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Science, Occupation, War: 1939–1945

A Collective Monograph

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Russian Biologist in Nazi Germany

Nikolai V. Timoféeff-Ressovsky[1363]

Georgy S. Levit – Uwe Hoßfeld

Abstract

Nikolai Vladimirovich Timoféeff-Ressovsky (1900–1981) was one of the key figures of the Modern Synthesis. Living and researching under both of the most powerful and inhuman totalitarian régimes – the Third Reich and the Stalin's Soviet Union – he succeeded in developing an ambitious research programme aiming to explain biological evolution on all major levels, from the molecular-genetic one up to the entire Biosphere. His role in the totalitarian régimes, especially in the Nazi Germany, remains highly controversial.

1363 This article is based on papers published previously by Hoßfeld, Uwe – Levit, Georgy S. 2016. Nikolaj Vladimirovic Timoféeff-Ressovsky (1900–1981). In *Neue Deutsche Biographie – NDB*, Bd. 26. Historische Kommission bei der Bayerischen Akademie der Wissenschaften München. Berlin: Duncker & Humblot: pp. 291–292; Levit, Georgy S. – Hoßfeld, Uwe. 2011a. Grenzüberschreitungen im Leben des russischen Biologen Nikolaj Vladimirovic Timoféeff-Ressovsky (1900–1981). In *"Fremde" Wissenschaftler im Dritten Reich. Die Debye-Affäre im Kontext.* Edited by Dieter Hoffmann and Mark Walker. Göttingen: Wallstein Verlag: pp. 182–199; idem. 2011b. Тимофеев-Ресовский в Берлин-Бухе: новые документы – старые обвинения [Nikolay Timofeev-Ressovsky in Berlin-Buch: New Documents – Old Accussations]. In *Studies in the History of Biology* 3 (1): pp. 39–44; idem. 2009. From Molecules to the Biosphere: 'Nikolai V. Timoféeff-Ressovsky's (1900–1981) Research Program Within the Totalitarian Landscapes. In *Theory in Biosciences* 128 (4): pp. 237–248; Junker, Thomas – Hoßfeld, Uwe – Zachos, Frank E. – Rasran, Leonid. 2003. *О* разногласиях между Адольфом Ремане и Николаем Владимировичем Тимофеевым-Ресовским в 1939 году [On the controversy between Adolf Remane and Nikolai Timofeeff-Ressovsky]. In *В тени дарвинизма* [In the shadow of darwinism]. Edited by Georgy S. Levit. St-Petersburg: Fineday-Press: pp. 126–137; Hoßfeld, Uwe. 2002. Документы Н.В.Тимофеева-Ресовского в архивах КГБ и Штази [Documents of Timofeeff-Ressovsky in the archives of Stasi and KGB]. In *Русско-немецкие связи в биологии и медицине* [Russian-German Links in Biology and Medicine]. Edited by Eduard I. Kolchinsky. St-Petersburg: Borej Art: pp. 208–214, and idem. 2001. 'Im unsichtbaren Visier' Die Geheimdienstakten des Genetikers Nikolaj V. Timoféeff-Ressovsky'. In *Medizinhistorisches Journal* 36 (3/4): pp. 335–367.

He has often been accused of being too cooperative with the Nazi régime. In this paper, we approach the problem of his alleged cooperation with Nazi authorities, examining both of the crucial episodes of his biography and summarizing his views on evolution. We conclude that the key decisions he made reflect the specificity of his research programme focused on the most fundamental questions of evolutionary biology and biosciences in general.

The Russian biologist Nikolai Vladimirovich Timoféeff-Ressovsky (1900–1981; hereinafter TR) is one of the most striking personalities and key figures of the Synthetic Theory of Evolution in the twentieth-century science.[1364] On the one hand, his name stands for groundbreaking research in the fields of population genetics, radiation biology, evolutionary biology, and evolutionary developmental biology.[1365] On the other hand, he is still often associated with the propagation of eugenic ideas under National Socialism and the facilitation of military application of atomic energy under Communism. Yet, his extensive scientific biography remains largely unwritten, his role under totalitarianism, especially in Nazi Germany, being highly controversial. Until very recently, studies of his life have been hindered by language barriers, the difficult circumstances of the Cold War, and inaccessibility of archival sources. Materials discovered in the archives of the former East German Security Service (*Staatssicherheit*; hereinafter Stasi) and Russian Federal Security Service (*Федеральная служба безопасности*; hereinafter FSB)[1366] as well as the latest investigations into the general context of the relationship between science and society sheds new light on TR's life and scientific achievements.[1367]

1364 Hoßfeld, Uwe – Junker, Thomas. 2009. *Die Entdeckung der Evolution. Eine revolutionäre Theorie und ihre Geschichte.* 2nd edition. Darmstadt: Wissenschaftliche Buchgesellschaft.

1365 Medvedev, Zhores A. 1982. 'Nikolai Wladimirowich Timoféeff-Ressovsky (1900–1981)'. In *Genetics* 100 (1): pp. 1–5.

1366 The Federal Security Service, contemporary Russian intelligence service, is the successor of the Soviet KGB.

1367 Levit and Hoßfeld. 2009. op. cit.; Hoßfeld 2001. op. cit. Further see Paul, Diane B. – Krimbas, Costas B. 1992. 'Nikolai W. Timofejew-Ressowski'. In *Spektrum der Wissenschaft* 4: pp. 86–94 and Berg, Raissa L. 1990. 'In defense of N.V. Timoféeff-Ressovsky'. In *The Quarterly Review of Biology* 65 (4): pp. 457–479.

1 Biographical sketch

TR obtained his school education in Moscow and Kiev and, after having terminated the high school (1918), he studied at Moscow University (since 1940: *Московский государственный университет имени М.В. Ломоносова*).[1368] There, he passed the so-called 'Great Practicum' at Nikolai K. Koltsov (1872–1940) in 1920–22 with the aim of specializing as a zoologist, geneticist, and biophysicist. One of his immediate teachers was the leading Russian geneticist Sergei S. Chetverikov (1880–1959). In 1922–25, TR was a collaborator of the Commission for Research of Natural Productive Forces of Russia (*Комиссия по изучению естественных производительных сил страны, КЕПС*), initially established in 1915 within the Imperial St. Petersburg Academy of Sciences and reorganized within the Academy of Sciences of the USSR into the *Совет по изучению производительных сил СССР АН СССР* in 1930.

