einen jüdischen Mathematiker, die ich nur als infam ansehen kann, wobei ich offen lasse, ob dieser Charakter der Aussage Herrn Booß-Bavnbek bewußt war oder nicht, sowie, ob er vielleicht unbewußt intendiert war oder nicht.

(J) Der Artikel ist logisch inkonsistent.

Der Gutachter schließt seine umfangreiche Stellungnahme mit den Worten: „Als objektives Urteil ist *intellektuell und moralisch inakzeptabel* für den Artikel von Scholz und Schappacher vollkommen unhaltbar. Hingegen paßt es hervorragend zur Charakterisierung des Beitrages von Herrn Booß-Bavnbek."

Da der Gutachter ausdrücklich schreibt, daß er sich absolut nicht auf eine Kontroverse mit Ihnen einlassen werde und Sie auch **nicht** autorisiere, ihn zu zitieren, möchte ich Ihnen seine Stellungnahme nicht zusenden. Vielleicht geben Ihnen die aufgeführten Gründe auch ohne Erläuterungen genügend Stoff zum kritischen Nachdenken.

Mit vorzüglicher Hochachtung

W.-D. Geyer

Letter in *DMV-Mitteilungen 1/1994* from Prof. H. Tietz

Wer ist ein negativer Heros?

Im DMV-Jahresbericht '94 (1992) berichten die Herren Schappacher und Scholz über Oswald Teichmüller (OT).

Zunächst wollte ich den Artikel nicht lesen, weil mich das NS-Thema anekelt: selbst gutgemeinte Berichte und Analysen gehen meist daneben und durchbrechen fast nie den Nebel der Verständnislosigkeit, der über dem Inferno liegt. Aber mehrere Kollegen haben mich eindringlich auf den Artikel und seine Problematik hingewiesen, und ich bin nun entsetzt, mein Vor-Urteil so sehr bestätigt zu sehen!

Inzwischen hat Herr Booß-Bavnbek über OT und den Jahresbericht eine Dokumentation verfaßt (sie kann von ihm angefordert werden: RUC/IMFUFA, Postboks 260, DK-4000 Roskilde), die aber soviel weiter geht als meine eigene Kritik, daß ich befürchte, die Diskussion, wenn sie denn in Gang kommen sollte, könnte sich vom Wesentlichen entfernen.

Das sind die Gründe für meinen Versuch, mich nun doch zu äußern und zu erklären, wieso die Autoren ein heikles Thema auf fatale Weise aufgearbeitet haben.

Dies vorweg: den Hauptteil des Artikels, der sich mit OT's Werk befaßt, diskutiere ich nicht: sein Genie ist unbestritten, und die Darstellung seines Werkes ist höchst verdienstvoll; um so mehr aber zwingt der biographische Teil zum Widerspruch!

Die Autoren können *„auf die Charakterisierung der gespannten und widersprüchlichen Persönlichkeit nicht weiter eingehen"* sondern wollen *„sich ganz auf eine Darstellung der belegbaren Ergebnisse ... beschränken"*. Hätten sie sich daran gehalten, so wäre ein warnender Hinweis an den Leser notwendig gewesen, weil ein Gerüst

von Ereignissen nur ein blutleeres Bild der NS-Zeit geben kann, aber nicht in der Lage ist, den Blick für die diabolische Spannung zu schärfen, die damals die menschlichen Charaktere zu einem Spektrum extremer Perversitäten auffächerte. Dieses bewußt zu machen, muß aber die Aufgabe jeder Beschäftigung mit der NS-Zeit sein; denn Zeitzeugen gibt es nur noch wenige, und die Jüngeren, zu denen auch die Autoren zählen, können nur eine blasse Vorstellung dieser Geschichte entwickeln, die — wir erleben es ja täglich! — immer näher an das Bild einer lediglich gestörten Normalität heranrückt. Daher wäre Schweigen und Vergessen taktvoller als eine solche Geschichtsschreibung, die in der redlichen Absicht, Wissen zu vermitteln, das Verstehen blockiert.

