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COHORTING, NETWORKING, BONDING: MICHAEL POLANYI IN EXILE

Michael Polanyi was nurtured in the “happy peace times” of turn-of-the-century Europe. In a review of F. A. Hayek’s *The Road to Serfdom* for *The Spectator* in 1944 he fondly remembered the “good old days” when

before 1914 you could travel across all the countries of Europe without a passport and settle down in any place you pleased without a permit. The measure of political tolerance which commonly prevailed in those days can be best assessed by remembering local conditions which at the time were considered as exceptionally bad. The domineering and capricious personal régime of Wilhelm II was widely resented, even though it allowed, for example, the popular satirical paper, *Simplicissimus*, regularly to print the most biting cartoons, jokes and verse directed against the Kaiser. Europe shuddered at the horrors of Tsarist oppression, though under it Tolstoy could continue to attack from his country seat in Yasnaya Polyana with complete impunity the Tsar and the Holy Synod, and persistently preach disobedience against the fundamental laws of the State... After less than a generation, say in 1935, we find that all the freedom and tolerance which only a few years earlier had been so confidently taken for granted, has vanished over the main parts of Europe.¹

After World War I the situation fundamentally and dramatically changed, particularly for Polanyi’s generation. New borders were established, cutting across the continent of Europe. Through much of the post-World War I era, Hungarian Jews were repeatedly in trouble. Groups of them were forced to leave their native country after 1919, Germany after 1933, and Europe after 1938, just to mention a few major turning points in European history.

From Budapest to Berlin

Networking, using available contacts and relying on people already established in Germany, was among the most natural methods used to secure a place somewhere

¹ Michael Polanyi, ‘The Socialist Error,’ *The Spectator*, March 31, 1944.

abroad, and particularly in Germany. A lot of people needed help and this induced a veritable “chain reaction.”

The situation became extremely difficult during World War I. When in 1916 Michael Polanyi inquired about his own prospects for a *Habilitation* under Professor G. Bredig at the Institute for Physical Chemistry and Electrical Chemistry of the University of Karlsruhe, he was politely turned down.

We are compelled, now after the War [has started] more than ever before, to take into account the public opinion which urges us to fill in the available places for *Dozenten* by citizens of the *Reich* as much as possible. Even though we like to treat the citizens of our Allies the same way as our own, you must have seen in my Institute that the situation was pushed so strongly in favor of them, that as of now, and more than ever before, I must see to attracting more Imperial Germans.²

A year later, Polanyi tried Munich and turned to Professor K. Fajans in what was then the Chemical Laboratory of the Bavarian State. Though his request was well received there and an offer was made to become an assistant to Dr. Fajans, Polanyi’s German plans did not materialize until after the War.³

An assistant to Georg de Hevesy during the Hungarian Republic of Council—a Bolshevik experiment that lasted through the Summer of 1919—Polanyi left Budapest at the end of 1919 and went to Karlsruhe where he had already studied chemistry from 1913-14.⁴ Identified by many with the grossly failed Hungarian Republic of Councils of 1919, Hungarian Jews were punished in many ways and often forced to leave Hungary. Polányi was searching for a good job in Physical Chemistry. Seeking advice in regard to his future employment in Germany, he turned to Theodore von Kármán, a fellow-Hungarian and a distinguished Professor of Aerodynamics in Aachen, Germany.

Young Michael Polanyi’s questions to Von Kármán were answered politely but with caution. “The mood at the universities is for the moment most unsuitable for foreigners though this may change in some years; also, an individual case should

² G. Bredig to Michael Polanyi, Karlsruhe, February 12, 1917. (German) Michael Polanyi Papers, Box 1, Folder 5, Department of Special Collections, University of Chicago Library, Chicago, Ill.

³ K. Fajans to Michael Polanyi, München, June 26 and October 5, 1918. (German) Michael Polanyi Papers, Box 1, Folder 5, Department of Special Collections, University of Chicago Library, Chicago, Ill.

