

Introduction: Joachim Mrugowsky's Manuscript on "Das Fleckfieber"

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Typhus posed one of the major medical challenges of the Second World War: epidemics of typhus erupted soon after Germany invaded Poland in September 1939, worsening with the attack on the Soviet Union in June 1941, and became a widespread threat when some 2.5 million "Ostarbeiter" were taken to Germany. From an immunological point of view, young adults from areas where typhus was not endemic rendered the advancing German forces especially vulnerable to typhus. The Allies and Germany took divergent positions, as the Allies deployed DDT whereas the Germans were fixated on laborious delousing methods of regimenting people through showers and using fumigants notably Zyklon for personal effects.¹ The epidemiological writings of Joachim MRUGOWSKY (1905–1948) require careful interpretation as the German response to typhus in terms of preventive vaccines was far from monolithic: different sectors and theoretical positions among the scientific establishment became linked to different elements of the Nazi state. The fictitious delousing methods of the genocidal gas chambers relied on expectations of delousing. It is in these multiple contexts that Joachim MRUGOWSKY'S text on typhus control has especial importance. Such an account is valuable in the general history of epidemics in what the historian Charles ROSENBERG has called the "dramaturgy" of an epidemic: with scientists pitted against a malevolent microbial foe.² In this case, how MRUGOWSKY steered a delicate line between a wider context of the SS as a major agency in Nazi genocide, and his identity as a public health expert.

This text on *Das Fleckfieber* has a history which reaches back deep into the historiography of medicine under National Socialism. The book of essays to accompany an innovative and challenging exhibition "Volk und Gesundheit. Heilen und Vernichten im Nationalsozialismus", shown originally in Tübingen in 1982 drew attention to MRUGOWSKY'S environmental approach to epidemiology.³ MRUGOWSKY'S environmental and historical interests were presented as a paradox to his SS activism and support for SS power structures. WEINDLING kept these issues in mind so that after completing a monograph on *Fleckfieber*, it was clear that there remained problematic issues concerning *Fleckfieber* experiments at the Nuremberg Medical Trial. It was for this reason that contact was made to Prof. Hartmut MRUGOWSKY leading to a meeting with Dr Gertraud RUDAT, daughter of MRUGOWSKY, who

1 WEINDLING 2000.

2 ROSENBERG 1989.

3 Projektgruppe „Volk und Gesundheit“ 1982.

had transcribed the text on *Fleckfieber*. An opportunity to research further and publish the text came with the *Anneliese-Maier-Forschungspreis* (AMP) of the *Humboldt-Stiftung*, which was held from 2015 at the *Deutsche Akademie der Naturforscher Leopoldina e. V. – Nationale Akademie der Wissenschaften*. Research on National Socialism and biosciences has been integrated as a research field of the *Leopoldina-Zentrum für Wissenschaftsforschung* (Leopoldina Centre for Science Studies). In December 2016, WEINDLING organized a workshop called “Joachim Mrugowsky und sein unveröffentlichtes Manuskript: ‘Das Fleckfieber (Physiologie, Epidemiologie und Bekämpfung)’”. The goal of the workshop was to research the biography of the SS-physician and expert in hygiene, Joachim MRUGOWSKY. An expert group participated, consisting of: Dr. Florian BRUNS, Prof. Wolfgang ECKART, Ryan FARRELL MA, Dr. Judith HAHN, Dr. Marion HULVERSCHEIDT, Dr. Astrid LEY, and Prof. Volker ROELCKE, along with Prof. Hartmut MRUGOWSKY.