Aber die Autoren haben sich nicht an ihre angekündigte Beschränkung gehalten: der Bericht ist vielmehr von Wertungen durchsetzt, die über belegbare Ereignisse hinausgehen.

Der NS-Staat wird mit deutlichen Worten kritisiert: *„die besonders katastrophalen Dimensionen des Zugriffs auf das Wissenschaftssystem"* werden ebenso angesprochen wie Hitlers Verschleiß deutscher Soldaten *„als Kanonenfutter"*.

Aber diese Kritik bleibt merkwürdig abstrakt, weil Personen davon ausgenommen werden: es fehlen Worte über menschliche Tragödien ebenso wie über Bemühungen um Hilfe, und so wird eine Auseinandersetzung mit OT konsequent vermieden; lediglich ist einmal — und das ist die schärfste Kritik an ihm, zu der sich die Autoren durchringen — von seiner *„Unsensibilität"* die Rede; aber dort, wo sein politisches Wirken zur Sprache kommt, entziehen sie es dadurch der Kritik, daß sie es mit Aktivitäten anonymer Instanzen verdecken: mehrfach ist von Provokationen durch *„NS-Studenten"* — unter denen OT ja eine exponierte Funktion hatte! — die Rede. Aber nur einmal wird dabei seine eigene Rolle erwähnt; dies war nicht zu vermeiden, handelt es sich doch um den berüchtigten Boykott, mit dem Edmund Landau von der

Universität verjagt wurde: wenigstens als Fußnote wird vermerkt, daß OT *„den Boykott leitete und dann Landau die Gründe dafür persönlich erläuterte"*. Zwar wird die *„bewundernswerte Fairness Landaus gegenüber dem jungen Studenten"* hervorgehoben, aber die Ungeheuerlichkeit selbst wird heruntergespielt, indem die Autoren sich gegen OT's *„Negativheroisierung"* verwahren, weil sein *„Aktionismus .. nur insoweit seine fatale Wirkung entfalten konnte, als er mit dem institutionellen Eingriff des Nazi-Staates parallel lief"*.

Die Vermeidung der Negativheroisierung und die umwerfende Begründung dafür zwingen zu der vorliegenden Entgegnung! Denn einerseits könnte sich jeder — von Hitler verschiedene — Nazi, und wenn er noch soviel Unheil angerichtet hatte, hinter diesem Argument verkriechen, und andererseits geht es bei der Beurteilung eines Menschen — und die Ablehnung der Negativheroisierung *ist* eine Beurteilung! — nicht um die Frage, welche Umstände sein Wirken verstärkt haben könnten, sondern einzig und allein um sein Handeln selbst!

Die unheimliche Wirkung der Nazis beruhte auf der Freisetzung und Gleichschaltung aller Kräfte durch die absolute Herrschaft einer Ideologie und eines sie verkörpernden „Führers": — die Masse ordnete sich jubelnd dieser sie tragenden „Bewegung" unter und bejahte den Terror als notwendiges Mittel, die heiligen Ziele der Ideologie gegen menschliche Schwächen hochzuhalten; Probleme und Selbstzweifel verblaßten gegenüber der Gewissheit, daß man einer „Herrenrasse" angehöre — im Kontrast zum „zersetzenden" Judentum, an dem man als allgegenwärtigem Feindbild die verdrängten Komplexe abreagieren konnte, — und von dieser Masse hoben sich zwei Typen von Fanatikern ab, die sich als *Träger* der Bewegung hervortaten: zum einen die Karriereereiter und zum anderen die „Idealisten", die sich der NS-Ideologie nicht erst unterzuordnen brauchten, weil sie sich mit ihr identifizierten — ein solcher war OT!

Man stelle sich vor: *ein 20-jähriger Student ver-*

sperrt an der Spitze einer von ihm zusammengetrommelten Schar braun uniformierter SA-Männer (und solche militanten Horden waren skrupelloser als 68-er GoIn-Aktivisten!) einem alten Professor den Eingang zum Hörsaal und verkündet ihm, die Studenten lehnten es ab, von einem Juden unterrichtet zu werden! — Und das soll kein negativer Heros sein?