In June 1925, TR, even not graduated, moved to Berlin together with his family at the invitation of Oscar Vogt (1870–1959) in order to establish genetic studies at the Kaiser-Wilhelm-Institute for Brain Research (*Kaiser-Wilhelm-Institut für Gehirnforschung*). At first, TR worked as an assistant there, researching – together with his wife Helena Alexandrovna (1898–1973) – into the issues of population and evolution theory genetics with the use of the vinegar fly (*Drosophila melanogaster*). In 1936, he obtained a proposal from *Cold Spring Harbor Laboratory* (Carnegie Institution, USA), mediated by the *Rockefeller Foundation*. This bid strengthened his position in Germany. He was then offered an independent financing within the KWI for Brain Research by the chemist Rudolf Mentzel (1900–1987), a representative of the Reich Ministry of Science, Education and Public Enlightenment (*Reichsministerium für Wissenschaft, Erziehung und Volksbildung*; hereinafter REM) and the key figure of the Nazi science policy. TR got in the position of a director of a de facto autonomous institution and became a scientific member of the Kaiser Wilhelm Society (*Kaiser-Wilhelm-Gesellschaft*; hereinafter KWG) in May 1938. In Berlin, TR brought forward fundamental research in the area of population genetics, mutations, and radiobiology. The research on mutations, based in substance on radiation processing and theories, brought TR into an early contact with a row of younger scientists. As a result of these works, he introduced the publication *Über die Natur der Genmutation und der Genstruktur* (the hit theory) together with the later 1969 Nobelists in physiology and medicine, Max Delbrück (1906–1981) and Karl G. Zimmer (1911–1988), called the 'three-man-work', which showed that the genes are molecules. In 1943, his elder son Dmitry (1923–1945) was arrested by the *Gestapo*, brought

1368 Levit – Hoßfeld. 2009; idem. 2010.

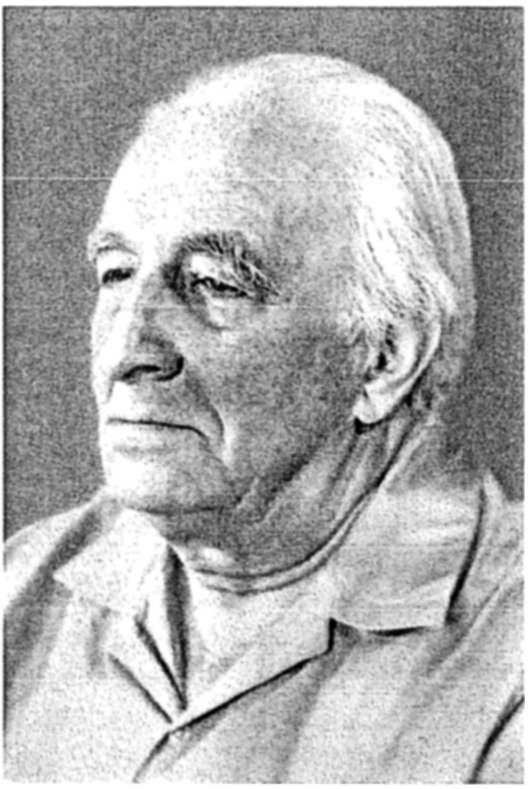
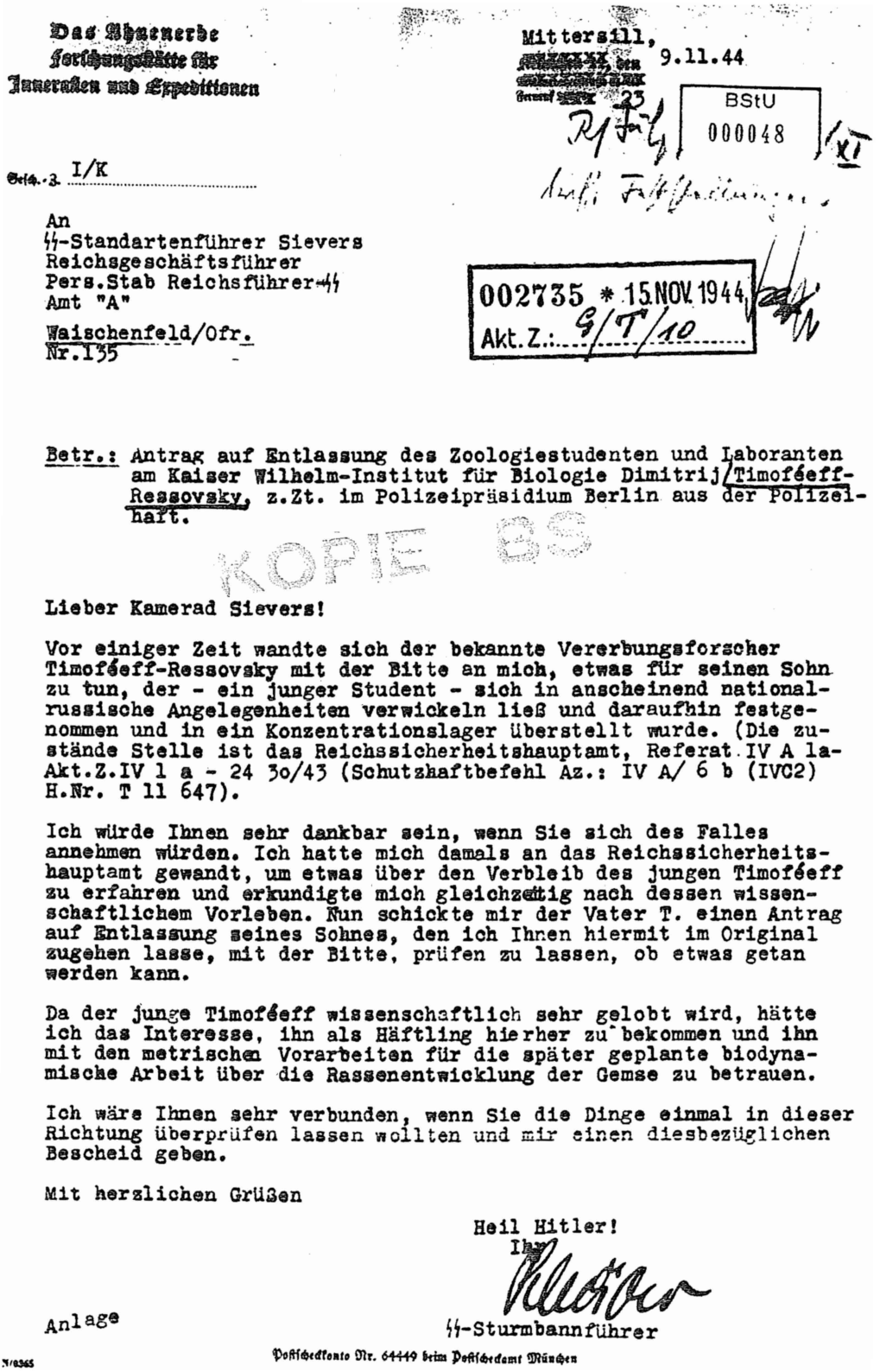


