

Reinhard Siegmund-Schultze

ORCID 0000-0003-1210-4328 Department of Mathematical Sciences, University of Adger (Kristiansand, Norway) *Historia Mathematica* (Editor-In-Chief) <u>reinhard.siegmund-schultze@uia.no</u>

Some remarks and documents concerning the emigration of Polish mathematicians during the 1930s and early 1940s

Abstract

The history of the sufferings and the emigration of mathematicians under Nazi influence would be very incomplete without considering the perhaps most vibrant and at the same time most victimized European mathematical school of the 1930s, namely the Polish one. Polish mathematical emigration contributed – similarly to German-speaking emigration – considerably to the development of mathematics in the host countries, particularly in the United States.

The paper contributes to the discussion with some archival documents from two specific sources, which have so far found



relatively little attention among historians of mathematics. These are the files of the Society for the Protection of Science and Learning (SPSL) at the Bodleian Library in Oxford, UK, and the files related to the Asylum Fellowship Plan organized by the Astronomer at Harvard University Harlow Shapley, now in possession of the Harvard University Archives.

Keywords: emigration of Polish mathematicians, occupation by Nazi Germany, problems of academic job market, Society for the Protection of Science and Learning (SPSL), Shapley's Asylum Fellowship Plan

Kilka uwag i dokumentów dotyczących emigracji polskich matematyków w latach 30. i 40. XX wieku

Abstrakt

Historia cierpień i emigracji matematyków wywolanych przez nazistów jest bardzo niekompletna, jeśli nie weźmiemy pod uwagę szkoły polskiej, chyba najbardziej tętniącej życiem, a zarazem najbardziej prześladowanej europejskiej szkoły matematycznej lat trzydziestych XX wieku. Polska emigracja matematyczna przyczyniła się – podobnie jak emigracja niemieckojęzyczna – do rozwoju matematyki w krajach przyjmujących, szczególnie w Stanach Zjednoczonych.

Artykuł jest przyczynkiem do dyskusji na temat niektórych dokumentów archiwalnych z dwóch konkretnych źródeł, które jak dotąd stosunkowo mało interesowały historyków matematyki. Są to akta Society for the Protection of Science and Learning (SPSL) w Bodleian Library w Oxfordzie w Wielkiej Brytanii oraz akta związane z Asylum Fellowship Plan organizowanym przez Harlowa Shapleya, astronoma z Harvard University, obecnie w posiadaniu Harvard University Archives.

Słowa kluczowe: emigracja polskich matematyków, okupacja przez hitlerowskie Niemcy, problemy akademickiego rynku pracy, Society for the Protection of Science and Learning (SPSL), Shapley's Asylum Fellowship Plan



In my book Mathematicians Fleeing from Nazi Germany of 2009 I investigated the enforced emigration of German-speaking mathematicians from Nazi Germany and Nazi dominated European territory between 1933 and 1945. In my definition all mathematicians who were trained mathematically and/or socialized or assimilated in a German-speaking mathematical environment, including Austria and related territories, and Switzerland were "German-speaking". I did not differentiate between mathematicians born in Germany or elsewhere, and thus I included in my book Hungarian born Johann von Neumann, Polish born Leon Lichtenstein, and others whose mother tongue was not German but who published mostly in German. In a later publication (2012) I investigated the "migration of mathematicians to and from Czechoslovakia, caused by National Socialism." But again, I focused on German-speaking mathematicians, because there were many of them working even after WWI in various universities and schools in Bohemia and Moravia, particularly in Prague and Brno. The same was not the case in Poland, even in those parts which formerly (before WWI) had been under Prussian or Habsburgian rule, although many Polish mathematicians at the time (Tarski, Walfisz, Birnbaum, Rosenblatt, Schauder etc.) had a good command of German and published partly in this language. I have not felt fit until now to include into my research mathematician-refugees either from Czechoslovakia, Poland, France, Italy or any other country in Europe, who taught, published and communicated mostly in non-German languages. I still feel this should be reserved primarily to historians from those countries with better linguistic and cultural competences for that task. Any attempt from my side cannot, by necessity, completely succeed in analyzing the particular circumstances of emigration in the countries of origin, conditions of acculturation in the host countries, and the scientific impact of the refugees. This in fact requires an analysis of correspondences with compatriots and of mathematical publications in languages not familiar to me. For the Polish case we have encouraging recent investigations in this direction by historians such as Ciesielska, Duda, and Maligranda.¹



¹ Ciesielska, Maligranda 2014; Maligranda 2011 and Duda 2012. The latter publication comprises many more refugees than those from Nazi oppression, but - maybe for lack of space - it basically refrains from giving historical analysis.

However, systematic studies of the political, economical and scientific reasons for the emigration of Polish mathematicians, the sensitive issue of academic anti-Semitism and of the reception of refugees in the host countries are still missing. The autobiographies of emigrants from Poland such as Mark Kac (1985),² and Stanisław Ulam (1976), and by the mathematicians surviving occupation such as Hugo Steinhaus (2015–2016, vol. 1; vol. 2),³ and Kazimierz Kuratowski (1980), are still important and not fully explored sources.⁴ Further sources are biographies of Polish émigré-mathematicians such as of J. Neyman (Reid 1982), A. Tarski (Burdman Feferman, Feferman 2004), and A. Rosenblatt (Ciesielska, Maligranda 2014).

If I now nevertheless and in full recognition of my limits use the occasion of the invitation⁵ to speak in Kraków in June 2018 to reflect about the fate of some "non-German-speaking" Polish mathematicians between 1933 and 1945, it is mostly for two reasons.