Man kann viele Gründe anführen, um den beklemmenden Eindruck dieser schändlichen Aktion zu mildern:
— OT fühlte sich von seinem durch Genie und Rasse getragenen Elitebewußtsein zur Führung „berufen", und aus dieser Berufung erwuchs in ihm der „Auftrag", dem „jüdischen Feind" den Würgegriff anzusetzen;
— den blanken Zynismus in dem unbeschreiblich arroganten Brief von OT an Landau, den die Autoren dankenswerterweise an die Öffentlichkeit bringen, nimmt OT als Konsequenz seiner „wissenschaftlichen" Deduktion aus der Rassenideologie in Kauf;
— seine Jugend und sein Fanatismus machten ihn blind gegenüber dieser Ungeheuerlichkeit, durch die er, gemäß dem Prinzip, „dem Feind offen ins Auge sehen!", sich selbst als „arischer Held" beweisen konnte;
— der Konflikt, sich zwischen der bestehenden menschlichen Bindung zu seinem Opfer und diesem Auftrag entscheiden zu müssen, gab ihm „tragische Größe", die seiner Eitelkeit schmeichelte.

Aber zu *einem* Vorwurf, der OT's *Charakter* offenlegt, dringen diese Argumente nicht durch: als er sich entschloß, Landau am Halten seiner Anfängervorlesung zu hindern, hätte er auf der fast kollegialen Basis, die wegen seiner hohen mathematischen Begabung zwischen ihm und Landau bestand, diesem seine Absicht unter vier Augen persönlich mitteilen können, ja müssen, um ihm wenigstens die unvorstellbar bedrohliche Konfronta-

tion mit der SA zu ersparen — wenn nur ein Fünkchen menschlichen Anstandes in ihm gewesen wäre ...

„Was ihr den Geist der Zeiten heißt
das ist im Grund der Herren eigner Geist,
in dem die Zeiten sich bespiegeln."

Horst Tietz
Universität Hannover.

Reply from Profs. N. Schappacher and E. Scholz in *DMV-Mitteilungen 2/1994*

O. Teichmüller

• Herr Tietz hat in den DMV-Mitteilungen 1–1994 den von uns herausgegebenen, mit mehreren Mitautoren verfaßten Artikel über Oswald Teichmüller (Jber. DMV 94, 1991, Heft 1) äußerst scharf kritisiert. Schwiegen wir dazu, könnte das als Ausweichen vor der Auseinandersetzung oder gar als Verachtung des Angriffs ausgelegt werden. Andererseits fällt es uns aber nicht leicht, unsere Arbeit unter Berufung auf Regeln der Geschichtsschreibung vor dem Zorn eines Opfers der Nazi-Diktatur zu verteidigen; denn hier wäre unser Schweigen vielleicht angemessener und taktvoller. Aber wir haben ja schon einmal nicht geschwiegen, als wir den Artikel über Teichmüller veröffentlichten.

Der Hauptvorwurf, den Herr Tietz unserem biographischen Text macht, ist eigentümlich gestaffelt: erstens behauptet er, daß unser Vorhaben der Darstellung ohne persönliche Wertungen gefährlich sei; zweitens, daß wir (zum Glück??) dieses Vorhaben nicht eingelöst hätten; drittens aber, daß trotz dieser nicht-Einhaltung unseres Vorsatzes unser Text „merkwürdig abstrakt" bleibe, menschliche Tragödien ausblende usf. Wir glauben demgegenüber, daß wir unserem Vorhaben durchaus treugeblieben sind. Die von Herrn Tietz als Beleg seiner zweiten Feststellung zitierten kritischen Ausdrücke ('katastrophale Dimension ...', 'Kanonenfutter') scheinen uns kei-

neswegs unverträglich mit historischer Sachlichkeit. Daher verdienen wir den zweifelhaften Bonus, den uns Herr Tietz im zweiten Schritt seiner Gedanken einräumt, nicht — was dann auch dem Befund des dritten Schrittes jede Überraschung nimmt: es ist einfach derselbe wie in Schritt eins.

