

Patrick L. Zawadzki, Analysis and contextualisation of the work and life of the pharmacologists W. Wiechowski, E. Starkenstein and G. Kuschinsky with particular focus on their contribution to modern pharmacology

As the title suggests, this dissertation focuses on analysing and contextualising the life and work of three Prague-based pharmacologists in the first half of the twentieth century. The author, himself a pharmacologist active in the field, was in excellent position to analyse the professional achievements and scientific production of the three scientists mentioned in the title. After discussions with me, his thesis supervisor, Zawadzki decided to fully use his position of a native German speaker by choosing as his subject pharmacology at the Faculty of Medicine of the German University in Prague and its development in the social and political context of difficult times, that is, across three states, regimes, and ideologies (the Habsburg monarchy, interwar Czechoslovak Republic, and the time of Nazi dictatorship).

During his work on the dissertation, Zawadzki had remarkably quickly mastered all skills necessary for working with a historical subject, that is, finding one's way around the basic secondary literature, theory and methodology of historical research, heuristics and critical assessment of primary sources, and linking the approach of a historian of medicine with methods used by pharmacologists.

The thesis is organised in a relatively traditional manner, suitable for a doctoral dissertation in the history of science and education (in this case, the history of medicine). In the opening chapters, the author clearly states that the main aim of his work is *'to provide a distinctive contribution to social micro-history within a subfield of pharmacology'* using the example of three personalities of Prague science. As the basic way of approaching the subject and meeting its goals, Zawadzki opted for a multidisciplinary approach, in which he combined traditional narrative biographical treatment with sociological methods. His partial goal was to both preserve the individual, specific features of individual biographies and to describe, as comprehensively as possible, interactions between the persons who are the focus of his work and their social and political environment. In subchapter 1.2, Zawadzki describes in detail his basic methodological starting points, which he found in a combination of phenomenological approaches of Edmund Husserl and Martin Heidegger. (Though I must admit that I did not always grasp the fine nuances of differences in their argumentation.) In the subsequent subchapters, Zawadzki introduces the methods he uses in his thesis: the case-study approach (three case studies dedicated to three personalities form the three main chapters of the thesis), in-depth interviews (transcription of an interview conducted with a descendant of Professor

Starkenstein in accordance with methods used in oral history forms a supplement to the dissertation), document analysis of specialised pharmacological texts, *thick description* in the sense of Clifford Geertz, and data analysis. Given the temporal location of biographies of two of the main protagonists (Emil Starkenstein and Gustav Kuschinsky), whose career peaked in the dramatic 1930s and 1940s in the exposed space of Central Europe, in Prague, Zawadzki applied to those two case studies the extraordinarily useful concept of victimisation. Through this lens, that is, based on the model of perpetrator–victim–bystander (see p. 31), he then studied the fortunes of one Prague-based Jewish scholar and one Reich German scholar whose fortunes rose during the Nazi regime.

All in all, this work rests on outstanding theoretic and methodological foundations. Zawadzki shows familiarity both with the more general secondary literature (production of international scholars) and with specifically Prague subjects in subchapter 1.7 and naturally throughout the dissertation. Briefly in subchapter 1.3 and then in the individual biographical chapters, he also addresses the availability, informative value, and analysis of primary sources (both archive sources and printed material, above all academic texts of the main protagonists).

As the starting points of the three case studies, Zawadzki outlined the following preliminary hypotheses: 1. Wilhelm Wiechowski: A ‘normal’ academic biography? 2. Emil Starkenstein: A case of personal and professional victimisation? 3. Gustav Kuschinsky: A case of preferential treatment under the Nazi regime? A detailed analysis of the individual biographies and their comparison is then facilitated by a more or less uniform structuring of the case studies, which all include (1) contextualisation of life and work, (2) analysis of scientific work, (3) conclusion: contribution to modern pharmacology. When analysing his protagonists’ careers, Zawadzki was interested not only in the basic information and progress from studies to assistant lecturership, habilitation, professorship, etc. He also paid close attention to various influences and collaboration with other scientists and academic institutions (including special subchapters on the mutual influence which the three main protagonists had on each other) as well as specific professional relations with pharmaceutical companies or public healthcare. Separate subchapters in all three case studies follow also the protagonists’ relationships and activities outside professional circles (family, philosophical influences, political affiliations, etc.). As part of analysis their scientific work, Zawadzki follows the particular segments of the field (e.g., basic chemical and pharmaceutical research, biochemical research, research in physiology and biology etc.) and outlines some specific methods, including their ethical dimensions, for instance experiments involving animals or self-experimentation.

The most notable original and valuable findings of this dissertation belong to two areas: First of all, a thorough investigation of the life and work of the three scientists in the context of social and political changes in their academic milieu in the 1930s and 1940s, and secondly, an assessment of their scientific contribution. The former was investigated in especially great detail in subchapters dedicated to the life of Emil Starckenstein (3.1.7–3.1.9), where Zawadzki describes in detail ‘*several levels and differentiated aspects of victimization*’. In the case of Gustav Kuschinsky, he arrives at a similarly vivid and critical assessment of the ‘*extent of involvement in policies of the Nazi regime and political stances*’ (in subchapter 4.1.3). In the conclusion of his work, Zawadzki eloquently summarises his conclusions based on the study of three lives through the lens of victim–bystander–perpetrator concept in relation to his starting hypotheses.

Regarding the second main area of findings, Zawadzki’s presentation is comprehensible even to a person unfamiliar with pharmacology and his partial conclusions spelled out in subchapters which are in all three biographies called ‘*Contribution to modern pharmacology*’ (2.3. 3.3, 4.3.) are highly convincing. In the case of Professor Wiechowski, Zawadzki highlights his contribution to clinical application of results of his basic research. In the case of Professor Starckenstein, he emphasises his contribution to systemisation and standardisation of commonly used pharmaceuticals, his insistence on evidence-based pharmacotherapy, and his influence on public healthcare. In the case of Professor Kuschinsky, he appreciates the results of his research into treatment of cardiovascular diseases, his basic pharmacological research, and his thoughts on methodology and applied methods.

This thesis includes, in full, all the requisite scientific apparatus, such as footnotes, bibliography, but also for instance a glossary of specialised terms from pharmacology which appear in the text and a full transcription of an interview with a descendant of Emil Starckenstein. It also meets all other formal requirements expected of a doctoral dissertation, such as a logical division in sections, comprehensibility, accessible language, and easy orientation in the text.

I recommend, without reservation, that this work be considered a dissertation required for the defence of title Ph.D.

Professor PhDr. Petr Svobodný, Ph.D.

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