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MATHEMATICIANS AT WAR
POWER STRUGGLES IN NAZI GERMANY'S MATHEMATICAL COMMUNITY: GUSTAV DOETSCH AND WILHELM SÜSS

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It is generally difficult to deny having committed a given act, or that such an act was committed; it is, on the contrary, very easy to alter the motivations which led us to an act and the passions within us which accompanied the act itself.

Primo Levi

Abstract. — The article discusses several examples of power struggles in Nazi Germany's mathematical community. Among them are the fate of German participation in J.E.L. Brouwer's journal *Compositio mathematica* in 1934/35. Ludwig Bieberbach put an end to this participation for political reasons. Special attention is paid to developments in the *Deutsche Mathematiker-Vereinigung* (*DMV*), above all to the presidency of Wilhelm Süss in the years 1937 to 1945. The pre-war years of his presidency were overshadowed by Bieberbach's opposition to the *DMV*. One of the most important events is the expulsion of non-Aryan *DMV*-members in 1938/39 (*Judenfrage*), which was central to the *DMV*'s success in dealing with Nazi government officials. In World War II the *DMV*'s successful professional policies, though they were threatened by Süss' Freiburg colleague Gustav Doetsch, were carried on by Süss in close collaboration with Nazi government officials. His efforts were crowned by the foundation of a central institute for mathematics in the Black Forest (Oberwolfach).

Résumé. — Mathématiciens en guerre. Luttes de pouvoir dans la communauté mathématique de l'Allemagne nazie: Gustav Doetsch et Wilhelm Süss. — L'article analyse plusieurs luttes de pouvoir dans la communauté mathématique de l'Allemagne nazie, dont celle concernant la participation allemande à la revue de J.E.L. Brouwer *Compositio mathematica* dans les années 1934/35. Ludwig Bieberbach a mis fin à cette participation pour des raisons politiques. Une attention particulière est par ailleurs portée à la *Deutsche Mathematiker-Vereinigung* (*DMV*) et à Wilhelm Süss, son président, de 1937 à 1945. Les années de

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sa présidence situées avant guerre ont été marquées par l'opposition de Bieberbach à la *DMV*. Un des évènements les plus importants a été l'expulsion des membres non-aryens de la *DMV* en 1938/39 (*Judenfrage*). Il a été déterminant pour les relations fécondes de la *DMV* avec les officiels du gouvernement nazi. C'est en collaboration étroite avec le gouvernement que Süss a poursuivi, durant la seconde guerre mondiale, les politiques professionnelles de la *DMV*, même si elles ont été menacées par son collègue de Fribourg, Gustav Doetsch. Les efforts de Süss ont été couronnés par la fondation d'un institut central de mathématiques dans la Forêt Noire (Oberwolfach).

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1. INTRODUCTION

Anybody plunging into the deep sea of historical research on science in the Third Reich will be confronted with some major theses and problems which have been the subject of much discussion during the last decade[1]. Some of these are directly rooted in German scientists' legitimising and vindicatory discourses of the post-war era. Such is the thesis of "subversion from within", which Werner Heisenberg and the physical scientists working on the atomic bomb took recourse to after the war. According to them they had deliberately slowed down the progress of the bomb project. This myth has been convincingly demolished by Mark Walker [Walker 1989]. Closely related is the construction of "apolitical" scientists who did not perceive their own research agenda and professional contexts as part of a nazified world or an active process of

[1] For surveys of recent literature on science in Nazi Germany see [Beyerchen 1992], [Hopper 1996], [Harwood 1997]. For general orientation *cf.* [Ludwig 1974], [Walker 1989], [Macrakis 1993], [Olff-Nathan 1993], [Renneberg/Walker 1994], [Hentschel 1996, xix–xcix]. For the case of mathematics *cf.* [Siegmund-Schultze 1993], [Mehrtens 1996].
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nazification [Hopper 1996, pp. 168-171]. "Apolitical" scientists still linger about in recent publications, notably Wilhelm Süss has been described as such [Hammerstein 1999, pp. 464 and 469]. "Apolitical" scientists were often portrayed as ideal brokers who could acquire maximal professional autonomy for their particular discipline, while at the same time keeping their distance, their innocence and their purity. Herbert Mehrtens has given a stimulating discussion of this, calling it "*irresponsible purity*" [Mehrtens 1994].

These questions are deeply entangled with moral standards and judgements, and naturally so, as they are rooted in the discourse of justification in post-war Germany, where questions of right or wrong, good or bad, Nazi or not, quickly became part of everybody's everyday business. Recent historiography of Nazi science has cautiously come to "*encourage a shift of emphasis away from judgements of guilt and innocence toward a historiography more concerned with understanding and explanation*" [Harwood 1997, p. 145]. This does not imply that moral concerns should be superseded by explanatory ones, but rather that the assignment of personal guilt to individuals will not help in the investigation of the nature and scope of collaboration between scientists and the Nazi regime. Investigating the entanglement of mathematicians' professional policies with issues that were at the very core of the Nazi state, such as its anti-Semitism, is a starting point to get to grips with the relations of scientists and the Nazi regime. Apart from this general problem there are two other topics on the agenda of this paper, which might invite further study. Firstly there is the nature of scientific relations between Nazi Germany and the international scientific community which is illustrated here by the affair involving the international journal *Compositio mathematica* in 1934/35 (Section 3)[2]. The other topic is that of denazification and the continuity of professional élites after 1945, some aspects of which are discussed in Section 7.