Firstly, I want to contribute to this discussion with some archival documents from two specific sources, which I found "accidentally" when searching for my main group of refugees, the German-speaking mathematicians. These two sources have so far found relatively little attention among historians of mathematics. I speak about the files of two organizations that supported scholars fleeing from the Nazis after 1933: the files of the *Society for the Protection of Science and Learning* (SPSL, original name Academic Assistance Council) at the Bodleian Library in Oxford, UK, and the files related to the Asylum Fellowship Plan organized by the Astronomer at Harvard University (Cambridge, USA) Harlow

² Kac was actually a Russian-speaking Ukrainian born Jew who was socialized in Poland when, as a result of WWI, his hometown Kremenetz had become Polish Krzemieniec and Lwów (Kac's place of mathematical studies) had become Polish as well. Kac was thus a Polish-speaking mathematician in a similar sense in which Johann von Neumann was a German-speaking one.

³ Jewish Steinhaus went into hiding after the German occupation of Lwów in 1941.

⁴ Kuratowski's book appeared under conditions of communist censorship, which reduces its openness about questions such as anti-Semitism and Polish-Soviet relations. However, the book is particularly valuable for photographic material. As communicated to me by D. Ciesielska there is some evidence that Kuratowski was of Jewish ancestry and hid this from the German occupiers.

⁵ My talk was on 4 June 2018 in front of the Polish Academy of Arts and Sciences and had the same title as this article.



Shapley (1885–1972). As to the SPSL I can partly build on previous research by Robin E. Rider (<u>1984</u>) and by my colleague in Kristiansand, Rolf Nossum (<u>2012</u>).

Secondly, during my previous studies I developed an intense feeling that the history of the sufferings and the emigration of mathematicians under Nazi influence is very incomplete without considering perhaps the most vibrant and at the same time the most victimized European mathematical school of the 1930s, that is the Polish one. As a German historian I feel a particular responsibility to consider this question at least to some extent. Restricting my discussion to refugees implies of course that I cannot really give a picture of the sufferings of the Polish mathematicians. After all, refugees fleeing from the Nazis were "privileged" victims, compared to the ones who were killed in Germany or under occupation. The Polish probably suffered most, due to the Nazi policies to annihilate the Polish intelligentsia, not just the Jews among them. During my research I counted 17 German-speaking mathematicians who were murdered or driven to suicide by the Nazis (or in fewer cases by Stalinism), just to mention the well-known F. Hausdorff, R. Remak und A. Tauber among them. But there were many more killed from the relatively smaller Polish community, among them S. Kaczmarz, J. Marcinkiewicz, S. Saks, J. Schauder, M. Wajsberg. I found 35 Polish mathematicians murdered; my Polish colleagues probably know more.6 In my paper I will focus on the surviving refugees and keep respectful silence in view of the irretrievable loss of life.

Finally, for this introduction I want to stress that Polish mathematical emigration contributed – similarly to German-speaking emigration – considerably to the development of mathematics in the host countries, particularly in the United States. As one example that stands for many, I quote here from the 1989 article on Antoni Zygmund's mathematical school by his American students Coifman and Strichartz:

It is important to realize the following unique features of this school. When Zygmund came to Chicago, the "trend"

⁶ Steinhaus in his diaries of January 1945 already counted 26 murdered, two among them killed by the Soviets (Kempisty, who committed suicide when jailed by the Russians in Wilno, and Marcinkiewicz). For Marcinkiewicz see Maligranda 2011. See also the list in Kuratowski 1980 (pp. 81/82) which comprises 22 murdered.

in mathematics was very much influenced by the Bourbaki school and other forces that championed a rather abstract and algebraic approach for all of mathematics. Zygmund's approach toward his mathematics was very concrete. He felt that it was most important to extend the more classical results in Fourier analysis to other settings... He realized that fundamental questions of calculus and analysis were still not well understood. In a sense, he was "bucking the modern trends" (Coifman, Strichartz 1989, p. 347).

2. Remarks and scattered evidence about reasons for the emigration of Polish mathematicians in the 1930s and early 1940s

Emigration of European mathematicians during the 1930s and early 1940s cannot be reduced to forced emigration under direct Nazi pressure in Germany or in German-occupied territories. Not only was there – if to a smaller degree – forced emigration from other dictatorial regimes such as Italian Fascism and Soviet Stalinism. Emigration was also conditioned by fear of coming events such as occupation, by the precarious academic job market in many countries and by political conditions such as anti-Semitism even outside Nazi Germany. As a general tendency, conditions for emigration worsened during the late 1930s not least due the fact that the earlier refugees had filled available positions abroad. To take just one example: Mark Kac, born in 1914, the future prominent American probabilist, felt in 1937 in Lwów that he was disadvantaged compared to German-speaking Jewish mathematicians:

I was young, not even a Ph.D., with only two or three published notes, while my "competitors" from Hitler's Germany were, in many cases, world-renowned (Kac <u>1985</u>, p. 41).

The five major centers of mathematical research in Poland between the two World Wars in approximate order of importance were in Lwów,⁷ Warsaw, Wilno, Kraków and Poznań. All five towns were Polish at the

⁷ The most detailed historical description of any Polish mathematical center is the one by Duda on Lwów (<u>2014</u>).



time. Lwów and Wilno were ceded to the Soviet Union after World War II, with surviving members of the Lwów school being relocated to the Western part of Poland, in particular to formerly German Wroclaw. All five centers came under German or Soviet occupation during WWII. When occupation began, it was almost too late for emigration. Antoni Zygmund in Wilno (1940 to the US), Jan Łukasiewicz in Warsaw (1944 to Nazi Germany), Leon Chwistek in Lwów (1941 to the Soviet Union) were notable exceptions.

