



**Ulf Hashagen.** *Walther von Dyck (1856-1934): Mathematik, Technik und Wissenschaftsorganisation an der TH MÖnchen.* Stuttgart: Franz Steiner Verlag, 2003. xv + 802 pp. EUR 108.00 (cloth), ISBN 978-3-515-08359-1.



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Biographies are a difficult genre of historical writing. Anthony Trollope lamented in the 1850s “that no mental method of daguerreotype or photography has yet been discovered by which the characters of men can be reduced to writing and put into grammatical language with an unerring precision of truthful description.”[1] While a lot has since been said and written about the art and methods of writing biographies, one of the fundamental dilemmas of the genre is that the interest a biography attracts is generally proportional to the fame of its subject. Prominent subjects, such as Galileo or Einstein, draw a perhaps excessive public curiosity about every corner of their lives, be it their relationships with their daughters or wives. While thousands of pages have been written and read about such landmark personae of history, less famous figures generally command scant attention; their lives are only occasionally rescued from marginality and even oblivion by doctoral dissertations. Such is the case with Ulf Hashagen’s biography of the Munich mathematician and “Wissenschaftsorganisator” Walther von Dyck, which was submitted as a Ph.D. dissertation at the University of Munich in 2001. Dyck is clearly not one of those immortalized few, though he was highly honored during his lifetime, whereas after his death memories of his exploits gradually faded.

Hashagen’s introduction sketches the problematic

nature of dealing with the richly documented life of this once prominent, but now forgotten figure. In order to compensate for Dyck’s lack of prominence in the twenty-first century, the author pursues several Adriadne threads through the course of his career: Dyck’s mathematical achievements; his role both as a professor of mathematics and as an organizer at the Technical University of Munich; his co-operation with the German mathematician Felix Klein; his more political activities in the organization of science during World War I and in the Weimar years; and, finally, his involvement in the founding of the Deutsches Museum in Munich. The book is a rich source for those with a particular interest in the history of mathematics in Germany from the 1880s to the 1920s or the history of the Technical University of Munich. Moreover, large passages read like a fragmentary biography of Dyck’s teacher Felix Klein (1849-1925), one of the commanding figures in the history of mathematics and science of that time. The text is divided into seven parts consisting of twenty-nine chapters and an appendix of 130 pages, including tables relating to the history of both the Technical University of Munich and the University of Munich (e.g., Ph.D. students in mathematics), a list of sources, a bibliography and an index.

The first part deals with Dyck’s youth in Munich, his family, schooling, university years and the manner in

which he came under the influence of the brilliant young mathematician Felix Klein, who supervised his dissertation and appointed him as his assistant. In the second part of the book Hashagen describes Dyck's formative years when he follows Klein to Leipzig as his assistant and takes the next step up the ladder towards an academic career with his Habilitation (1881). Klein, who thought highly of Dyck, sent him to the two leading mathematical centers in Berlin and Paris, where he met such esteemed mathematicians as Leopold Kronecker, Ernst Eduard Kummer, Karl Weierstraß, as well as Henri Poincaré and Charles Hermite. Dyck also went to the United States as Klein's emissary with the particular mission of exploring conditions at Johns Hopkins University where Klein had recently been offered a professorship. After having considerably broadened his mathematical and geographical horizons under Klein's tutelage, Dyck returned to the Technical University of Munich in late 1884 as full professor.

Part 3 of Hashagen's narrative covers Dyck's mathematical career in Munich, developing a rich panorama of the professional status of mathematicians at the Technical University as reflected, for example, in their quarrels with engineers about the extent and nature of mathematical teaching and their rivalry with fellow colleagues at the University of Munich. Dyck emerges as a second-rate mathematician who hoped in vain for a call to a prestigious university. In part 4, he steps outside these shadowy contours into the limelight of a successful career, making a name for himself as an efficient administrator of academic affairs and as rector of the Technical University (1900-1906). He became a leading propagator of the scientific status of technical universities throughout Germany, a role that the universities and university-trained academics had traditionally tried to deny them. Dyck also became involved in the reform of mathematical school teaching in Bavaria and throughout Germany; he developed an interest in the history of science—in particular the life and works of Kepler—and he participated in the founding of the Deutsches Museum in Munich.