Fig. 1 N. W. Timoféeff-Ressovsky during his last years, late 1970s (by courtesy of Nauka Press, and V.I. Ivanov and N.A. Ljapunova).

to the concentration camp Mauthausen and executed there on 1 May 1945. In September 1945, TR was apprehended by a collaborator of the Ministry of the Interior of the USSR (*Народный комиссариат внутренних дел*, literally: 'The People's Commissariat for Internal Affairs'; hereinafter NKVD), and brought to Moscow. The Military Senate of the Supreme Court of the USSR sentenced him for 10 years of imprisonment and property confiscation for having refused to return home and for an alleged share in anti-Soviet propaganda. In 1947, after 107 days in the penitentiary camp, he built up a laboratory of radiobiology in the military research centre in Sungul in the Southern Urals. In 1948–51, TR's imprisonment was changed to penal settling in the Chelyabinsk Region. Amnestied in 1955, he moved to Sverdlovsk and established the Department of Radiobiology and Biophysics (*отдел радиобиологии и биофизики Института Биологии Уральского филиала АН СССР*) of the Institute of Biology of the Academy of Sciences of the USSR in 1955–64. In 1964, TR shifted to Obninsk and founded a Department of Genetics and Radiobiology (*отдел радиобиологии и генетики в Институте медицинской радиологии*) within the Institute for Radiology. At the same time, he was active in the institute for Medico-Biological Problems of the Academy of Sciences in Moscow until 1971. He died in Obninsk at the age of 81 on 28 March 1980.



Das Ahnenerbe
Forschungsstätte für
Innerasien und Expeditionen

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BStU
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Tgb.-Z. I/K

An
SS-Standartenführer Sievers
Reichsgeschäftsführer
Pers.Stab Reichsführer-SS
Amt "A"
Waischenfeld/Ofr.
Nr.135

002735 * 15.NOV.1944
Akt.Z.: S/T/10

Betr.: Antrag auf Entlassung des Zoologiestudenten und Laboranten am Kaiser Wilhelm-Institut für Biologie Dimitrij Timoféeff-Ressovsky, z.Zt. im Polizeipräsidium Berlin aus der Polizeihaft.

KOPIE BS

Lieber Kamerad Sievers!

Vor einiger Zeit wandte sich der bekannte Vererbungsforscher Timoféeff-Ressovsky mit der Bitte an mich, etwas für seinen Sohn zu tun, der - ein junger Student - sich in anscheinend nationalrussische Angelegenheiten verwickeln ließ und daraufhin festgenommen und in ein Konzentrationslager überstellt wurde. (Die zuständige Stelle ist das Reichssicherheitshauptamt, Referat IV A 1a-Akt.Z.IV 1 a - 24 30/43 (Schutzhaftbefehl Az.: IV A/ 6 b (IVC2) H.Nr. T 11 647).

Ich würde Ihnen sehr dankbar sein, wenn Sie sich des Falles annehmen würden. Ich hatte mich damals an das Reichssicherheitshauptamt gewandt, um etwas über den Verbleib des jungen Timoféeff zu erfahren und erkundigte mich gleichzeitig nach dessen wissenschaftlichem Vorleben. Nun schickte mir der Vater T. einen Antrag auf Entlassung seines Sohnes, den ich Ihnen hiermit im Original zugehen lasse, mit der Bitte, prüfen zu lassen, ob etwas getan werden kann.

Da der junge Timoféeff wissenschaftlich sehr gelobt wird, hätte ich das Interesse, ihn als Häftling hierher zu bekommen und ihn mit den metrischen Vorarbeiten für die später geplante biodynamische Arbeit über die Rassenentwicklung der Gemse zu betrauen.

Ich wäre Ihnen sehr verbunden, wenn Sie die Dinge einmal in dieser Richtung überprüfen lassen wollten und mir einen diesbezüglichen Bescheid geben.

Mit herzlichen Grüßen

Heil Hitler!
Ihr

Anlage

SS-Sturmbannführer

N/8365

Postscheckkonto Nr. 64449 beim Postscheckamt München

Fig. 2 Letter of E. Schäfer to W. Sievers concerning TR's son Dmitry, 9 November 1944 (BStU Berlin, Archiv der Zentralstelle).