⁴ *Ibid.*

never be dealt with by the general principles. ... To get an assistantship is in my mind not very difficult and I am happily prepared to eventually intervene on your behalf, as far as my acquaintance with chemists and physical chemists reaches. I ask you therefore to let me know if you hear about any vacancy and I will immediately write in your interest to the gentlemen concerned.”⁵

After the War ended, the prospects for Hungarians in defeated Germany naturally got even worse. From 1920 on, Von Kármán helped a number of Hungarians start their careers in Germany, readily sponsoring friends of his family, often under the most adverse circumstances.⁶ Several years later, in 1923, American visiting scholar Eric R. Jette described the German university scene in remarkably similar terms: “conditions in the universities were very bad, of course, in all places. The same story was heard everywhere, no money, no new professors or docents but laboratories filled with students who had almost nothing to live on. Yet the research goes on and the students still keep at their books.”⁷ In little over a year, however, Jette received better news from Werner Heisenberg who “said that while the university people were not as well off as before the war, they were infinitely better situated than a year ago.”⁸

Nevertheless, Hungarians were difficult to turn down. The future engineering professor Mihály Freund asked for Polanyi’s assistance for a young relative, Tibor Bányai, who had just finished high school in Budapest and wanted to become an engineer at the University of Karlsruhe, where Polanyi had been active for some time. More importantly, in 1922 Polanyi paved the way for several people from Hungary to get a job. The most important cases were those of Leo Szilard and Imre Brody. Szilard tried to get an assistant’s job at the Institute of Physical Chemistry at the University of Frankfurt am Main. Szilard, of course, was well on his way to becoming a scientist in his own right. The degree he just received in Berlin under Max von Laue was the best letter of recommendation he could possibly present. Yet,

⁵ Theodore von Kármán to Michael Polányi, Aachen, March 17, 1920, University of Chicago, Joseph Regenstein Library, Special Collections, Michael Polányi Papers, Box 17.

⁶ Cf. e.g. the case of the son of his brother’s friend Michael Becz, see Elemér Kármán to Theodore von Kármán, Budapest, May 9, 1920 (German), Theodore von Kármán Papers, File 139.1, California Institute of Technology Archives, Pasadena, CA.

⁷ Eric R. Jette to Michael Polanyi, Up[p]sala, February 10, 1923, Michael Polanyi Papers, Box 1, Folder 19, Department of Special Collections, University of Chicago Library, Chicago, Ill.

⁸ Eric R. Jette to Michael Polanyi, Copenhagen, March 28, 1924, Michael Polanyi Papers, Box 2, Folder 1, Department of Special Collections, University of Chicago Library, Chicago, Ill.

under the circumstances, he did need Polanyi's letter to Frankfurt professor B. Lorenz, and Polanyi referred to Szilard as a "wonderfully smart man."⁹

In a letter written to Albert Einstein, Polanyi also supported physicist Imre Brody in 1922. In this important document Polanyi asked Einstein to write to the leaders of Robert Millikan's newly founded institute in Pasadena, CA so that Brody could get a job as an assistant.¹⁰

Of all the Hungarian scientists, however, Theodore von Kármán proved to be the most active and successful contact person whose German and subsequent U.S. correspondence provides a wealth of information on half a century of Hungarian networking. A typical letter from his German period was sent in 1924, by a Hungarian friend in Vienna, asking for his assistance with Hungarian chemical engineering student Pál Acél to continue his studies "in Germany, preferably under you."¹¹ Correspondence on these matters sometimes had to be clandestine: in dangerous years such as 1920, a reply to such mail was more prudent to send to Vienna, rather than Budapest, and picked up there personally.¹²

Students continued to try to study in Germany for several reasons, one of them being the commitment of the German professors to their gifted students and the great deal of time and interest they allotted to young people.

Professor Lipót Fejér asked fellow mathematician Gabor Szegő in Berlin in early 1922: "What does little Johnny Neumann do? Please let me know what impact do you notice so far of his Berlin stay."¹³ In an 1929 interview, Michael Polanyi, since early 1923 a *habilitierter* Berlin professor himself,¹⁴ proudly yet sadly described the essential difference between the contemporary Hungarian and German

⁹ Michael Polanyi to B. Lorenz, October 16, 1922. (German) Michael Polanyi Papers, Box 1, Folder 18, Department of Special Collections, University of Chicago Library, Chicago, Ill.