The fifth part shifts focus by portraying Dyck as he stepped beyond the narrow confines of Munich and Bavaria into the general realm of national and international organizational activities in mathematics and science. In close collaboration with and generally in the shadows of his erstwhile mentor Klein, Dyck was involved in the editing of the prestigious journal *Mathematische Annalen*. He also took part in the ambitious long-term project to publish an encyclopedia of the mathematical sciences (*Enzyklopädie der mathematischen Wis-*

*senschaften*, 1898-1934), and in the foundation in 1890 of a society that drew together German mathematicians, the Deutsche Mathematiker-Vereinigung. Moreover, in the late 1890s Dyck became very much involved in the organization of an International Association of Academies.

World War I put an end to these internationalist activities of the "gentleman-professor" from Munich, as presented in part 6, which has considerable relevance for those interested in German history in general. From the very beginning of the war, Dyck had looked for a way to put his talents in the service of the Reich. When he was finally dispatched to Belgium in September 1915 with the rank of a captain, his official mission, sanctioned by Chancellor Bethmann Hollweg, was to produce a memorandum on the Belgian school system. This mission fit hand in glove with the German goal, first formulated in 1915, of annexing the occupied Belgian territory. An important aspect of this policy was the Flemization of Belgium, which covered a broad spectrum of activities: from supporting Flemish political groups to the attempt to turn the University of Ghent into a Flemish institution in which French was barred as an official language of instruction. In this latter process, Dyck played an important role as an adviser to the German government, producing several memoranda on the "Vlamisierung der Universiteit Gent" and also serving as the German official responsible for the Flemization of the University of Ghent.

The sixth and final part of Hashagen's biography on Dyck is concerned with his achievements in the Weimar period when he returned to the Technical University of Munich. There, in difficult times, he had to cope with a flood of students returning from the war—both in his function as professor of mathematics and as rector (1919-1925). He was among the many professors who took a hesitant, if not decidedly negative position towards the new republican system. Dyck's high prestige among German academics can be seen from the fact that he was elected to numerous high offices in various scientific organizations such as the newly founded German Research Foundation (1920, Notgemeinschaft der Deutschen Wissenschaft), the Society of German Universities (1920, Verband der deutschen Hochschulen), and the august Society of Scientists and Physicians (Naturforscherversammlung). In all of these he found himself frequently at odds with official educational and university policies of the young republic, especially those pursued by Carl Heinrich Becker, a leading representative of the Ministry of Culture and Education. Dyck's avid interest in Kepler served as a kind of escape from the frustrations of the lost

war and the unwelcome republic. As he put it in 1930, Kepler could be seen as a shining instance of brilliance in the German people, a much needed symbol of German greatness. His involvement with editing Kepler's works forms a rather intriguing sub-thread of the book. It ranges from highly political issues, such as Dyck's demand in World War I that the Kepler manuscripts be returned from Russia to Germany, to his successful efforts to establish a first-rate editorial committee towards the end of his life. Due to his poor health Dyck resigned from all his offices in 1933 and died in 1934.

Hashagen presents an accurate and detailed, though rather lengthy, study of Dyck's unusual academic career, which had ramifications both for his specific discipline (mathematics) as well as for the larger academic culture (ranging from local Munich issues to general German ones). The author goes to great pains to contextualize each phase of Dyck's activities, furnishing a great deal of supplementary information from secondary literature, as reflected by the massive bibliography. From a practical

point of view, however, it is to be regretted that there are too few analytical paragraphs to help the reader digest the mass of material and topics covered in the six parts and twenty-nine chapters.

As the preface by Wolfgang A. Hermann and Friedrich L. Bauer insinuates, Hashagen has written the definitive biography of Walther von Dyck. Still, one may be allowed to ask: what does this book offer the general reader? Indeed, it includes quite a few things of interest for those who may not be deeply immersed in German mathematics, science, and education during the 1880s to the 1920s, but these must be patiently dug out from this massive volume. However, this principal point of criticism, namely the over-abundance of text and detailed information, is not necessarily to be addressed to the author alone but also to the editors and publishers of the Boethius-series. A shorter text would, presumably, have made this book more attractive to a larger audience.

[1]. Anthony Trollope, *Barchester Towers* (New York: New American Library, 1983), p. 181.

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