Various major social and political conditions for Polish mathematicians in the 1920s and 1930s come up repeatedly in historical accounts, for instance in the biographies mentioned above, among them a lack of academic jobs, and anti-Semitism as an additional obstacle. Moreover, there was a rather slow international recognition of Polish mathematics in the West, influenced by political and ideological prejudices against Eastern European scholars and partly by the language barrier.

To begin with political and ideological prejudices. Within the American Rockefeller Fellowship program of the 1920s, Polish mathematicians fared in the end quite well. There were 10 Polish fellows out of a total of 130 going to mathematical centers in the West, usually for a year.⁸ But there were signs of discrimination against Polish mathematics within the American Rockefeller philanthropy, which had been advised by leading American and German mathematicians. Among other things they did not realize the growth and the importance of the new centers in Lwów and Warsaw, and Rockefeller philanthropy did not consider support for them as institutions.

Even more difficult were Polish-German mathematical relations in particular. There were thematic restrictions in German mathematics in fields such as topology, functional analysis, and stochastics, which were partly the result of traditions, partly reinforced by the political alienation between the two nations after World War I. Anti-Polish resentments supported German partial abstention from functional analysis, and from some parts of research in the foundations of

⁸ The lists are in Siegmund-Schultze 2001. On the relation of Polish mathematicians to the Rockefeller philanthropy I gave a separate talk in Kraków on 4 June 2018 before the colloquium of the Institute of Mathematics of the Jagiellonian University. The title was "Rockefeller and the Internationalization of Mathematics between the two World Wars [with some emphasis on Poland]." I cannot go into details here.

mathematics. This – in the end – backfired against the Germans. There was decidedly less reserve against Polish mathematics in Vienna in the 1920s, where a completely different political and philosophical atmosphere encouraged, for example, the collaboration of logical positivists and mathematicians, and supported contacts with Polish scientists such as A. Tarski and W. Sierpiński.⁹ The Vienna topologist, Karl Menger, writes in his memoirs:

In Germany, in the 1920's, Abraham Fraenkel was familiar with Polish set theory but was less versed in Polish logic; the logicians in Göttingen were not yet fully familiar with the results obtained in Warsaw; nor had the relations of the Polish logicians with Heinrich Scholz and his group yet developed. The majority of Germans were intensely hostile to the restored Polish nation because of the loss, in the peace of Versailles, of the territories inhabited by Poles, especially the so-called Polish Corridor which joined Warsaw to the sea while separating Berlin from Königsberg, the city of Kant. Even many German intellectuals had an idiosyncratic aversion to Poles, which the latter, mindful of one hundred and fifty years of oppression by Prussia, reciprocated (Menger 1994, pp. 144–145).

In fields with stronger traditions in Germany, such as number theory, Germans such as Edmund Landau (1877–1938), himself persecuted by the Nazis after 1933, supported Polish colleagues (for instance his former student A. Walfisz, and S. Lubelski). Landau apparently even supported financially their new journal *Acta Arithmetica* (founded in 1935).¹⁰

This leads to the social and political conditions within Poland in the 1920s and 1930s. There was certainly a lack of job opportunities especially for the kind of mathematicians trained by the very theoretical and abstract Polish schools of set theory, logic, number theory, and functional analysis. Kuratowski says in his autobiography that in 1937 there were

⁹ I mentioned these issues in Siegmund-Schultze <u>2001</u>, p. 15.

¹⁰ Krätzel, Lamm 2013, p. 47, and below in section 3 on Lubelski.



in Poland 23 chairs of mathematics and 27 positions for auxiliary staff. That was not enough to employ even half of our research mathematicians (Kuratowski 1980, p. 77).

In another place in his book he admits a certain "one-sidedness of Polish mathematics" and an "almost complete omission of applications" (Kuratowski 1980, p. 75). Kuratowski also mentions that "there were not many adepts in number theory in Poland at the time" *(ibid.*, p. 56). The leading figures of the new Polish number theoretic journal *Acta Arithmetica*, Arnold Walfisz and Salomon Lubelski (about the latter – see below), both lacked material support, partly due to the marginality of their field in Poland. In order to survive, Walfisz had to take a job in the insurance industry,¹¹ as did the future émigrés Mark Kac (see below) and W. Birnbaum (Woyczyński 2001). Only Walfisz succeeded with emigration (1936 to Tiflis in the Soviet Union), Lubelski perished under the Nazis. About the functional analyst Juliusz Schauder, Mark Kac said in 1985:

Even for docents¹² of great scientific renown the chances of obtaining a professorship in a reasonable length of time were extremely small. They were nil for docents who were Jewish (the name of the mathematician Juliusz Schauder, an internationally famous Lwów docent who never became a professor, comes to mind) (Kac <u>1985</u>, p. 29).

Schauder himself wrote to his French friend Jean Leray on 8 July 1936 in German:

I really do not know what future has in store for me. With my age I should have become professor for long, but in my country [Vaterland] the situation for myself is totally hopeless. [...] I would really need one or two years for myself in order to do mathematics (Leray 1980, p. 431, translation from German).

¹¹ Krätzel, Lamm 2013, pp. 45–48.

¹² "Passing habilitation and earning the coveted title of «docent» allowed one to lecture without pay and to get onto a list of candidates when a professorial opening materialized because of a retirement or a death" (Kac <u>1985</u>, p. 28).

Of course, academic anti-Semitism in Poland and other European countries outside Nazi-Germany cannot be compared to state-enforced anti-Semitism as under the Nazis. Kac remarks in this connection:

Polish anti-Semitism had always been largely religious. Racial overtones, though possibly ever present, became noticeable only after Hitler came to power in Germany (Kac <u>1985</u>, p. 28).

As we have seen above, Polish mathematicians could not count much on help for their job prospects from German colleagues even before Hitler came to power in 1933.