2 Timoféeff-Ressovsky and the Third Reich

In 1932, TR spent several months in the newly established *Cold Spring Harbor Laboratory*, USA, sponsored by the *Carnegie Foundation*, which strengthened his position in Germany temporarily, as has been mentioned above. However, the end of the Vogt era at the KWI of Brain Research and the coming to power of the new director Hugo Spatz (1888–1969) in 1936 made TR's situation precarious again. H. Spatz expressed his views in a letter addressed to TR where he claimed that the Division of Genetics was a 'foreign body' within the KWI under his leadership. Accordingly, he recommended TR to submit an application for a position at the KWI for Biology (*Kaiser-Wilhelm-Institute für Biologie*). There was a vacancy after the forced emigration of the Jewish geneticist Richard Goldschmidt (1878–1958) to the USA.[1369] Yet, the Director of this KWI, Fritz von Wettstein (1895–1945), preferred Alfred R.W. Kühn (1885–1968). Both Kühn and Wettstein advocated cytoplasmic

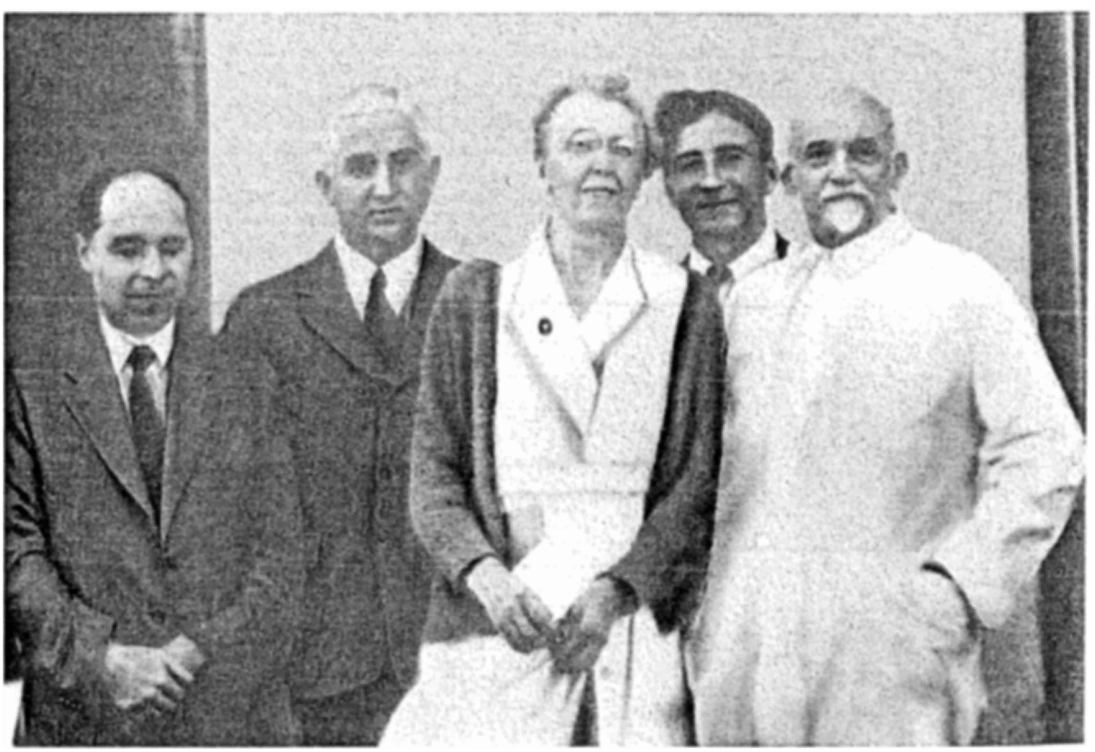

Fig. 3 Scientists of the KWI for Brain Research in Berlin-Buch, from left to right: Hermann Muller, unknown, Cécile Vogt, Timoféeff-Ressovsky, and Oskar Vogt, 1933 (by courtesy of V.V. Babkov and E.S. Sakanjan).

1369 Schmaltz, Florian. 2005. *Kampfstoff-Forschung im Nationalsozialismus. Zur Kooperation von Kaiser-Wilhelm-Instituten, Militär und Industrie* (= Geschichte der Kaiser-Wilhelm-Gesellschaft im Nationalsozialismus, Bd. 11). Göttingen: Wallstein Verlag: p. 253.

inheritance. It appears that TR's research program did not fit well into Wettstein's research agenda.[1370]

In the middle of the 1930s, TR's American colleagues, worrying about TR's position in Germany under the Nazi rule, offered him a position at the Carnegie Institution (via the *Rockefeller Foundation*). In the summer of 1936, the *Rockefeller Foundation* required an immediate answer. In June 1936, the abovementioned counteroffer of a leading and financially independent position within the KWI for Brain Research was made. Eventually, TR turned down the offer from the USA. Considering the strengthening of National Socialists in all parts of the German society and the mass emigration of German intellectuals, TR's decision appears enigmatic. Why did he stay in a totalitarian state despite the growing evidence of its criminal nature?

Yakov Rokityanskiy found a possible explanation of TR's decision, based on the personal archive of Vassily Babkov (1918–2001). It was a note of one of the *Rockefeller Foundation* associates (G.M. Miller), who summarized TR's reasons for not moving to the USA.[1371] He mentioned at least four of them: First, TR felt responsible for his research group (five scientists and six technical assistants); second, TR thought that he would have much less technical assistance in the USA; third, his children, he argued, had already changed their cultural environment once when moving from Russia to Germany. Last but not least, the prestige of a professor, he believed, was lower in the USA than in Germany. These arguments seem plausible, considering that around that time, the KWG was an established scientific institution with a reputation as a hotbed for budding Nobel laureates.

Following his decision to remain in Germany, TR became director of the Division of Genetics and Biophysics (*Abteilung für Genetik und Biophysik*), which was subordinated directly to the KWG. In the same year (1936), TR's division obtained a minor neutron generator, the crucial device for the planned molecular genetic experiments.[1372] In this way, the German offer was much more attractive for TR, considering the experimental and interdisciplinary character of his studies, which implied expensive technical equipment and uniquely trained scientists.

Yet, there was hypothetically another possibility for TR to escape Hitler's régime: back to the USSR. Indeed, the Soviet Embassy 'advised' him vigorously to return to Moscow in 1937. However, his former teacher N.K. Koltsov had

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1370 Wettstein, Fritz v. 1928. 'Über plasmatische Vererbung und das Zusammenwirken von Genen und Plasma'. In *Berichte der Deutschen botanischen Gesellschaft* 46: pp. 32 ff.

1371 Rokityanskiy, Jakov. 2003. *Рассекреченный Зубр: следственное дело Н. В. Тимофеева-Ресовского: документы* [Unclassified 'Aurochs': the Court File of N. W. Timofeeff-Ressovsky: Documents]. Edited by Jakov Rokityansky. Moscow: Academia: pp. 6–162.

