



David Zimmerman, *Ensnared between Hitler and Stalin: Refugee Scientists in the USSR*

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Karl Hall

Central European University

Among those displaced by the two world wars, intellectuals generally and scientists in particular have received no small share of historians' attention. Charles Weiner's 'New site for the seminar' (1969) set the scene historiographically for physicist refugees to America, and much scholarship since has documented the exodus of scientists from Central Europe. That the Soviet Union was either destination or (more often) forced detour for a sizeable cohort of Central European scientists is well known, and scholarship on their plight has expanded greatly since 1991. David Zimmermann aims for a fresh view of these peregrinations, shifting the focus from the more famous figures who went directly to 'the West' and treating a more academically diverse cohort whose members did not generally achieve the fame of a Hans Bethe or an Edward Teller. The outcome is a pleasing synthesis of an impressive body of literature, demonstrating admirable empathy for its protagonists, but it holds few revelations for anyone closely acquainted with Russian and Ukrainian history of science.

Zimmermann follows thirty-six scholars, mostly natural scientists, including the odd philosopher or musicologist who caught his interest. The value lies in the sociological breadth, however, ranging from German physical chemist Hans Hellmann (executed by the Soviets in 1938) to Russian mathematician Michael Sadowsky, who trained in Germany and eventually wound up in the United States. 'Surprisingly', writes Zimmermann, 'only a minority of the refugee academics in this study (fourteen out of thirty-four whose birthplace is known) were born in Germany' (p. 26). Yet in an important sense this is not surprising at all, since many of the scientists whom he characterizes throughout as 'the Ensnared' were children of empires, not aboriginally 'German' despite their immersion in German-speaking academia. Zimmermann duly invokes the dissolution of empires (sensibly citing Peter Gatrell's seminal work) and the ambiguity of nationality in the new passport regimes after 1918, but his narrative too strongly anticipates Hitler's rise to power in 1933, even though the vulnerabilities that would plague his protagonists (some Jewish, some married to Jews, some leftist in their politics) were already becoming apparent after 1918 and beyond German borders.

Unfamiliarity with Russian imperial heritage does not help. For example, in Sadowsky's brief biography we learn, 'After the Russian Revolution, Dorpat became Tartu' (p. 28); the ethnically Russian Sadowsky family, stranded in Finland, was unwelcome in newly independent Estonia, nor did they want to migrate to the Soviet Union. German Dorpat (town and university) had in fact become 'Iuriev' as part of the Russification of the Baltic in 1893. Michael's father, the physicist Aleksandr Ivanovich Sadovskii, began teaching there several years later (after many non-Russian-speakers had been forced out), eventually serving as rector. Precisely this heritage of conservative Russian nationalism in the provinces contributed to the father's decision to emigrate during the Civil War. (He taught at the Russian university in Prague until his death in 1923. Born in Vitsyebesk, the elder Sadovskii is now claimed as a Belarusian scientist of note.)

Although Zimmermann is generally sensitive to identity problems in biographical trajectories, one occasionally wishes that more than biography were at stake in the explanatory apparatus.

Tied to the passport mobility problem is a subtler issue: the rise of international post-docs in the 1920s as a career stage for young scientists, treated in Alexei Kojevnikov's recent work. Paths to career stability were lengthening just as European politics were restricting mobility. Mitchell Ash and Alfons Söllner's valuable edited volume *Forced Migration and Scientific Change* (1996) is acknowledged only cursorily, since Zimmermann is unconcerned with the substantive intellectual pursuits or disciplinary after-effects of his wandering scientists. Fate does a good deal of buffeting in this narrative of scientific heroes, when the true challenge would be to situate their achievements within the specific institutional regimes that produced them, and the rival institutional regimes that both welcomed and violated them.

For the most part, Zimmermann judiciously handles the ego documents produced by the Ensnared during the Cold War to explain their experiences under Hitler and Stalin. Pitfalls accompany his limited familiarity with Soviet history, however. He relates an episode from Alexander Weissberg's *The Accused* (1951) about a 1934 April Fool's Day joke played by physicist and *enfant terrible* Lev Landau, following a Party commission appointed to ratify staffing arrangements at the Ukrainian Physico-Technical Institute (UFTI) in Kharkiv. When Landau forged an official directive assigning higher degrees to the lowest assistants at the institute, others further up the hierarchy were upset, until someone noted the date. But the context is lost on the author, who seems unaware that higher degrees had been abolished in 1918, only to be restored a few months before Landau's 'prank'. Regulatory clarity would not come for several years thereafter, and Landau was exploiting that social uncertainty for his own ends. Relying on the recent work of L.J. Reinders, who draws heavily on the Russian-language account of Pavlenko, Ranyuk and Khramov about UFTI, Zimmermann nonetheless does reasonable justice to the atmosphere in which protagonists like Fritz Houtermans and Martin Ruhemann sought to make UFTI internationally competitive. As he narrates the dynamics of the Soviet purges, he acknowledges the fraught nature of confessional documents from secret-police archives. Missing, however, is evidence of engagement with wider post-Soviet scholarly literature on how and why the Soviet state adopted surveillance practices that helped institutionalize systematic violence. 'Stalin' remains little more than a force field against which individual psychologies are gauged and occasionally found wanting.