Anti-Semitism as a state doctrine in Germany created a totally different situation that went far beyond traditional academic anti-Semitism, which existed in other countries as well. In particular, it did not matter to the Nazis if a Jewish scholar had converted to Christianity, they persecuted what they defined as "Non-Aryans." When in early June 1934 Walfisz tried to win the German mathematician Helmut Hasse for the editorial board of *Acta Arithmetica*, Hasse inquired anxiously with his superiors in the ministry whether he was allowed to accept the invitation. In his letter he added the remark:

[a]s to the factual matter I remark that the three managing editors are Polish mathematicians, two of them (Walfisz and Dickstein) presumably non-Aryans.¹³

This led to an official ban for Hasse to collaborate with Walfisz. At the same time the Germans could not hide their admiration for the recent Polish progress, particularly in functional analysis, where German mathematics was rather under-developed. Two years after the incident with Walfisz the same number theorist Hasse wrote in an internal report about his attendance of the International Congress of mathematicians in Oslo 1936:

At a social gathering it was stressed, relative to the Polish mathematician S[tefan] Banach (Lemberg), who was in

¹³ Siegmund-Schultze 2002, pp. 339/340. In the end, Dickstein did not become editor, however Lubelski did. The latter was also "non-Aryan" in the Nazi understanding. See Krätzel, Lamm 2013, p. 45.



attendance at the Congress, how admirable it was that Poland had developed such a broad and strong mathematical school of such a particular orientation in so short a time.

The recipient of Hasse's partial report, Walther Lietzmann in Göttingen, the leader of the German delegation to Oslo, added in his comprehensive report to the Nazi authorities:

We should improve our contacts with Poland which is still largely oriented towards France relative to science. However, certain problems may arise, since many Polish mathematicians seem to be nonAryans.¹⁴

Banach was no Jew but he was not spared oppression under German occupation.¹⁵ In view of the ruthless extermination policies of the Nazis, which were not only directed against Jews but against the Polish intelligentsia as a whole, and given the pre-history of nationalistic conflicts as described above, the Polish, as a rule, could not rely on help from German mathematicians. A notable exception was the logician Jan Łukasiewicz who came to Germany late in 1944, on the initiative of Heinrich Scholz from Münster. In realistic fear of the approaching Russians, Łukasiewicz stressed his anti-Semitism and his anti-Soviet position in order to be acceptable for the Nazis (Schmidt am Busch, Wehmeier 2005, p. 125).¹⁶

3. Some new documents from SPSL and the Shapley Committee, concerning the emigration of Polish mathematicians

In this final section I will quote a few documents mostly from the files of the SPSL and the Shapley Committee, which have been introduced

¹⁴ Both quotes in Siegmund-Schultze 2002, p. 344.

¹⁵ Banach survived in German occupied Lemberg (Lwów) but died soon thereafter in 1945, possibly also due to the previous hardships – see Kaluża 1996, pp. 84–91; Duda <u>2014</u>, pp. 69–73.

¹⁶ Although it took certainly courage on the part of Scholz to support the Pole Lukasiewicz, he was not in the position to help Polish mathematicians of Jewish ancestry in the same manner. Attempts of some biographers of Scholz seem inappropriate to gloss over the anti-Semitism and anti-slavic conceit of the Nazis, whom Kac rightly describes as the "German barbarians" (Kac 1985, p. 18).

in the first section. The documents concern above all the following mathematicians who either emigrated from Poland (before or during occupation), stayed there under occupation or tried in vain to leave the country: S. Kempisty, W. Kozakiewicz, K. Kuratowski, S. Lubelski, J. Marcinkiewicz, J. Neyman (Reid <u>1982</u>), J. Rudnicki, A. Tarski (Burdman Feferman, Feferman 2004), and A. Zygmund. Several of these mathematicians lost their lives under occupation. Well-known mathematicians and philosophers from England and the United States such as G.H. Hardy, B. Russell, H. Weyl, J.H.C. Whitehead, and J.H. Woodgers were involved as recipients or authors of several of these documents. I give only very sparse commentary of my own.¹⁷

Finally, for the purpose of documentation and possible future research I add an anonymous report from the Shapley Papers on a mysterious Polish mathematician "H.Z.", who escaped through Germany and Switzerland to France.

3.1. Records from about 1940 in the Harlow-Shapley Papers at Harvard University on the Polish number theorist Salomon Lubelski

As mentioned above, Salomon Lubelski (1902 – probably 1941) together with Arnold Walfisz was in 1935 the co-founder of the Polish number theoretic journal *Acta Arithmetica*. He never got a full professorship and was finally murdered in the Nazi concentration camp Majdanek, probably in 1941. There is little biographical information in the literature beyond (Anon 1958). Lubelski apparently contacted the Shapley Committee shortly before or during occupation to inquire about chances for emigration. The Shapley Committee has one page of biographical information on record (possibly collected by Hermann Weyl) and an additional page with an undated typewritten letter with H. Weyl as the author. The prominent German mathematician and mathematical physicist Hermann Weyl (1885–1955) had been a refugee himself, arriving at the Institute for Advanced Study in Princeton in 1933. He was

¹⁷ Some remarks in the letters, for instance about academic anti-Semitism in Poland and about the relation between Poland and Lithuania, or the refugee policies in Switzerland certainly need a detailed and nuanced investigation.



instrumental in helping other mathematicians to reach the United States. He was also well-educated and active in number theory, although it was not his primary research area.

a) Page with biographical information on Lubelski

(Harvard University Archives, Harlow Shapley Refugee Files HUG 4773.10, box 6B, folder L):