1372 Schmaltz. op. cit.: p. 256.

already warned him against an attempt to come back to the USSR in 1933. Political repressions (purges) were at its apogee in 1937, and a return would doubtlessly mean "*the most terrible and complex way to commit a suicide*" for him as N.K. Koltsov emphasised in his letter.[1373] Predictably, TR turned down the 'offer' from the USSR. The next year, German officials pressured TR to take German citizenship. He refused, arguing that he was born Russian, and that changing his citizenship would be a serious decision, although it would make his life and work in Germany much easier.

In 1938, TR became a scientific member of the KWG, a designation reserved for the Society's outstanding scientists. Two years later, he was elected a member of the famous Leopoldina Academy (*Die Leopoldina – Nationale Akademie der Wissenschaften*) in Halle/Saale. In these years, TR truly achieved the peak of his scientific career in Germany.[1374]

3 Timoféeff-Ressovsky and the East German State Security Service (Stasi)

The file of the 'Case Timo', as it was called by the Stasi, comprises 130 volumes of 5,046 pages.[1375] The file consists of five quite different topical groups: 1. family situation; 2. the period at KWI in the period of the Third Reich; 3. publications in the field of radiobiology; 4. archived interrogation protocols and enquiries among former colleagues and collaborators; 5. scientific reception of TR in the German Democratic Republic (hereinafter GDR). TR's son Alexei (born 1927) addressed the Supreme Court of the USSR with a request for rehabilitation of his father on 8 August 1987. Twenty other requests of the same contents came in from research and educational institutions, signed by the leading biologists and geneticists of the time.[1376] Subsequently, on 12 February 1988, the military prosecutor (Lieutenant Colonel V.K. Kondratov) of the Supreme Military Prosecutor's Office decided: a) to open investigations into newly discovered circumstances of the case, and b) to hand over the inquiries to the Investigation Department of the State Security Commission (KGB).[1377] On 22 April 1988, Major General of the KGB

1373 Babkov, Vladimir V. – Sakanjan, Elena S. 2002. *Николай Тимофеев-Ресовский* [N.V. Timofeef-Ressovsky]. Moscow: Pamyatniki Istoricheskoi Mysli: p. 212.

1374 Levit – Hoßfeld. 2009. op. cit.; idem. 2010. op. cit.

1375 Hoßfeld. 2001. op. cit.

1376 These were, for example, Nikolay Dubinin, Sergei Vonsovsky, Aleksei V. Yablokov, Jelena Saakanyan, Vladimir Ivanov, Joshua Z. Rappoport, Hans Stubbe, Wolf von Engelhardt, and others.

1377 Bundesbeauftragte für die Stasi-Unterlagen (Stasi Records Agency; hereinafter BStU) Berlin, Archiv der Zentralstelle, MfS HA IX/11, RHE 25/87 SU Vol. 2b (UdSSR-Dokumente), f. 87.

L.I. Barkow in assignment of the Supreme Military Prosecutor's Office (Proceedings No. 6/1644) eventually informed the Ministry of the State Security that the Investigation Department of the KGB would perform 'a supplementary inquiry into the archived proceedings *in re* Timofeev-Ressovsky' and forwarded appropriate open questions to East Berlin.[1378] The aide-de-camp of the commander of the Investigation Department of the KGB (A.G. Gubinskiy) was sent to Berlin for three weeks to coordinate the matter. In the following evaluation report from 7 July 1988, the conclusion was made that "*by his activities, TR had committed high treason, defecting to the enemy, and was sentenced rightly*".[1379] The Investigation Department held the opinion that there were no grounds for further dealing with the issue of rehabilitation.[1380] The department then terminated renewed proceedings in TR's case on 20 September 1988, requesting, nevertheless, to make out expert opinions of specialists from the GDR "*for the purpose of determining the character and targeting of TR's scientific research, and because many documents were drawn up in the German language*".[1381] Afterwards, the East German Ministry of State Security created the 'Work Group Timo' (*Arbeitsgruppe Timo*), composed of four persons (Colonel Stolze, Major Juchert, Captain Heise und Captain Lösche), who were examining the documents for several months.[1382] In addition, collaboration between the Ministry of State Security of the GDR (Main Department IX) and the Academy of Science of the GDR (*Akademie der Wissenschaften der DDR*) had been reached on 24 February 1989, within which the President of the Academy commissioned Professor Helmut Böhme (1929–2015), Dr Werner Hartkopf (born 1925), and Dr Joachim Tripoczky with making out an expert opinion.[1383] The President of the Academy, pharmacologist Professor Werner Scheler (1923–2018) was able to hand over the report to the Ministry on 8 February 1989.[1384]

1378 The Russian Secret Service turned to Berlin with this request pursuant the deal from 26 June 1975 between the Soviet KGB and the Ministry of State Security of the GDR on mutual legal assistance and collaboration in prosecuting of criminal deeds.

1379 BStU Berlin, Archiv der Zentralstelle, MfS HA IX/11, RHE 25/87 SÜ Vol. 1 (Leitakte), f. 48.

1380 Ibid.: f. 75.

1381 Ibid., f. 129–130, letter of col. I.K. Peretruchin to Generalmajor Rolf Fister, 20 September 1988.

1382 Ibid., Vol. 2 ('Leitakte mit Gutachten'), f. 82.

1383 Ibid., Vol. 3, f. 2/3.

1384 Ibid., f. 62.

Ministerrat der
Deutschen Demokratischen Republik
Ministerium für Staatssicherheit
Hauptabteilung Untersuchung
Leiter

Berlin, 27. Februar 1989

RHE 25-27 54

Komitee für Staatssicherheit
der UdSSR
Untersuchungsabteilung
Leiter
Genossen Oberst Rastorgujew

M o s k a u

Untersuchungen zu TIMOFEJEW-RESSOWSKI, Nikolai Wladimirowitsch

Ausgehend von dem mit der Anfrage 1162/88 unter Bezugnahme auf die zwischen dem KfS der UdSSR und dem MfS der DDR abgeschlossenen Vereinbarungen über die Rechtshilfe in Strafsachen übermittelten Ersuchen, von kompetenten Spezialisten der DDR ein Gutachten zur Bestimmung des Charakters und der Zielgerichtetheit der wissenschaftlichen Forschungen TIMOFEJEW-RESSOWSKIs sowie der von ihm geleiteten Abteilung Genetik des Institutes für Hirnforschung in Berlin-Buch und deren Bedeutung für die Kriegführung des faschistischen Deutschlands erarbeiten zu lassen, wurden durch die Hauptabteilung Untersuchung des MfS entsprechende Anforderungen an die Akademie der Wissenschaften der DDR gerichtet. Der Präsident der Akademie der Wissenschaften der DDR hat daraufhin am 20. 12. 1988 drei sachverständige Wissenschaftler der DDR mit der Erstattung eines Gutachtens beauftragt.