Wenn es demnach stimmen sollte, daß unser Artikel, wie Herr Tietz sich ausdrückt, ein eher „blutleeres Bild der NS-Zeitßeichnet, so liegt das vor allem an der Vorsicht der Nachgeborenen, die ahnen, wie unangemessen ein Nachsprechen oder Nachgestalten von persönlich Erlittenem bleiben müßte. Sogar die künstlerische, also viel persönlichere, Bearbeitung dieser Zeit durch Nachgeborene (in Film oder Literatur) scheint uns in der Regel da am überzeugendsten, wo nicht Dramen nach-inszeniert, sondern „nur" Erinnerungen von Zeitzeugen montiert werden.

Nur ergibt sich für uns aus der eben beschriebenen Vorsicht der Nachgeborenen nicht das von Herrn Tietz nahegelegte „taktvolle Schweigen und Vergessen". Erläutern wir dies an dem Ausdruck, der Herrn Tietz zu seiner Überschrift inspirierte: Selbstverständlich ließe sich Oswald Teichmüller gut als negativer Heros darstellen, im Sinne des exemplarischen Lebenslaufes eines jungen Menschen aus sehr bescheidenen Verhältnissen, der schon in der Weimarer Republik zum fanatischen, militanten Nazi wird und 1933 dann seine menschliche Unreife in politisch verbrämte Charakterlosigkeit (und fast Schizophrenie) umsetzt. Jeder Leser kann das leicht aus unserem Text und dem Brief Teichmüllers an Landau im Anhang unseres Artikels entnehmen — durch dessen Veröffentlichung wir diese Vorgänge übrigens weiter offengelegt haben als das vorher bekannt war. Sel-

ber jedoch etwa eine detaillierte mentalitätshistorische Studie Teichmüllers vorzulegen, lag weder in unserer Absicht noch fühlten wir uns dazu kompetent.

Wenn wir uns, mit einem offenbar mißverständlich gewählten Ausdruck, gegen eine 'Negativheroisierung' Teichmüllers verwahrten, so nicht, um diese offensichtlichen Schlußfolgerungen über Teichmüllers Persönlichkeit abzuwehren, also auch nicht, um es Teichmüller zu erlauben, sich hinter höheren Gewalten zu „verkriechen", wie es Herr Tietz uns zu unrecht unterstellt; sondern nur um die Rolle zu betonen, die der institutionelle, politische Rahmen für Teichmüllers objektiven Erfolg (Landaus Rücktritt von seiner Stelle) spielte: Ein Boykottanführer vom Schlage Teichmüllers alleine genügte eben nicht, um Landau aus seiner Stelle zu jagen. Dazu bedurfte es des politischen Umfeldes, das 1933 derartige SA-Aktionen an den Universitäten tendenziell begünstigte, während das geänderte Klima Teichmüller in seiner Berliner Zeit völlig ins Abseits stellte. Dieser historische Befund war und ist uns wichtig. (Gibt nicht auch in unserer jüngsten Vergangenheit und Gegenwart der Bundesrepublik Deutschland das politische Gesamtklima mehr Anlaß zur Sorge als das Psychogramm der Brandstifter von Mölln oder Solingen?) Demgegenüber halten wir die Art und Weise, in der Herr Tietz gegen Ende seines Briefes das Verhältnis zwischen Teichmüller und Landau als „fast kollegial" beschreibt, für einen untauglichen Versuch, durch die Überbetonung mathematischer und psychologischer Momente die Machtverhältnisse der Zeit teilweise auszublenden.

Es hat uns sehr erstaunt, daß sich Herr Tietz in eine Reihe mit der für unser Empfinden ganz anders gearteten Kritk an unserem Artikel durch Herrn Booß-Bavnbeck stellt und dessen Pamphlet gewissermaßen empfiehlt. Diese unserer Ansicht nach äußerst unangemessene und völlig überzogene Polemik zirkuliert seit einiger Zeit als 'graue Literatur' und soll wohl zu allem Überfluß im *Mathematical Intelligencer* teilweise veröffentlicht werden.

Immerhin teilen Herr Tietz und Herr Booß-Bavnbeck den Eindruck, wir hätten Teichmüller nicht hinreichend vehement verurteilt. Aber birgt nicht — und hier sprechen wir unter Nachgeborenen — reine Verurteilung die Gefahr eines nur erschlichenen Abstands von der historischen Epoche, der niemandem nützt?