¹⁰ Michael Polanyi to Albert Einstein, March 14, 1922. (German) Michael Polanyi Papers, Box 1, Folder 17, Department of Special Collections, University of Chicago Library, Chicago, Ill.

¹¹ Elemér Székely to Theodore von Kármán, Wien, April 29, 1924. (Hungarian) Theodore von Kármán Papers, File 29.14, California Institute of Technology Archives, Pasadena, CA.

¹² Mihály Freund to Michael Polanyi, May 4, 1920. (Hungarian) Michael Polanyi Papers, Box 17, Department of Special Collections, University of Chicago Library, Chicago, Ill.

¹³ Gabor Szegő Papers, SC 323, Boxes 85-036, Department of Special Collections and University Archives, Stanford University Libraries, Stanford, CA.

¹⁴ Obersekretär Breuder [?], Technische Hochschule zu Berlin, to Michael Polanyi, Charlottenburg, November 8, 1923. (German) Michael Polanyi Papers, Box 1, Folder 20, Department of Special Collections, University of Chicago Library, Chicago, Ill.

educational scenes declaring that “professors in Germany grab with avid interest the hand of any student considered to be gifted. They are like the art-collector whose utmost passion is to discover talent. This is part of the profession of a university professor.”¹⁵ It is important to note that his generation shared essentially the same experience later in U. S. universities: for *émigré* scholars and scientists, the welcoming atmosphere of German universities was happily rediscovered in, and partly transferred to, the United States.

One of the outstanding qualities of the post-World War I German environment was tolerance – political, religious, professional, and artistic. People, professions, ideas, and artistic products persecuted at home in Hungary were welcome in the open atmosphere of Weimar Germany. Béla Bartók’s pioneering ballet *The Miraculous Mandarin*, rejected and scorned in Hungary, found a sympathetic audience in Cologne, albeit for a single night only, where Hungarian-born Eugen Szenkár performed it for the first time in 1926.¹⁶

Moving to Germany was not only a question of survival in terms of studies, jobs, and promotions: it also meant an opportunity to resume one’s original professional activities or intellectual directions. It was not merely the acquisition of a new address: it led to the reconstruction of spiritual (and often bodily) health, the realization of the self, a restoration of the mind.

***‘Incipit Hitler:’*¹⁷ Rescue Operations**

The international community of scientists and scholars showed a great deal of compassion for those being threatened by Hitler. They supported emigrating colleagues from Germany by providing the necessary organizational framework and material assistance,¹⁸ providing for some 6000 highly qualified professionals to

¹⁵ “Polányi Mihály Nádas Sándorhoz,” *Pesti Futár*, 1929, pp. 37-38.; repr. in *Polanyiana*, I/1, 1991, p. 26.

¹⁶ József Ujfalussy, *Béla Bartók* (Budapest: Corvina, 1971), pp. 237-240; György Kroó, *A Guide to Bartók* (Budapest: Corvina, 1974), pp. 97-105. The ballet was not tolerated even in Cologne, where the conservative mayor of the city, Konrad Adenauer stopped the production.

¹⁷ Stefan Zweig, *Die Welt von Gestern. Erinnerungen eines Europäers* (Fischer Taschenbuch Verlag GmbH, 1994), p. 411.

¹⁸ For a well-written general survey of international efforts to rescue immigrant scientists and scholars from Germany see Laura Fermi, *Illustrious Immigrants. The Intellectual Migration from Europe 1930-1941*. 2nd rev. ed. (Chicago and London: University of Chicago Press, 1971), Chapter IV: The Roads to America, pp. 60-92.