S. Lubelski: Address – Leszno 77, Warsaw, Poland Born Feb. 9, 1902, Warsaw – Polish, Jewish, unmarried, Ph.D. 1927 Positions held ? Editor of the Acta Arithmetica References: A.A. Albert, E. T. Bell, Prof. Claude Chevalley (1938–1939, Fine Hall, Princeton, N.J.) Publications – 23 papers, mostly on the theory of numbers, of substantial content. List can be supplied if required.

b) Hermann Weyl's letter (undated, signature typewritten)

(Harvard University Archives, Harlow Shapley Refugee Files HUG 4773.10, box 6B, folder L):

Re Lubelski:

Editor of the Acta Arithmetica. 23 papers, mostly on theory of numbers, of substantial content. Obviously long in opposition to the other Polish mathematicians, as evidenced by the following characteristic quotations from his letters:

"Der selige und liebenswürdige Professor Landau hat – um eine mathematische Arbeitsstelle unter anderem auch für mich zu schaffen – aktiv geholfen, die Zeitschrift Acta Arithmetica in's Leben zu rufen."

"Die Zeitschrift Acta Arithm. ist aber ein Dorn im Auge der hiesigen Mathematiker, die geglaubt haben, mich durch Aushungern der Mathematik entreissen zu können."

["The dear departed, very kind Professor Landau has – in order to create a mathematical job also for me – actively supported the foundation of the journal Acta Arithmetica [...] The journal Acta Arithm. is, however, a thorn in the side of the mathematicians here, who tried snatching me from mathematics by starvation."]

Not known to me personally, nor is his work known to me in detail. He seems to overestimate his own importance, but he is certainly a mathematician of high standing. H. Weyl

3.2. Records in the files of SPSL from 1937/38 concerning a possible position abroad for the logician Alfred Tarski

Alfred Tarski (1901–1983) was one of the leading logicians of the 20th century. He happened to be on a lecture tour to the United States when Poland was invaded in 1939. He stayed there for the rest of his career but did not succeed in securing immigration for his family before the end of the War. There is a full-length biography on Tarski (Burdman Feferman, Feferman 2004) that strongly emphasizes academic anti--Semitism in Poland in the late 1930s as a reason for Tarski's lack of academic progress then, maybe downplaying a bit the general calamity of the academic job market. A letter in favor of Tarski written in 1937 to SPSL by the English biologist and philosopher of science Joseph Henry Woodger (1894-1981) emphasizes the same point. A handwritten letter to SPSL from 1938 by the famous logician and philosopher Bertrand Russell (1872–1970) has already been published in facsimile in Nossum 2012. The letter compares Tarski favorably with the German logician Rudolf Carnap (1891–1970) who - not being Jewish but a leftist - had already reached American soil at the time.

Joseph Henry Woodger to SPSL (Adams) on 22 November 1937 (typewritten, signed):

(Bodleian Library Oxford, SPSL 285, fol. 330/331)

Dear Mr. Adams,

In answer to your letter of 19th of November, it would be superfluous, if not impertinent, for me to say anything about Dr Tarski's scientific qualifications in addition to the testimonials I recently sent to you. His is one of the five or six leading names in modern logic and certain branches of mathematics. He has created the subject known as "Semantic" almost entirely alone. He has a long list of publications of outstanding importance already to his credit. Let me try to give you some notion of the wide significance of Dr Tarski's work. One of



the most urgent needs of the present day is to make people language--conscious. This need is particularly urgent in relation to morals, politics and economics, and in every sphere of life which involves value--judgments. Because we live in an age in which all these topics are in a ferment and a great deal depends on the way in which beliefs regarding them are formulated. If people were more language-conscious more aware of the properties of language as a tool or instrument – they would be far less at the mercy of propaganda than they are at present. They would be able to use the instrument of language more critically and intelligently, and would be on their guard against attempts by others to use it to enslave them. We are constantly being reminded of the truth of the old saying that "The pen is mightier than the sword" because it is only by the systematic misuse of the pen that people can be persuaded to use the sword. Now in my opinion the chief significance of Dr Tarski's work is to be found in the fact that he is creating the means by which it will be possible to make people – through its ultimate influence on education – language conscious. It is a great misfortune that at present we have no one of Dr Tarski's calibre working on his subject in England.

The tragedy of Dr Tarski's position lies in the fact that, owing to the antisemitism in Poland, and in spite of his genius, which is freely acknowledged among his Polish colleagues, he has no prospects of becoming a professor in a Polish university. His small remuneration as docent is quite insufficient to support a wife and child. He is therefore compelled to devote a large part of his time to school teaching. This, coupled with the constant uncertainty about the future which the tendency for antisemitism to increase brings with it, places him in an atmosphere in which it is extremely difficult for him to exercise his great talent. In recent years his circumstances have not enabled him to achieve the continuity which his work requires.

His case is thus somewhat similar to that of Dr. Karl Popper whom you helped. But Popper's gifts are not so great as Tarski's; the antisemitism in his case was perhaps less intense and less organized; and he had no children. Tarski's problems would be solved and he would be freed to continue his work if a suitable appointment could be found for him outside Poland. He could occupy any teaching appointment in either logic or mathematics. In this connexion I ought to mention that although Dr Tarski speaks French and German fluently and correctly he

has not yet mastered spoken English. But he reads this language easily and is at present taking lessons in the spoken language.

Mr Bertrand Russell, when I spoke to him recently, told me that he would be pleased to do anything he could to help to obtain an appointment for Dr Tarski.

Yours sincerely, J. H. Woodger

Bertrand Russell to SPSL 10 January 1938 (handwritten)¹⁸

(Bodleian Library Oxford, SPSL 285, fol. 333/333v)

Dear Sir

I have read a good deal of Tarski's work, and have met him in the company of other logicians. I have no doubt that he is the ablest man of his generation in what may be called "scientific philosophy" (by which I do not mean the philosophy of science). There is one man who has perhaps a wider reputation (Carnap), but I do not consider him so original, so clear, or so well-balanced.