Fortuitously Joachim MRUGOWSKY began his academic career at the *Martin Luther Universität Halle-Wittenberg* (as it was called since 1933). MRUGOWSKY studied botany and medicine in Halle, and gravitated towards the biochemist Emil ABDERHALDEN (1877–1950), in whose laboratory he worked. As Florian BRUNS shows in his paper, all of MRUGOWSKY’S academic teachers were affiliated with the Leopoldina. The biochemist ABDERHALDEN was a member since 1912 and became the President of the Leopoldina in 1932. MRUGOWSKY’S academic teachers in botany were George KARSTEN (1863–1937, ML 1911), Camill MONTFORT (1890–1956, ML 1925), and Günther SCHMID (1888–1949, ML 1932). Teachers in other subjects included the zoologist Valentin HAECKER (1864–1927, ML 1919) (who also taught Walther DARRÉ [1895–1953]), the geologist Hans SCUPIN (1869–1937, ML 1925), the chemist Daniel VORLÄNDER (1867–1941, ML 1905), and the biologist Paul SCHMIDT (1872–1950, ML 1922).⁴ As Nikolas K. SCHRÖDER points out, MRUGOWSKY had a close connection to the anatomist Prof. Hermann STIEVE (1886–1952, ML 1922), who supported MRUGOWSKY for the award of scholarship.⁵ The research on MRUGOWSKY for this volume opened up that he was in deep contact to Adolf MEYER-ABICH (1893–1971, ML 1932) from 1937 on, that he prepared an edition of the *Enchridium medicum* of Christoph Wilhelm HUFELAND (1762–1836, ML 1790), holism, research on Jakob VON UEXKÜLL (1864–1944, ML 1932) or invitations for talks.⁶ After World War II, MEYER-ABICH was the main supporter to free MRUGOWSKY or at least to let him be pardoned.⁷ In 1943 he wrote to MEYER-ABICH: “Nur möchte ich Sie bei dieser Gelegenheit bitten, Herrn Geheimrat Abderhalden und meinen alten Chef, Professor Paul Schmidt herzlich zu grüßen.”⁸

Through his contacts to various members of the Leopoldina, MRUGOWSKY published an academic paper in the *Nova Acta Leopoldina* under the title: “Über fossile Bakterien aus dem Mitteleozän des Geiseltales” in 1936.⁹

4 See in this volume the chapter of Florian BRUNS: Völkische Ideologie und Hygiene. Der SS-Arzt Joachim Mrugowsky (1905–1948).

5 See in this volume the chapter of Nikolas K. SCHRÖDER: Vom völkischen Studenten zum nationalsozialistischen Arzt. Joachim Mrugowskys Studienzeit in Halle (1925–1935).

6 See Universitätsbibliothek Hamburg, B A 55 5, Korrespondenz mit J. MRUGOWSKY und Frau 1937–1968, hier Briefe vom 10. März 1937, 1. März 1939, 21. April 1943.

7 See Universitätsbibliothek Hamburg, B D 32 15, Korrespondenz mit J. MRUGOWSKY und Dritten bzgl. Der Nürnberger Prozesse 1947–1948.

8 Universitätsbibliothek Hamburg, B A 55 5, Korrespondenz mit J. MRUGOWSKY und Frau 1937–1968, Brief vom 8. Mai 1943.

9 MRUGOWSKY 1936.

Heinz ZEISS (1888–1949, ML 1943) had considerable influence on MRUGOWSKY’s environmental approach to hygiene. ZEISS developed the geo-medicine paradigm, which was later taken over by MRUGOWSKY and is central for MRUGOWSKY’s research.¹⁰ MRUGOWSKY engaged enthusiastically with the geo-medicine paradigm since 1930.¹¹ ZEISS supported MRUGOWSKY to become a “Dozent für Hygiene und Bakteriologie” at the *Friedrich-Wilhelms-Universität* Berlin in 1939.¹² Three years later, he and other scientists rejected MRUGOWSKY’s nomination to be appointed as “Honorar-Professor” or “außerplanmäßiger Professor”. ZEISS decided that the nomination by the *Reichsminister für die besetzten Ostgebiete* “kann also nicht im entferntesten mit dem Titel eines Hochschulprofessors verglichen werden”.¹³ For ZEISS, this was not the right appreciation regarding MRUGOWSKY’s work. In 1944, ZEISS supported MRUGOWSKY becoming an “Außerplanmäßiger Professor” which happened on 26 September 1944, which shows the deep connection between ZEISS and MRUGOWSKY. In the manuscript on typhus MRUGOWSKY developed original theories of infection and immunity in relation to the epidemiology of “Fleckfieber” or (in English) typhus. His hitherto unpublished treatise on the topic shows a dedicated hygiene expert developing an original theory of *Fleckfieber* infection: the theory involved a double process of first a rickettsial microbe and then a Proteus particle. MRUGOWSKY’s role as Director of the Hygiene Institute of the Waffen-SS presents problems at the level of the history of epidemiology, epistemology, ideology, and medical administration. Importantly, MRUGOWSKY’s text raises the issue as to how innovative science could be aligned with the demands of delivering medicine for the SS in its grandiose and grotesque schemes for attaining racial mastery.