leave Germany in quick succession.¹⁹ A number of parallel initiatives emerged to bring about an effective framework for rescuing the community of German-Jewish scientists. Headquartered in Zürich, Switzerland, the *Notgemeinschaft Deutscher Wissenschaftler im Ausland* [Emergency Society of German Scholars Abroad] was founded largely as a result of the efforts of a Hungarian-born scientist. “Professor Philip Schwartz,” wrote Lord Beveridge in his *A Defence of Free Learning*, “Hungarian by birth but holding a Chair of General Pathology and Pathological Anatomy at Frankfurt-am-Main in Germany, [Schwartz] was an immediate victim of Hitler’s racial persecution and went in March 1933 to Zürich in Switzerland. There he founded at once the *Notgemeinschaft* and directed it for six months. ... For money it had to depend almost wholly on contributions from displaced scholars whom it had helped to re-establish. But by its personal knowledge of the scholars themselves and by using its contacts with universities everywhere, it [the *Notgemeinschaft*] rendered invaluable service,”²⁰ providing a list of nearly 1500 names of dismissed academics in Germany, which was published in 1936 with the assistance of the Rockefeller Foundation.²¹

The first major success of the *Notgemeinschaft* was an agreement with the Turkish government to place 33 German professors at the University of Istanbul. Similar arrangements were discussed with Australian, Indian, South African, Soviet and U. S. authorities as well as with the Committee for Intellectual Cooperation of the League of Nations.

In May 1933, scientists in Great Britain established the *Academic Assistance Council* (first conceived as the International Board of Scientists and Scholars) with Nobel Laureate Lord Rutherford as President and Sir William [later Lord] Beveridge and Professor C. S. Gibson as Secretaries.²² A few weeks later the

¹⁹ Cf. Herbert A. Strauss and Werner Röder, eds., *International Biographical Dictionary of Central European Emigrés 1933-1945*, (München - New York - London - Paris: K.G. Saur, 1983), Vols. I-II/1-2/III, xciv, 1316 p.

²⁰ Lord Beveridge, *A Defence of Free Learning* (London-New York-Toronto: Oxford University Press, 1959), pp. 128-129.

²¹ Laura Fermi, *Illustrious Immigrants. op. cit.*, p. 62.

²² Lord Beveridge, *op. cit.*, p. 2; Leo Szilard to Jacques Errera, London, June 4, 1933 (German), Leo Szilard Papers, Box 7, Folder 22; Benjamin Liebowitz to Ernst P. Boas, London, May 4, 1933, Leo Szilard Papers, Box 12, Folder 4, Mandeville Department of Special Collections, University of California, San Diego Library, La Jolla, CA. — The Council remained in existence until 1966, as the *Society for the Protection of Science and Learning*. Cf. Leo Szilard to unknown, May 14, 1933, Leo Szilard Papers, Box 12, Folder 21, Mandeville Department of Special Collections, University of California, San Diego Library, La Jolla, CA; Robin E. Rider, “Alarm and Opportunity,” *op. cit.*, p. 116.

Emergency Committee in Aid of Displaced German (later Foreign) Scholars was established as the American counterpart of the AAC to provide grants or fellowships to immigrant scientists and scholars.²³ The main contributions to the Emergency Committee funds came from Jewish foundations and individuals.²⁴

Another support committee, the *Comité International pour la Placement des Intellectuels Réfugiés* was formed in Geneva, offering positions to refugee professors from Austria, Germany, and Italy.²⁵

Jewish groups in Europe considered raising funds for a new university based on refugee faculty alone, an idea that originated in the mind of Albert Einstein who envisaged a *Flüchtlingsuniversität*, a refugee or emigrant university somewhere in Europe.²⁶ A longtime and valued colleague, Leo Szilard was able to convince Einstein “that this would not be an easy task,” and that he should “concentrate on one promising effort.”²⁷ This is how Einstein started to support the idea of the Academic Assistance Council. Another suggestion was to raise more money for the Palestine University.²⁸ Immediately after the recession, however, there was not enough money for any of these projects to materialize. Instead, several agencies provided relief of some sort, such as the *Jewish Relief Committee* in Amsterdam.

The academic community in the United States was horrified to learn of what was happening in Germany. German-born Franz Boas was one of the first to receive an authentic report from Benjamin Liebowitz who travelled throughout Europe

²³ Lord Beveridge, *op. cit.*, pp. 126-127; Karl Brandt Circular, New York, February 1, 1934 (German), John Von Neumann Papers, Box 7, “1933: Some very interesting letters to J. v. N.,” Library of Congress, Washington, D.C. — For details on the two institutions see Robin E. Rider, “Alarm and Opportunity: Emigration of Mathematicians and Physicists to Britain and the United States, 1933-1945,” *Historical Studies in the Physical Sciences*, Vol. 15, Part I (1984), pp. 107- 176, esp. pp. 116, 139.