Die Gutachter sind nach Prüfung der zur Verfügung gestellten Materialien aus dem Archivvorgang TIMOFEJEW-RESSOWSKI sowie weiterer durch eigene Nachforschungen ermittelter Unterlagen und wissenschaftlicher Publikationen unter anderem zu dem Schluß gelangt, daß

1. das Institut für Hirnforschung und die von TIMOFEJEW-RESSOWSKI geleitete Abteilung Genetik nicht zu den als "kriegswichtig" eingestuften Instituten der Kaiser Wilhelm-Gesellschaft zu zählen sind;

2. eine Teilnahme TIMOFEJEW-RESSOWSKIs und der von ihm geleiteten Genetischen Abteilung an Forschungen zur Stützung der faschistischen Rassenideologie und -politik sowie zur Entwicklung und Vervollkommnung militär-technischer Ausrüstungen nicht abzuleiten ist;

Fig. 4 The Letter of Generalmajor Fister, February 27, 1989 (BStU Berlin, Archiv der Zentralstelle).

3. in der Abteilung Genetik betriebene Auftragsforschungen anderer Wissenschaftler mit radioaktiven bzw. ionisierenden Materialien, die der Geheimhaltungspflicht unterlagen und militärtechnische Probleme berührten, in keinem Zusammenhang mit den Forschungen von TIMOFEJEW-RESSOWSKI standen und keine für die faschistische Kriegführung bedeutsamen Ergebnisse erbrachten.

Zusammenfassend schätzen die Gutachter ein, "daß die Forschungen des sowjetischen Wissenschaftlers Nikolai Wladimirowitsch TIMOFEJEW-RESSOWSKI zu keiner Zeit dazu beitrugen, die faschistische Diktatur in Deutschland bewußt zu unterstützen oder ihr Mittel der Kriegführung zu liefern".

Das von den Sachverständigen der Akademie der Wissenschaften der DDR erarbeitete Gutachten, einschließlich einer zusätzlichen Beilage, wird in zweifacher Ausfertigung übersandt. Gleichzeitig werden die zur Verfügung gestellten 10 Beweismittelakten (Archiv-Nr. N - 18520) beigefügt.

Die Unterstützungsmöglichkeiten der Hauptabteilung Untersuchung des MfS in der Sache TIMOFEJEW-RESSOWSKI sind nach dem gegenwärtigen Stand der Erkenntnis damit ausgeschöpft.

Es wird gebeten, die Hauptabteilung Untersuchung des MfS über die abschließende Entscheidung der sowjetischen Justizorgane zu informieren.

Anlagen
Gutachten (zweifach)
10 Beweismittelakten

Fischer
Generalmajor

AKADEMIE DER WISSENSCHAFTEN DER DDR *Präsident*

Auf Anforderung des Ministeriums für Staatssicherheit, Hauptabteilung Untersuchung - ergangen in Erledigung eines Ersuchens gemäß dem Vertrag zwischen der DDR und der UdSSR über die Rechtshilfe in Zivil-, Familien- und Strafsachen vom 28. 11. 1957 zu den zusätzlichen Untersuchungen der sowjetischen Justizorgane in der Strafsache gegen Timofejew-Ressowski, Nikolai Wladimirowitsch - habe ich am 20. Dezember 1988

- Professor Dr. habil. Helmut B ö h m e , Ordentliches Mitglied der Akademie der Wissenschaften der DDR, Wissenschaftler im Zentralinstitut für Genetik und Kulturpflanzenforschung der AdW der DDR, Gatersleben
- Dr. phil. Werner H a r t k o p f , Wissenschaftlicher Mitarbeiter im Büro des Präsidenten der AdW der DDR, Berlin
- Dr. sc. phil. Joachim T r i p o c z k y , Bereichsleiter im Institut für Theorie, Geschichte und Organisation der Wissenschaft der AdW der DDR, Berlin

mit der Erstattung eines Gutachtens beauftragt.

Dieses Gutachten wurde erarbeitet und mit Datum vom 8. 2. 1989 dem Ministerium für Staatssicherheit übergeben. Dem Ministerium für Staatssicherheit entstehen keine Kosten, weil das Gutachten als dienstliche Aufgabe angefertigt wurde.

Berlin, den

Prof. Dr. sc. med. W. Scheler

DDR - 1080 Berlin, Otto-Nuschke-Straße 22/23

Fig. 5 The Letter of the President of the Academy of Sciences of the GDR W. Scheler, s. d. (BStU Berlin, Archiv der Zentralstelle).