MRUGOWSKY’s science serves as an important corrective to assumptions of Nazi science as irrational “pseudo-science”. The term, deployed by the British biologist Julian HUXLEY (1887–1975) as part of his critique of Nazi race theory, entered into widespread use at the end of the war when the Allies discovered the appalling human experiments and medical atrocities linked to race theory.¹⁴ At the same time MRUGOWSKY’s role in overseeing “Fleckfieber”/typhus experiments at the concentration camp of Buchenwald shows how an innovative environmentally oriented “Geo-medical” approach to immunology was linked to Nazi aims of Geo-politics and *Lebensraum* as well as a ruthlessly exploitative approach to prisoners. The exploitation of forced labour at the underground factory of *Mittelbau*, established to build ballistic V2 rockets as a *Wunderwaffe* to defend the crumbling *Reich*, resulted in catastrophically unhygienic conditions among the prisoner labour force. These conditions come to the fore in two newly discovered diaries from 1943 and 1944. The Nuremberg Medical Trial dealt with the complexities of MRUGOWSKY’s medical rationales which were outlined by his defence. The prosecution relied on the DING-SCHULER’s “Di-

10 See in this volume the chapter of Paul WEINDLING: Joachim Mrugowskys Text on Fleckfieber.

11 See in this volume the chapter of Nikolas K. SCHRÖDER: Vom völkischen Studenten zum nationalsozialistischen Arzt. Joachim Mrugowskys Studienzeit in Halle (1925–1935).

12 Archiv der Humboldt-Universität Berlin (AHUB) Heinz ZEISS an den Dekan der Medizinischen Fakultät der Universität Berlin, Berlin, den 9. Januar 1939.

13 AHUB Heinz ZEISS, Hygienischen Institut der Universität Berlin an den Dekan der Medizinischen Fakultät, Prof. Dr. ROSTOCK, Berlin den 13. Juli 1942. Paul WEINDLING is part of the group researching the provenance of brain tissues for the Max Planck Society. He is co-editing with Servasti TRUBETA and Christian PROMITZER a collection on sanitary borders. *Medicalising Borders and Boundaries by Disease Prevention in Quarantine, Selection of Migrants and Containment*. This collection includes a chapter on the Buchenwald research station. His most recent book is *Victims and Survivors of Nazi Human Experiments* (WEINDLING 2014).

14 <https://plato.stanford.edu/entries/pseudo-science/>. (zuletzt abgerufen am 15.07.2020).

ary". Erwin DING (1912–1945), who later changed his name to SCHULER, was a bacteriologist stationed in the concentration camp of Buchenwald. This edition shows the Diary to be a retrospectively compiled – although in many respects still accurate – source intended by DING-SCHULER to shift responsibility fully onto MRUGOWSKY, although by the time of the Trial, DING-SCHULER had committed suicide while in American custody.

MRUGOWSKY moved away from any particulate and deterministic causal particle – whether of a bacteria or gene, and towards holistic ideas in both bacteriology and genetics. He rejected in any monocausal sense of one microbe or hereditary unit. His work provides connections to the professor of hygiene Heinz ZEISS in Berlin. Overall, MRUGOWSKY engaged with leading experts in hygiene such as the Robert Koch Institute President Eugen GILDEMEISTER (1878–1945, ML 1939).

As Volker ROELCKE observes in his chapter, MRUGOWSKY referred to “my institute” in Buchenwald, as well as citing publications by Erwin DING-SCHULER. ROELCKE also notes how numbers of victims have varied in the secondary literature. Indeed, the confusion in the statistics of victims of *Fleckfieber* immunisation research prompted WEINDLING to launch the project on victims of Nazi medical experiments by identifying each individual as far as possible rather than accepting statistical aggregates. In order to contextualise and show scientific impact, the names and identities of victims have been reconstructed providing a more accurate reference basis than hitherto. The Diary listing is ambiguous in several respects. Has a person been a victim multiple times? How have Passage Persons been counted? Have only typhus victims been counted or also victims of the largescale yellow fever experiments?