²⁴ Robin Rider, “Alarm and Opportunity,” *op. cit.*, p. 144. Cf. Lord Beveridge, *op. cit.*, pp. 15, 126.

²⁵ Laura Fermi, *Illustrious Immigrants*, *op. cit.*, pp. 62-63.

²⁶ Albert Einstein to Leo Szilard, Le Coq-sur-Mer, April 25 and May 1, 1933; Leo Szilard to Albert Einstein, London, May 4 and 9, 1933 (German), Leo Szilard Papers, Box 7, Folder 27, Mandeville Department of Special Collections, University of California, San Diego Library, La Jolla, CA.

²⁷ Leo Szilard to Sir William Beveridge, Brussels, May 14, 1933, Leo Szilard Papers, Box 11, Folder 18, Mandeville Department of Special Collections, University of California, San Diego Library, La Jolla, CA.

²⁸ Leo Szilard to Sir William Beveridge, London, May 4, 1933, Leo Szilard Papers, Box 4, Folder 30, Mandeville Department of Special Collections, University of California, San Diego Library, La Jolla, CA.

collecting information and helping plan relief operations. “It is impossible to describe the utter despair of all classes of Jews in Germany,” he wrote in early May 1933 to Boas. “The thoroughness with which they are being hunted out and stopped short in their careers is appalling. Unless help comes from the outside, there is no outlook for thousands, perhaps hundreds of thousands, except starvation or the sleeping pill. It is a gigantic ‘cold’ pogrom. And it is not only against Jews; Communists, of course, are included, but are not singled out racially; social democrats and liberals generally are coming under the ban, especially if they protest in the least against the Nazi movement. Please note that I am not speaking from hearsay: I know people, friends in many classes - scientists, scholars, doctors, lawyers, business men, economists, etc.”²⁹ Ultimately, some 6000 displaced scholars and professional persons from Europe applied to the New York-based Emergency Committee, out of which 335 were granted assistance.³⁰ Hungarians applying for (and eventually receiving) grants or fellowships either left Germany in 1933-34 (I), or left Hungary after anti-Semitic legislation was introduced there in 1938-41 (II).³¹ The incomplete list of indisputably Hungarian names includes:

- I. Ladislaus (László) Farkas
- Melchior (Menyhért) Pályi
- Otto Szász
- Gabriel (Gábor) Szegő
- Leo Szilárd
- Edward (Ede) Teller
- Paul (Pál) Neményi
- Imre Weisz

²⁹ Benjamin Liebowitz to Ernst P. Boas, London, May 4, 1933, Leo Szilard Papers, Box 12, Folder 4, Mandeville Department of Special Collections, University of California, San Diego Library, La Jolla, CA.

³⁰ Emergency Committee in Aid of Displaced Foreign Scholars, New York Public Library, Manuscripts and Archives Division, New York, N.Y.—For a brief history of the Committee see Laura Fermi, *Illustrious Immigrants*, *op. cit.*, pp. 76-78.

³¹ *Ibid.*, 195 boxes of correspondence and papers.

- II. Dezső Rapaport
Stephan Sárközi de Somogyi-Schill
Egon Wellesz
George Pólya
Nelly Szent-Györgyi
Ladislás (László) Tisza
Charles de Tolnay
Rusztém Vámbéry

The following Hungarians applied for aid to the Emergency Committee but were refused:

- I. Willy (Vilmos) Fellner
A. B. Halasi
Friedrich (Frigyes) Antal

- II. Elizabeth M. Hajós
Michael Erdélyi
Francis (Ferenc) de Kőrösy
Eugene (Jenő) Lukács
Elemér Balogh
Zoltán Fekete
Imre Ferenczi
Béla Frank
Nicholas (Miklós) Halász
Péter Havas
Hugo Igotus
Aurél Thomas Kolnai
René Fueloep [Fülöp]-Miller
Béla Bartók