4 Was Timoféeff-Ressovsky involved in collaboration with the Nazi authorities?

After the *Perestroyka* period in the USSR, TR was not only rehabilitated but, due to the efforts of his biographers, became an icon of Soviet science. Despite the pressures of two totalitarian régimes, he became one of the leading figures of international science. Being an extremely charismatic personality and a talented narrator, TR gave his biographers the best chances for reconstructing his life story in terms of 'heroes' and 'villains'. A debate broke out between those who saw TR as either a criminal[1385] (e.g., Office of the General Military Prosecutor) or as an amoral person (e.g., N. Dubinin), and those claiming that TR had met the highest ethical standards all along.[1386] Thus, in 1989, an influential Soviet geneticist Nikolai Dubinin (1907–1998) published a letter in a popular literary journal *Nash Sovremennik* (Our Contemporary), accusing TR of amorality: "*I have always supported the opinion that Timofeeff's work in Germany between 1941 and 1945 – when Germany invaded the USSR with the whole power of its military machine – was amoral*".[1387] After the beginning of the WWII, N. Dubinin continued, TR had a possibility to leave Germany but he "*stubbornly held on his position in Berlin*".[1388]

The best example of a strictly pro-TR biography is the book of Russian authors V.V. Babkov and E.S. Sakanyan.[1389] Here, TR's German period appears as an attempt to preserve 'islands of stability and decency' in the German scientific-cultural landscape.[1390] They emphasize that TR was one of the few scientists in Germany who helped individuals threatened and persecuted by the National Socialists; for example, he protected Soviet 'slave laborers' (*Zwangsarbeiter*). The memoirs of his friend, the artist Oleg Zinger (1909–1997), are instructive in this respect. Zinger recalled that TR, though a totally 'apolitical person', "*was shocked by the 'inhumanity' taking place around* [him]".[1391]

1385 TR was accused of co-operation with the Nazi authorities and for contribution into the 'completion of the military power of the fascist Germany', for example, by Iljin, D. – Provorotov, V. 1989. 'Кто вы, доктор *Тимофеев*-Ресовский?' [Who Are You, Dr *Timofeev*-Resovskiy?]. In *Nash Sovremennik*, No. 11: pp. 173–188.

1386 E.g., official appeals and publications of his pupil Ivanov, Vladimir I. 1990. 'Нет пророка в своем отечестве' [No One is a Prophet in His Homeland]. In *Priroda* 9: pp. 71–77. See also BStU Berlin, MfS HA IX/11 RHE25/87 SU, Vol. 119, an official appeal to the Office of General Military Prosecutor, s.d.

1387 Quoted from Dubinina, Lidiya G. – Ovchinnikova, Irina N. 2006. *Николай Петрович Дубинин в XX веке* [N.P. Dubinin in the 20th Century]. Moscow: Nauka: p. 346.

1388 Ibid.

1389 Babkov – Sakanyan. 2002: p. 204.

1390 Ibid.: p. 204.

1391 Zinger, Oleg. 1990. 'Колюша – Николай Владимирович Тимофеев-Ресовский' [Koljuscha – N.V. Timofeev-Ressovsky]. In *Khimija i zhizn* 12: pp. 39–45.

Being a person of action, "*Koljusha* [one of TR's nicknames – author's note], *helped everyone and did everything he could! Berlin-Buch became an 'isle of salvation' for the Soviet prisoner-of-war biologists, the French, the students etc.; Koljusha somehow succeeded in settling all of them and protecting them from the authorities, from this awful Nazi, who made terrible things, of which we were totally unaware at that time, although nobody believes us in this respect now*".[1392] O. Zinger insists that none of TR's friends were aware of Nazi crimes: "*It was impossible in Germany of that time to gain an understanding of anything; there were Nazis somewhere, but we knew little about them*".[1393] Interpretations like these, however, are widespread in contemporary biographical reconstructions of TR's life.

At the same time, attempts to show that TR collaborated with Nazi officials also continue. Thus, very recently, the German historian of science Florian Schmaltz offered a new account of TR's German period, based on an intensive archival research, opposing the results of earlier investigations made by the authors of this paper.[1394] He proceeds from the assumption that German scientists of TR's format (de facto head of the KWI) must have participated in the German scientific and socio-political system to a significant extent. In his voluminous tome, F. Schmaltz devotes a chapter to investigations into TR's role in the KWG's cooperation with the Nazi régime.[1395] He develops his argument by analysing archival records, which reveal, for example, details of TR's grant applications submitted to the German Research Foundation (*Deutsche Forschungsgemeinschaft*; hereinafter DFG). The very character of the application process, F. Schmaltz argues, implied a scientist's own initiative to a substantial extent. TR's Division of Genetics conducted, among others, respirator studies, which were undoubtedly of military significance. The same neutron generator TR employed for fundamental investigations into molecular structure of genes was ideally suited for testing the respirator filters with the use of the method of isotopic markers. The structure and equipment of TR's laboratory, as well as the expertise of its members, determined the very character of the research, conducted in TR's division. In this respect, the studies of the laboratory relevant to the *Wehrmacht* were not simply a result of a forced compromise with the socio-political environment, but followed rather a sophisticated developmental pattern shaped by interrelations of the two interacting agents: science and society. This picture contradicts the accepted passive/proactive dichotomy, implying a violent totalitarian society and an 'asocial' scientist falling prey to the aggressive

1392 Ibid.
1393 Ibid.
1394 E.g., Hoßfeld. 2001. op. cit.
1395 Schmaltz. op. cit.

régime. In other words, to be integrated into the German armament research (*Rüstungsforschung*) must have required strong scientist's will to do so, and to pool resources from the armament industry.

Schmaltz's argument provides a good opportunity to analyse the very notion of 'co-operation', which, in this case, will be closely coupled with the problem of personal moral responsibility. One can distinguish three different aspects in the hypothetical involvement of TR and his division in armament research.

The first aspect is a structural one: The Genetic Division of the KWI, as an autonomous scientific institution within the administrative structures of the Third Reich, was on its way to integrating itself into the pre-existing system of relationships between science, industry, and political authorities. It is not surprising, however, that a successful research institution became incorporated into this system as its constituting part. The sole fact of the merger with the system does not necessarily mean that the scientific unit functions as an obedient instrument of the state power. The very nature of science provides it with autonomous fundamental targets. Just for example, it was no coincidence that the Evolutionary Synthesis developed along the same lines in all the three relatively isolated countries: Germany, the USSR, and the USA.

The second aspect concerns a possible criminal character of the existing integration if approached from the viewpoint of today's common values and criteria. The fact of integration of a scientific institution into the given system of financial and structural stimuli does not routinely lead to any value judgment. Many institutions and economic units established by the Nazi régime or existing under this régime were ultimately incorporated into the postwar societies. Such industrial giants as Osram, Krupp, Klöckner etc., and the very system of the KWI were all resumed by the liberal political-economical system in West Germany.