The National Socialists' seizure of power in 1933 soon triggered a process of redistribution of power within the German mathematical community, and the two professors at the Freiburg Institute of Mathematics, Gustav Doetsch and Wilhelm Süss, were from 1934 to 1945 to be

[2] Research on the Third Reich's international scientific relations is still young: [Richards 1990a, 1990b], [Walker 1992], also [Knoche 1991], [Siegmund-Schultze 1993, pp. 177–192].

found in the midst of the pursuit of and desire for this power. Strange as it may seem to choose such a seemingly localized focus in dealing with this process, such a perspective does not merely stem from a love for micro-historical detail, as will become apparent. For the discussion of these men's respective roles and activities in these power struggles, I heavily draw on two corpora of papers, namely those of Wilhelm Süss and the papers of the *Deutsche Mathematiker-Vereinigung* (*DMV*), which are now both accessible at the University Archives of Freiburg[3]. These provide an extensive basis for the future investigation of many hitherto scarcely documented aspects of the history of mathematics in Nazi and post-war Germany. Furthermore, the papers of Gustav Doetsch from the war years, only fragments of which survive[4], shed light on the early history of L.E.J. Brouwer's journal *Compositio mathematica*, especially its fate in Germany in 1934/35.

Neither Doetsch nor Süss had played an influential role in the German mathematical community before 1933. But in 1934 both tried to benefit from the changing circumstances and took keen interest in the reorganization of the *DMV* along the lines desired by Ludwig Bieberbach. They supported Bieberbach's futile efforts to nazify the *DMV*, but at the same time they disagreed with his opposition to Germans being members of the editorial board of Brouwer's newly founded journal *Compositio mathematica*, which included many Jewish mathematicians. Bieberbach's stance concerning the *Compositio* proved successful, but he fell from power in the *DMV*, and Doetsch and Süss were left in an ambiguous position *vis-à-vis* the hierarchy of influence and the process of redistribution of power within the German mathematical community (Section 3).

The ambiguity was resolved in 1937 when Süss was chosen president of the *DMV*. Süss soon established himself in the role of a very effective representative of mathematics in Germany. The acid test for him was the handling of the non-Aryan *DMV* members in 1938/39, the so-called *Judenfrage* (Section 4). With the outbreak of the war Doetsch entered the scene of professional policies in mathematics as representative of the

[3] For a guide to the archival material see [Remmert 1999d] for the papers of the *DMV* and [Remmert 2000b] for the papers of Süss.

[4] In author's possession, the Doetsch papers will be transferred to the University Archives of Freiburg (UAF).

powerful *Aviation Ministry*. In the meantime Süss and Doetsch had totally fallen out with each other and a fierce power struggle was fought between them during the war. A particularly high controversy between them was the question of a central institute for mathematics (*Reichsinstitut für Mathematik*), which Süss got to establish in Oberwolfach in 1944. Eventually Süss prevailed over Doetsch and considerably extended his own power to organise mathematical research important to the war (Section 5 and 6). In the post-war years Süss managed to safeguard his influence, but Doetsch became more and more isolated and ran into trouble with the committee of denazification at Freiburg University (Section 7).

As Doetsch and Süss are at the centre of this narrative, it is appropriate at this point to describe something of their professional biographies.

2. GUSTAV DOETSCH (1892–1977)[4]

Gustav Doetsch was born in Cologne into a strict catholic family. From 1911 to the outbreak of World War I he studied mathematics at Göttingen, Berlin and Munich. He joined the army in October 1914. After two years in the infantry Doetsch was moved to the Air Force in summer 1916 and was trained as an aerial observer. He was demobilised a highly decorated second-lieutenant in December 1918. He returned to Göttingen and finished his thesis in 1920 under Edmund Landau. Doetsch had worked together with Felix Bernstein before the war and they had published a joint paper in 1915 [Bernstein/Doetsch 1915]. Although Bernstein could not offer Doetsch a position in Göttingen they published five more joint papers between 1922 and 1927. Doetsch took his Habilitation in Hannover in 1921. In the curriculum vitae, which he submitted with his Habilitation thesis he explicitly acknowledged the influence the publications of G.H. Hardy and J.E. Littlewood had had on him[6]. In 1922 he went to Halle as lecturer in applied mathematics. He became full professor in Stuttgart in 1924. He declined calls to Greifswald in 1927 and to Giessen in 1930, but went to Freiburg in 1931.

Doetsch held a high international reputation due to his work on the Laplace Transform [Fantappiè 1933, p. 9], which had been stimulated by

[5] On Doetsch cf. [Wagner 1952], [Sartorius 1963], [Deakin 1992], [Remmert 1999a, 2000a].

[6] Niedersächsisches Hauptstaatsarchiv Hannover, Personalakte Gustav Doetsch.