Wir haben uns bewußt auf dokumentierbare Ereignisse beschränkt. Dies war unsere erklärte Absicht, die wir ausgeführt haben. Wir verstehen wohl, warum das Herrn Tietz nicht genügt. Immerhin dürfte die von uns angebotene Dokumentation auch für weitergehende Projekte, etwa im Sinne von Herrn Tietz, nicht unnütz sein.

N. Schappacher, Strasbourg und
E. Scholz, Wuppertal

• Der Stil bei der Verarbeitung der NS–Zeit hat sich in einem halben Jahrhundert mehrfach gewandelt:
– in der ersten Phase war man sich des Geschehens so allgemein bewußt, daß wenig darüber gesprochen wurde: man fürchtete Verletzungen durch Aufwühlen von Schmerz oder Schuld;
– von den Nachgeborenen wurde dieses Schweigen als Verschweigen mißdeutet, und „Enthüllungen“ waren an der Tagesordnung:
– die Nach-Nachgeborenen von heute schreiben die Geschichte der NS-Zeit aus der Distanz heraus und stoßen damit, meist ohne Absicht und oft ohne Verständnis, häufig auf Widerstand: *intern* verführt die Distanz dazu, die NS-Zeit historisch einzuordnen, und daran entfachte sich der „Historikerstreit“, *extern* entwirft die Kälte einer distanzierten Darstellung leicht ein falsches, weil harmloses Bild und leistet damit dem Wiedererwachen der menschenverachtenden NS-Ideologie Vorschub.

Vor dieser Gefahr zu warnen, gab der Teichmüller-Artikel der Herren Schappacher und Scholz Anlaß. Es freut mich, daß die Autoren in ihrer vorstehenden Entgegnung die Möglichkeit, die entscheidende Formulierung „mißverständlich gewählt“ zu haben, einräumen und sich von der scheinbaren Verharmlosung der NS-Zeit distanzieren.

Horst Tietz
Hannover

Letters to the Editor

Concerns about Obituaries Published in *JDMV*

We are worried by the editorial policy of the official organ of the German Mathematical Society (*Jahresbericht der Deutschen Mathematiker Vereinigung–JDMV*), as observed with respect to the articles on the Nazis Bieberbach (v. 88, 1986, pp. 190–205), Strubecker (v. 94, 1992, pp. 105–117), and Teichmüller (v. 94, pp. 1–39).

An historically accurate perspective on the past is withheld from young and future readers. This makes one wonder about current willingness to face the past.

1. Bieberbach. The obituary mentions without elaboration that he was a Nazi, but declares that he later recognized and deeply regretted these "errors" (Irrtümen), and asserts that "this is not the place" to go more deeply into the matter. No evidence is provided to suggest that he did in fact repudiate his past, nor are we aware of any. There is no hint as to how seriously any such alleged repudiation should be taken—not that this would matter much in the light of what he did, nor justify bypassing those events.

It mentions that he had been editor-in-chief and publisher of *JDMV*, 1920–1934. However, it does not report that he had abused this post for Nazi purposes so flagrantly that even in those perilous times the September 1934 DMV annual membership meeting adapted a formal motion which, although declaring loyalty to the new rulers of Germany, "regretted" his publication in the *JDMV* of his open letter attacking Harald Bohr and doing so against the wishes of both his coeditors and without the knowledge of the DMV executive (*JDMV*, v. 44, 1934, p. *86*). He soon resigned his *JDMV* posts and founded the notorious periodical *Deutsche Mathematik* for the designated purpose of promoting Nazism in the mathematical world.

None of this is mentioned in the obituary, nor his other behaviour, nor the sharp protests from G. H. Hardy (*Collected Works*, v. 7, p. 160) and others.

We believe that readers of the *JDMV* are entitled to a more accurate perspective on Bierbach's life and times.