Ultimately, the third and final aspect concerns personal responsibility of a scientist for being a part of a certain institution or socio-political system as well as for the decisions he/she makes. On this level, one can pose a question as to how anyone made use of his/her scientific and personal autonomy, granted within an existing structure. This is also the level of possible moral reproach.

TR's division was indeed involved into the respirator studies (*Gasmaskenforschung*), which was already well-known at the time of his rehabilitation.[1396] In 1941, the German journal Applied Chemistry (*Angewandte Chemie*) published his paper, stemming from a lecture given in Dresden on 5 April 1941.[1397] In it, TR investigated the prospects of applying the neutron generator, and

1396 See for example, Vladimir, Ivanov. 1990. In *Priroda* 9: pp. 81–84.

1397 Timoféev-Ressovsky, Nikolai W. 1941. 'Einige chemisch-biologische Anwendungen der schnellen und der künstlich radioaktiven Stoffe'. In *Angewandte Chemie* 54 (437): pp. 190–195.

especially the indicator method based on the production of artificial radioactive isotopes, to various fields of biology and chemistry. Although the paper concentrates on applying indicators in physiology, morphology, genetics, and microbiology, TR devotes a small paragraph to the utilization of the same method for testing the respirator filters. These twenty lines in fine print represent the minimum of possible compromises with an invisible co-author, the State. The same respirator example can be found in several other publications where TR appears as a co-author.[1398]

Beyond the respirator issue, there are no further documented accusations against TR. Furthermore, there is no evidence that TR embraced National Socialist ideology, supported the National Socialist régime, or even made racist remarks.

An ethical system is conceivable in which TR could be accused even for his modest collaboration with the Nazi institutions and for not preferring a research position in a liberal society. Yet, if developed, this ethical system would be incriminatory for the majority of scientists in the history of the twentieth century, insofar as they either collaborated with one of the multiple totalitarian régimes or contributed to well-known examples of misuse of technology in the liberal world.

Conclusions

Different episodes from TR's biography as well as his broad scientific interests can be explained as proceeding from his steady attempts to complete a certain research programme, which became explicit in the late 1930s. The major idea behind this programme was to connect molecular, developmental, evolutionary, and environmental processes within a comprehensible theoretical framework. It is remarkable that in his biophysical works of the German period, TR already appealed to Vladimir Vernadsky's (1863–1945) ideas, which became crucial for his unifying research programme in the Soviet period.[1399] The aspiration of his physicist friends (including N. Bohr) towards an all-embracing physical theory may have played a paradigmatic role here. Further, TR's research programme reflects general and clearly detectable

1398 E.g., Born, Hans – Timoféeff-Ressovsky, Nikolai W. – Zimmer, Karl G. 1941. 'Anwendungen der Neutronen und der künstlich radioaktiven Stoffe in Chemie und Biologie'. In *Umschau* 45 (6): pp. 2–6.

1399 Timoféeff-Ressovsky, Nikolai W. 1942. 'Biologische Anwendungen des Zählrohres'. In *Naturwissenschaften* 30 (40): pp. 39–40; Timoféeff-Ressovsky, Nikolai W. – Zimmer, Karl G. 1947. *Das Trefferprinzip in der Biologie*. Leipzig: S. Hirzel Verlag.

environmental bias in Russian-language evolutionary biology.[1400] His complex, ambitious and fundamental research programme was the major factor determining the crucial episodes of his scientific and personal biography.

In any political situation, TR sought for the optimal conditions, which would allow him to conduct his scientific research at the highest level. Considering that TR was involved in experimental molecular-genetic and radiobiological investigations, only few countries with highly advanced and financed scientific institutions could provide him with the necessary research conditions at that time. Further, a scientist of TR's format, working not only experimentally but approaching theoretical issues of the highest possible complexity, is expected to be tightly coupled with his cultural and scientific micro- and macro-environment along with unique equipment. All these factors taken together determined TR's decision to stay in Germany in 1936 despite increasing Nazification. TR's decision was certainly in contradiction to the deeds of other liberal intellectuals. The 1930s were marked by massive emigration of leading scientists to Great Britain and the USA; about 15% of academic scientists left Germany. In 1937, one of the major scientific journals, the *Nature*, was forbidden in Germany.[1401] It was a time of 'packing up', and TR could not have been 'unaware' of all these developments. His decision exposed him and his family to immediate danger.

The same motive prevented him from escaping the potential Soviet occupation zone of Germany. His intention was, with all probability, to preserve his institute and research group, and to prepare it for deportation to the USSR. And, again, he was running evident risks. Yet, TR's decisions exactly followed his system of values where science was at the top of the ethical hierarchy.

TR was not the only example of that kind of behaviour. His older colleague and antipode, V. Vernadsky, returned from Paris back to the totalitarian USSR in 1926 because the liberal countries of that time could not support his large-scale research project in biogeochemistry. In both cases, science was seen not only as a 'profession' but as a global force, structuring natural and cultural landscapes. In one of his late papers, entitled The Biosphere and Humankind[1402], TR connects his hopes for solving planetary problems, like V. Vernadsky did, with the leading role of science. In other words, Science was the highest priority for TR, determining his major decisions.

1400 Levit. 2007. op. cit.

1401 Hoßfeld, Uwe – Olsson, Lennart. 2007. 'Nature under Hitler'. In *Nature* (DOI: 10.1038/nature06242).

1402 Timoféeff-Ressovsky, Nikolai W. 1968. 'Биосфера и Человечество' [Biosphere and Humankind]. In *Proceedings of the Obninsk Branch of the Geographical Society of the USSR* 1 (1): pp. 3–12.

On a more general level, our overview of TR's scientific biography is in accordance with the inference made by historian of science Eduard I. Kolchinsky (1944–2020) in his generalizing study on science under totalitarian régimes in Germany and Russia that scientific communities were prepared to reach a compromise with totalitarian régimes, expecting, in turn, financial support and non-intervention of the State into scientific affairs.[1403]

1403 Kolchinsky, Eduard I. 2006. Biology in Germany and Russia-USSR: Under Conditions of Social – Political Crisis of the First Half of the XX Century (Between Liberalism, Communism, and National Socialism). St-Petersburg: Nestor-Historia Publishers; Levit – Hoßfeld, 2007.