I am not able to judge as to Tarski's prospects of getting a permanent post in England, but I should certainly do everything in my power to enable him to get one. I think it of great importance that he should be enabled to do his work.

Yours truly Bertrand Russell

3.3. SPSL-documents from 1940 concerning the situation under occupation of Polish mathematicians such as Kazimierz Kuratowski, Antoni Zygmund, Stefan Kempisty, Józef Marcinkiewicz, Juliusz Rudnicki and Wacław Kozakiewicz

Kazimierz Kuratowski (1896–1980), who would become president of the Polish Mathematical Society during the first eight years after WWII, described his situation under occupation, for instance his participation in the "underground universities" in (Kuratowski 1980).

Wacław Kozakiewicz (1911–1959) was born in Złotniki near Kielce. He was a graduate of Warsaw University. From 1938 on a scholarship

¹⁸ This letter was published before in facsimile in Nossum 2012, p. 97.



in France, he was caught in a difficult situation when the war broke out. From 1944 in Canada, he became a professor at the French university in Montreal in 1959 (Duda <u>2012</u>, p. 100).

The early Polish immigrant and mathematical statistician Jerzy Neyman (1894–1981) tried in various ways to help compatriots to positions abroad. There exists a full-length biography of Neyman (Reid <u>1982</u>).

According to Nossum (2012, p. 98), Juliusz Rudnicki (1881–1948) survived in Wilno during the war, working as a secondary school teacher. Stefan Kempisty (1892–1940) committed suicide in prison in 1940 during Soviet occupation which began in June 1940 and ended in 1941 when the Germans invaded Lithuania (Józwik, Maligranda, Terepeta 2017). While Zygmund reached the US in 1940 and founded an influential analytical school there (see the quote by his students given above), his student Józef Marcinkiewicz (1910–1940) was killed as a Polish military officer in Soviet captivity (Maligranda 2011).

A. Zygmund (Wilno) to G.H. Hardy (England) 3 November 1939 (typewritten, copy):

(Bodleian Library Oxford, SPSL 286, fol. 372)

Dear Hardy,

When some time ago I wrote to you about Salz [sic, possibly Stanisław Saks], I did not expect that I should soon write to you a similar letter on behalf of myself.

Roughly speaking the situation is as follows. Wilno is at present at least in Lithuania. The country is very small and already possesses one university in Kovno. The present university in Wilno, that is the staff, will be liquidated very soon, and the Lithuanian University in Kovno will be transferred to Wilno. As a matter of fact, I doubt whether we shall obtain anything from the Lithuanian Government. In these circumstances, when all the high schools [meaning universities or higher schools] in the German part of Poland are closed and the Lwow [sic] University (now in U.S.S.R.) will probably be made Ukrainian this means that unfortunately I have lost any possibility to find work here. Would you help me a little?

I know that at present it is a hopeless task to look for a place in England. Besides, I owe you so much, both personally and mathematically (when you helped me to obtain the Rockefeller Fellowship) that I do

not want your relation to me to be burdened too much by my troubles. Of course if you heard of any possibility in any country, I should be extremely obliged (I don't mean, naturally of any stabilised position, still less of any professorship. I should be glad to have any junior position which would permit me to exist and to work, until my return to Poland would be possible). I must however confess that I am rather pessimistic about such a possibility. A dislike of foreigners, especially of people coming from the East of Europe, is so widespread, that only in exceptional cases I might hope for anything.

There is however, another possibility – The Princeton Institute for Advanced Study. A few years ago, during his stay in Wayans [sic], Lefschetz told me that if I wanted to get there, let us say for a year, he would support me (If I understood him well this is a sort of stipend for mathematical workers). Being afraid of a possible refusal I did not apply to the Institute. The situation is different now, and I shall have to try this way, whatever the result. During a year's time, much may happen that could enable me to return to more normal conditions. Simultaneously with this letter I shall send a letter to Lefschetz and perhaps to Bochner. I feel however that if my application is not backed by people of high mathematical standing, I may apply in vain. And it is here you could help me, provided the thing could at all be realized. If for any reason it would not be possible for you to support me, I should appreciate it if you would let me know.

A. Zygmund

G.H. Hardy to Mr. Thomsen (SPSL), 19 November [1939], Trinity College Cambridge

(handwritten, SPSL 286, fol. 374)

Dear Mr. Thomsen,

I enclose a letter which I have received from Prof. A. Zygmund of Wilno Univ. It is a new type of case, & I hardly suppose the SPSL is likely to be able to do anything (if the general "refugee" position is much the same as it was before the war). But Zygmund is a thoroughly first rate man.

The irony of it is that Wilno is (I believe) a mainly Lithuanian city, which Poland just collared by violence against the terms of the peace



settlement. And I suppose that giving it back to Poland is one of our 'war aims'!

I enclose a cheque for \pounds 25

I am yours sincerely

GH Hardy

May I have Z's letter back? I have written to Princeton about him.

J. Neyman (Berkeley) to Esther Simpson (SPSL) 3 January 1940 (typewritten, copy):

(Bodleian Library Oxford, SPSL 281, fol. 254/254)

Dear Madam,

Many thanks for yours of the 15th December. It is most encouraging to hear that the activities of your society now include Polish scholars. I appreciate the difficulty in getting information about those who are displaced. Consequently, I take the liberty of giving you such information that I happen to have.