The essays in this edition set MRUGOWSKY within his academic and medical context, bringing out the breadth of MRUGOWSKY’s interests and demonstrating how these intersect. First, Paul WEINDLING opens up the essays with an introduction on Joachim MRUGOWSKY and his research on *Fleckfieber*. WEINDLING covers the capture of MRUGOWSKY, his extensive writing during his time in prison, and the accusations he faced because of the accusations concerning the Buchenwald research. He then reconstructs the circumstances in which MRUGOWSKY worked on the manuscript on typhus and the connection to the academic field MRUGOWSKY was researching in, and concludes with a summary of his academic and SS career. Next, Marion HULVERSCHEIDT places the transfer of the manuscript on typhus (*Fleckfieber*) into the context of research on children of Holocaust victims and perpetrators. Through her meeting and talk with the daughter of Joachim MRUGOWSKY she reflects on how the generations of children and grandchildren dealt with the perpetrator generation posed by MRUGOWSKY’s career und National Socialism and eventual Trial at Nuremberg.

Florian BRUNS gives an overview on the biography of MRUGOWSKY. He focusses on his medical and political career. He shows MRUGOWSKY’s anti-semitic campaigning against Günther DEHN (1882–1970) in his time as leader of the *Nationalsozialistische Deutsche Studentenbund*, and compares his ethical views with his public health activities.

Nikolas SCHRÖDER focusses on MRUGOWSKY’s period as a student from enrolment at the University of Halle. SCHRÖDER shows the poor financial situation of MRUGOWSKY, his connection to the lecturers and professors at the University of Halle, and the development of his antisemitic views in the 1920s before becoming a member of the NSDAP.

Judith HAHN outlines the tasks of the Hygiene Institute which MRUGOWSKY directed from 1937 until 1945. She shows how the institute arose out of the *Sanitätsdienst-SS* and

the development of a hygienic-bacteriological division in the *Sanitätsdienst*. She then observes the extension of MRUGOWSKY's responsibilities, and those of his Hygiene Institute. Paul WEINDLING and Ryan FARRELL connect the knowledge on typhus with the research of the *Waffen-SS*. The connection between MRUGOWSKY and the Leopoldina is shown by the correspondence of MRUGOWSKY with Adolf Meyer-ABICH; MRUGOWSKY's "geo-medical" approach which was devised by Heinz ZEISS (ML 1944). MRUGOWSKY developed a strong connection to Emil ABDERHALDEN (who became President of the Leopoldina from 1932), which is confirmed by ABDERHALDEN's willingness to write a plea for clemency after MRUGOWSKY was sentenced to death. The authors show how MRUGOWSKY's subordinates, notably Erwin DING-SCHULER, carried out experiments on humans in concentration camps. DING-SCHULER's recently found diaries are compared to the version used in the Nuremberg Medical Trial. The diaries convey new insights on the participation of MRUGOWSKY and DING-SCHULER in case of human experiments as well as forced labour at *Mittelbau*. The new diaries are attached (transcribed from the original typescript by Nikolas SCHRÖDER) as well as a list of victims of human experiments perpetrated by DING-SCHULER (compiled by Michał PALACZ).

Volker ROELCKE's and Katharina KREUDER-SONNEN's essay focuses on MRUGOWSKY's theory of typhus and his knowledge on pathogen of typhus. In sum they state, that MRUGOWSKY's theory of typhus was critical with regard to the contemporary experimental bacteriology, but without condemning it. MRUGOWSKY's theory includes distinctive ideas.

SCHRÖDER introduces the editorial procedures for the transcribed manuscript, the footnotes which MRUGOWSKY partially provided, and discusses certain textual characteristics. This includes the editorial guidelines which were used to present the manuscript as close to the original as possible.

MRUGOWSKY's intellectual and SS/NSDAP commitments took MRUGOWSKY into a world of coerced experimentation at the concentration camps of Auschwitz, Buchenwald and Sachsenhausen, where MRUGOWSKY's Hygiene Institute instituted bacteriological monitoring stations. The approach adopted is to cite individual named victims of experiments rather than just to aggregate numbers from what may be unreliable sources. Once one has named individuals, this offers a historically verifiable evidence basis in terms of numbers and identities of victims.¹⁵ This is the approach which has been developed for experiment victims in their totality. Thus the Buchenwald victims can be seen in a wider context. The new Diaries add to the evidence of how MRUGOWSKY authorised a large prisoner research team, which included the philosopher-immunologist Ludwik FLECK (1896–1961), and the changing composition of the prisoner group.

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¹⁵ WEINDLING et al. 2016.

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