This is a minor quibble, but in one of the few instances when Zimmermann cites a Russian source directly he uses Aleksei Rykov's *Tesla protiv Einsteina* (Tesla versus Einstein) (2010), a dubious source that does not inspire confidence in his judgement. The hard-won quotation ('translated by the author') is painfully mundane: Murawkin did 'work on ultra-high voltages and the atomic nucleus' (p. 59).

We may commend the author for 'giving voice' to scientists whom Hitler and Stalin tried to silence, but the tone of moral accounting leaves a slight residue of unease. Zimmermann offers a brief take on Oppenheimer versus Teller, approvingly quoting Vitaly Ginzburg's post-Soviet affirmation of Teller's Cold Warrior position, yet he appears unaware of Ginzburg's complicated relation to the Communist Party. Canny, resilient, iconoclastic, sometimes personally victimized by the Soviet system, Ginzburg, an elite physicist, both enjoyed great prominence in that same system and exploited it to his best advantage: he was neither martyr nor dissident. To be fair, Zimmermann's cohort is diverse in motives and outcomes and he stops well short of martyrology or condemnation. Yet I came away wondering how much the author has advanced the state of debate since Paul Hollander's tendentious *Political Pilgrims* (1981). Zimmermann is much better at entangling his cohort in transnational histories, rather than treating them as free-floating

intellectuals making morally dubious ideological choices. I find this a valuable exercise in prosopography. But it should only be read in tandem with critical Soviet histories.

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Scott Alan Johnston, *The Clocks Are Telling Lies: Science, Society, and the Construction of Time*

Montreal: McGill-Queen's University Press, 2022. Pp. 264. ISBN 978-0-2280-0843-9. CA\$49.95 (cloth).

Rebekah Higgitt

National Museums Scotland

This book's flyleaf describes it as 'an exploration of why we tell time the way we do'. Its engagingly written opening offers readers unfamiliar with the field an argument about the social nature of timekeeping and introduces the Canadian railway engineer Sandford Fleming's campaign for standard time and the role of the 1884 International Meridian Conference (IMC). Many books cover similar ground, so it seems fair to ask what this one adds. Paul Glennie and Nigel Thrift's *Shaping the Day* (2009) told the story of technical, intellectual and social developments that shaped timekeeping over the *longue durée*. Derek Howse's *Greenwich Time and the Longitude* (1997) outlined how the Greenwich meridian and GMT became local, national and then international standards. Ian Bartky's *One Time Fits All* (2007) described Fleming's lobbying and how standard time was, slowly, implemented with the adoption of time zones. Most recently, Charles Withers revisited the politics and geographies of the prime meridian and the IMC in *Zero Degrees* (2017).

This book offers both less and more than the title suggests. It does not cover the history of 'the construction of time', paying no attention to the measurement of solar time or the creation of mean time, and little to the navigational, religious or social contexts that drove standardization before the railway and the telegraph. It does, however, add significant depth to the discussion in North America and Britain before, during and after the IMC. It makes good use of primary sources to find new things to say about a well-known story. Using correspondence and institutional archives, Johnston reveals the contingencies and varied interests that shaped discussions in 1884 and limited the IMC's impact on everyday timekeeping. He also provides context on the nature of the scientific community in the late nineteenth century and the range of concerns reflected in the adoption and reception of changes to timekeeping. These include professional gatekeeping, which excluded women's and a range of others' voices, and national, religious and social concerns that made agreement on standards elusive.

An important contribution is the reconstruction of internal discussion about Britain's delegation to the IMC. This reveals differing views within government and the overriding concern of the Science and Art Department that agreement on Greenwich should not precipitate acceptance of the metric system. Although Fleming's campaigning had motivated the conference, Johnston shows that his place at the table was far from guaranteed. He also presents useful material on time dissemination and education in North America, including fascinating examples of indigenous communities adopting standard