1. The information obtained directly from Professor A. Zygmund of the University Wilno.

The Polish University of Wilno was definitely closed by the Lithuanian authorities on December 15th and all the Polish staff of the same dismissed. As far as I can judge, the most outstanding scholars in that University were Professor A. Zygmund, Docent Józef Marcinkiewicz, and Professor S. Kempisty, all three mathematicians. However, this judgment may easily be biased because of my lack of information on sciences other than mathematics.

I know that Professor Zygmund is still in Wilno and letters to him could be addressed: Mathematical Institute, University of Vilnius, Vilnius, Lithuania. I presume that Professor Kempisty is in Wilno also. I have no doubt that Professor Zygmund will be able to supply you with a complete list of the former staff at the University of Wilno now dismissed.

According to unconfirmed reports, Doc. Marcinkiewicz, who was mobilized and joined the Polish Army, is now interned in Hungary. Maybe you will at least be able to ascertain his address.

2. A couple of months ago I received a letter from Dr. Waclaw [sic for Waclaw] Kozakiewicz, an extremely able mathematician of the younger generation, working on the theory of probability.

At the time when the war broke out he was on a Polish fellowship in France. There was some doubt whether his health would permit him to join the army and, having no means, he was in great distress. He gave his address as 19 rue Verdi, Chez Madame Detloff, Nice (A.M.), France, but my letters to that address and two telegrams, one of which was with a prepaid reply, are still without answer.

3. Professor Zygmund writes that, according to reports from persons who recently managed to escape from Warsaw, by crossing illegally into Lithuania, the University and the Engineering School of Warsaw are closed and even [sic] the German authorities have [even] shipped the equipment of several laboratories to Germany. So, for example, all the equipment of the Physical Institute was entirely removed from Warsaw. Presumably the scholars in Warsaw, Krakow [sic], and Poznan [sic] are in greatest need of help, but it is difficult to see how this help could be extended to them.

Thanking you again,

Sincerely yours J. Neymann [sic, typewritten]

Letter by Stefan Kempisty (handwriting) and Juliusz Rudnicki to SPSL on 27 January 1940 about their dismissal in Wilno

(Bodleian Library Oxford, SPSL 281, fol. 253, Handwritten by Kempisty)

Wilno, 27.1.1940

Dear Sirs,

The Polish University in Wilno is now liquidated and its staff dismissed. If you know of any vacant job suitable for us, we should be greatly obliged if you let we [sic] know of it.

Stefan Kempisty

Julius Rudnicki [sic, signature added]

Prof. of the former Polish University of Wilno

Nancy Searl (SPSL) to the English topologist J.H.C. Whitehead, 30 January, 1940 on the situation of Polish refugees (typewritten copy, excerpt):

(Bodleian Library Oxford, SPSL 281, fol. 263)



We have no particulars as yet about Dr. Kuratowski, and we should be glad to have any further particulars about him which you may obtain. The Polish refugees are so scattered and communication with them is so difficult, that we are glad to have any information that may come by indirect means.

Antoni Zygmund (1900–1992) in a questionnaire for SPSL from 1940 on his dismissal in Wilno (excerpts)

(Bodleian Library Oxford, SPSL 286, fol. 364-366)

Rank: Ordinary Professor of the university of Wilno Grounds of dismissal: closing of the present Polish university in Wilno Date of Notification: 20 November 1939 Religion, catholic: yes Countries you prefer to go: English speaking countries Countries you are not willing to go to: U.S.S.R. If not state reasons: Experiences with the Russian authorities during the Soviet occupation of Wilno

3.4. Report in the files of the Harlow-Shapley Papers at Harvard University after 1943 about the emigration of a yet unidentified Polish mathematician H.Z. through Germany, Switzerland to France

(Harvard University Archives, Harlow Shapley Refugee Files HUG 4773.10, box 6E, folder: reports, anonymous, typewritten)

A few days ago, Mr. H. Z. left Switzerland to go to Paris. He is 28 years old of Polish nationality and a very talented mathematician. Already in 1939, when Hitler invaded Poland, Mr. Z. had to flee from the Gestapo. For some months he lived hidden always changing his name and flying [sic] from town to town, from village to village. Three times he was almost caught and it seems to him like a miracle that he could escape. But one of his comrades was not so lucky. He was killed by the Gestapo and that was perhaps the last chance for Mr. Z. He took the identification of his dead friend and applied for a job in a German aircraft-factory. But already a few weeks later his false name was discovered and he was to be arrested. Once more he could escape in the very last moment and this time his only chance was to reach central Germany. On his way he

bought some false identification papers and reported to the authorities in Munich. From there he was sent to a factory near the Swiss frontier, where he had to work as a meat-packer. After a few days he made the acquaintance of some Polish war prisoners who worked in the same village. They decided to take a chance and to try to flee to Switzerland. When they started, they were 12, but only 3 of them managed to escape. 5 were shot by the Gestapo and the rest of them wounded and captured. That is how Mr. Z. came to Switzerland. But here he dared not report to the authorities because they would have delivered him at once to the Germans. So he lived hidden for more than one year and only in 1943, when also Swiss authorities began to believe in an Allied victory, did Mr. Z. announce himself at a police station. He hoped that it would now be possible for him to finish his studies and he applied to our Committee. We declared ourselves willing to grant him the necessary funds, but he was interned in a labor-camp. That was of course another aspect of Switzerland, which he had once believed to be a free country. During his internment in the labor-camp, Mr. Z. wrote a paper on a scientific subject and sent it to a well-known professor of Mathematics at the Geneva University. After having read this paper, the professor did his utmost to liberate our talented young friend from labor service. But Swiss authorities are tough. No wonder that Mr. Z. took the first chance to leave Switzerland and went to France. There he will not be interned and the finishing of his studies is only a financial question. With the help of our organization we will give him a chance to finish his studies and build up a new life earning existence for himself, his wife and his baby.