2. Strubecker. This obituary casts a warm glow over his appointment and services as professor in the "newly-founded Reichsuniversität" in Strasbourg during the Nazi occupation of that city. It describes those years as the happiest and most productive of his life. (The eminent Alsatian mathematician Ch. Ehresmann had refused that post despite Nazi blandishments.) To top it off, the obituary characterizes the liberation of Strasbourg in 1944 by the French as an "occupation" (Besetzung) by Allied troops!

This evaluation of his life is completely silent on the content of his lengthy obituary on E. A. Weiss (*Deutsche Mathematik*, v. 7, 1943, pp.

254–298). In it, Strubecker glorifies the Hitler regime and praises Weiss fulsomely for his activism and leadership in the storm troops (S.A.) (p. 260).

3. Teichmüller. This is a memorial article, published nearly fifty years after his death, so that it is historical research rather than a traditional obituary. This imposes stringent obligations, particularly when discussing a man of extraordinary mathematical talent but who, already two years before the Nazi accession to power, became a militant activist and storm trooper for "a fanatical doctrine that was bent on stifling all feelings of decency and compassion", as J. Dieudonné observed in his review of the *JDMV* memorial article (*MR*, 93B, 01037).

One can expect much discussion to arise. There are those, for example, who fear that Teichmüller's predecessors are given far from sufficient credit, that the authors leaned over backwards in his direction and minimized the impact of the work of, say, H. Grötzsch (an anti-Nazi dismissed on that account, appointed to Halloe after the war), M. A. Lavrentyev (founder of the Novosibirsk Centre of the Soviet Academy), and M. M. Schiffer (forced to emigrate by the Nazis).

In words available long before this memorial article was composed, Lipman Bers, one of the foremost authorities on this specialty and highly appreciative of Teichmüller's contributions to it, had opened his Foreword to Krushkal's monograph on "Quasi-conformal mapping and Riemann surfaces" (Wiley, 1979, English translation) as follows: "The theory of quasi-conformal mappings is about half a century old. Its originators were Ahlfors, Grötzsch, and Lavrentyev .... The celebrated theorem by Teichmüller, obtained about ten years after Grötzsch's results, should be considered as a far-reaching deepening and extension of Grötzsch's beautiful but simple papers."

Grötzsch is barely mentioned in the memorial article.

And what of the human side?

We do not have the space to go into the shocking details of Teichmüller's actions; some are recorded in the memorial article. But there can be discussion as to how completely they—and the context in which they occurred—are analyzed, along with the nagging problem of personal responsibility for one's behaviour and of its consequences for other human beings.

So, all in all, there stretches a whole field for debate and eventual understanding, a field to which the publication in the *JDMV* has led us.

Yet we fear that the editor has closed the gate. A discussion article, detailing many reservations and offering other views on many points, was submitted by Dr. Bernhelm Booss-Bavnbek (Roskilde, Denmark). It was swiftly and unambiguously rejected by the editor of the *JDMV*. (Its text and related materials can be obtained from RUC/IMFUFA, P.O. Box 260, KD-4000 Roskilde, Denmark. The title is "B. Booss-Bavnbek, Perspectives on Teichmüller and the *Jahresbericht*", tekst 248/1993, ISSN 0106-6242.)

The letter of rejection accompanied the editor's summary of the referee's report. The full text of that report was not sent to the author. There was no invitation to the author to reply even to that brief summary, nor any suggestion that the article be rewritten in the light of that report, nor that a different article on that topic should be sent for consideration. There was a prompt, flat, and absolute rejection within a month.

We believe that the demands of history and the need for free discussion require a different response. We hope that the *JDMV* editor and the executive of the DMV will review thoughtfully the concerns which these three cases have aroused in us.

The poem read from the podium as part of the official inauguration of President Clinton makes the point clearly:

History, despite its wrenching pain,
Cannot be unlived, but if faced
With courage, need not be lived again. –*Maya Angelou.*

Jean-Pierre Kahane
Université de Paris-XI
Klaus Krickeberg
Université de Paris-V
Lee Lorch
York University

The three coauthors were joined by twelve cosigners, half present or former AMS Council members, including two specialists on Teichmuller's work, and covering a wide range of interests.

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Letters to the Editor

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