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Bibliography

ARCHIVAL SOURCES

Society for the Protection of Science and Learning (SPSL), Bodleian Library, Oxford, UK. Harvard University Archives, Harlow Shapley Refugee Files. HUG 4773.10 Asylum Fellowship Plan.

PRINTED LITERATURE

- Anon 1958: Salomon Lubelski. Acta Arithmetica 4, pp. 1-2.
- Ciesielska, Danuta; Maligranda, Lech 2014: Alfred Rosenblatt (1880–1947). Wiadomości Matematyczne 50(2), pp. 221–259 [in Polish].
- Coifman, Ronald R.; Strichartz, Robert R. 1989: The school of Antoni Zygmund. [In:] A Century of Mathematics in America III (Providence, R.I.: American Mathematical Society), pp. 343–368.
- Duda, Roman 2012: Emigration of Mathematicians from Poland in the 20th century (roughly 1919–1989). Organon 44, pp. 95–125.
- Duda, Roman 2014: Pearls from a Lost City. The Lvov School of Mathematics. Providence: AMS.
- Burdman Feferman, Anita; Feferman, Salomon 2004: *Alfred Tarski. Life and Logic.* Cambridge: Cambridge University Press.
- Jones, Besse Zaban 1984: To the Rescue of the Learned: The Asylum Fellowship Plan at Harvard, 1938–1940. *Harvard Library Bulletin* 32, pp. 205–238.
- Józwik, Izabela; Maligranda, Lech; Terepeta, Malgorzata Ewa 2017: Stefan Kempisty (1892–1940). *Antiquitates Mathematicae* 11(1), pp. 61–111.
- Kac, Mark 1985: Enigmas of Chance. An Autobiography. Berkeley: University of California Press. Partially available online: <u>https://books.google.pl/books?id=1ZWl39UJWycC&printsec=frontcover</u>.
- Krätzel, E; Lamm Ch. 2013: Von Wiesbaden nach Tiflis. Die wechselvolle Lebensgeschichte des Zahlentheoretikers Arnold Walfisz. Mitteilungen der Deutschen Mathematikervereinigung 21, pp. 42–51.
- Kuratowski, Kazimierz 1980: Half a Century of Polish Mathematics: Remembrances and Reflections. Warsaw and Oxford: Pergamon Press.
- Leray, Jean 1980: My friend Julius Schauder. [In:] Walter Forster (ed.), Numerical Solution of Highly Nonlinear Problems. Amsterdam – New York: North-Holland Pub. Co., pp. 427–439.

- Maligranda, Lech 2011: Józef Marcinkiewicz (1910–1940) On the Centenary of Birth. [In:] *Marcinkiewicz Centenary Volume*. Warsaw: Polish Academy of Sciences, pp. 133–234.
- Menger, Karl 1994: Reminiscences of the Vienna Circle and the Mathematical Colloquium, edited by L. Golland, B. McGuinness, and A. Sklar. Dordrecht: Kluwer.
- Nossum, Rolf 2012: Emigration of mathematicians from outside Germanspeaking academia 1933–1963, supported by the Society for the Protection of Science and Learning. *Historia Mathematica* 39, pp. 84–104. DOI: 10.1016/ j.hm.2011.08.002. Available online: <u>https://www.sciencedirect.com/science/article/pii/S0315086011000498/pdfft?md5=efe72fd709ec9e99aa6f7a-001282ade9&pid=1-s2.0-S0315086011000498-main.pdf.</u>
- Reid, Constance 1982: Neyman From Life. New York: Springer.
- Rider, Robin E. 1984: Alarm and opportunity: Emigration of mathematicians and physicists to Britain and the United States, 1933–1945. *Historical Studies in the Physical Sciences* 15, pp. 107–176. DOI: 10.2307/27757544. Available online: https://www.jstor.org/stable/27757544.
- Schmidt am Busch, Hans-Christoph; Wehmeier, Kai F. 2005: Heinrich Scholz und Jan Łukasiewicz. [In:] Hans-Christoph Schmidt am Busch and Kai F. Wehmeier (eds.) 2005, *Heinrich Scholz: Logiker, Philosoph, Theologe*. Paderborn: Mentis, pp. 119–131.
- Siegmund-Schultze, Reinhard 2001: Rockefeller and the Internationalization of Mathematics Between the Two World Wars. Basel etc.: Birkhäuser. Partially available online: <u>https://books.google.pl/books?id=p1EmmMaBL4sC</u>.
- Siegmund-Schultze, Reinhard 2009: Mathematicians Fleeing from Nazi Germany: Individual Fates and Global Impact. Princeton and Oxford: Princeton University Press.
- Siegmund-Schultze, Reinhard 2012: Czech German-speaking migration of mathematicians to and from Czechoslovakia, caused by National Socialism in Germany. *History of Sciences and Technology (Déjiny véd a techniky)* 45, pp. 141–166.
- Steinhaus, Hugo 2015–2016: Mathematician for All Seasons, 2 volumes. Cham: Birkhäuser. Partially available online: vol. 1 (2015): <u>https://books.google.pl/books?id=V4hNCwAAQBAJ&printsec=frontcover</u>; vol. 2 (2016): <u>https://books.google.pl/books?id=IeOKCwAAQBAJ&printsec=frontcover</u>.
- Ulam, Stanisław 1976: Adventures of a Mathematician. New York: Scribner's. Partially available online: <u>https://books.google.pl/books?id=U2_zEZOHdU-</u> 4C&printsec=frontcover.
- Woyczyński, Wojbor A. 2001: Seeking Birnbaum or Nine Lives of a Mathematician. The Mathematical Intelligencer 23/2, pp. 36–46. DOI: 10.1007/BF03026626.