Altogether some 65 Hungarians appear on the applicants' lists of the New York Emergency Committee. They were almost exclusively Jewish-Hungarian (certainly not Béla Bartók) and left their country, directly or indirectly, for the U. S., because they were Jewish. The greater part of these left Hungary after the institution of the anti-Semitic laws of Hungary between 1938-41. A sizable group, however, had already left in, or right after, 1933, through Germany. Even the small sample of people who turned to the Emergency Committee demonstrates that many who were registered as German when the 1933 exodus started were, in fact, immigrants to

Germany from Hungary. Their list included scientists Leo Szilard and Edward Teller as well as mathematicians Otto Szász and Gábor Szegő.³²

Hungarians had a particular sensitivity to the emergency situation in Germany because of a strong sense of *déjà-vu*. The rise of anti-Semitism and anti-foreignism, as well as the persecution and threat they were subjected to in Germany was strongly reminiscent of the Hungarian ordeal of 1919-20. As it is well-known, the post-war emigration from Hungary to Germany was largely due to anti-Semitic legislation and other actions of the Hungarian government. This created a sensitivity, which made some of the Hungarians in Germany extremely active and successful leaders of the rescue operations that saved the lives and careers of several thousand scientists and scholars in Germany.

The Escape of Michael Polanyi

Michael Polanyi was offered an opportunity to leave Germany before the Nazi takeover. In early 1932, the University of Manchester in Great Britain invited him to become professor of physical chemistry. Polanyi hesitated to leave Germany, “where I am rooted with the greater part of my being.”³³ He also felt that it was unfair to leave Germany when it was in such a difficult situation. “I am unwilling to leave a community which is currently in difficulty after sharing the good times earlier,” he answered to Professor Lapworth in Manchester. Nevertheless, he started to make inquiries into the situation at the University of Manchester and established a large set of preconditions in case he decided to come. He demanded that a new laboratory consisting of a suite of 8-10 rooms be built for him for the considerable

³² This list is based on the documents of the Emergency Committee in Aid of Displaced Foreign Scholars kept in the Manuscripts and Archives Division of the New York Public Library, New York, N.Y. Robin E. Rider compiled a list of mathematicians and physicists who emigrated to the U. S. or to Britain which appears in the appendix of her excellent paper (*op. cit.*, pp. 172-176). Compared to my list, she added a few more émigré Hungarians such as physicists Gusztáv Kúrti, Cornelius Lánzos, and Elisabeth (Erzsébet) Róna, as well as mathematicians Paul Erdős, Tibor Radó, and Stefan (István) Vajda. Yet, Ms Rider made no distinction between Germans and Hungarians among the immigrant scientists and gave no attention to Leo Szilard’s activities or to other Hungarian contributions to the establishment of the Academic Assistance Council or that of the Emergency Committee.—The names listed here are based on my own research. I am grateful to Dr. Gábor Palló for additional information based on his research in the same collection.

³³ Michael Polanyi to Arthur Lapworth, Berlin, March 15, 1932 (German), Michael Polanyi Papers, Box 2, Folder 8, Department of Special Collections, University of Chicago Library, Chicago, Ill.

sum of £20-25,000, equipped with apparatus costing £10,000 and complete with 8-10 “personal collaborators” to work with.³⁴

The University of Manchester turned to the Rockefeller Foundation to support Polanyi’s new physical chemical laboratories, but was determined to go ahead with the plans itself even before the Foundation responded. Throughout the year 1932, intensive planning was carried out to prepare the venture and in mid-December, Vice-Chancellor Walter H. Moberly sent a formal invitation to Polanyi to take the Chair of Physical Chemistry at Manchester for an annual stipend of £1500.³⁵ As late as Christmas 1932, the University was in the midst of planning to erect the new building “as quickly as possible” so that it comply “fully with the requirements of yourself and Professor Lapworth.”³⁶

By mid-January 1933, Polanyi came to the conclusion that he would not go to Britain. Two weeks before Hitler’s takeover he declined to accept the invitation to Manchester citing his unwillingness to settle for good in Manchester, as well as the poor climatic conditions of the area as his main reasons.³⁷ Though at first he believed that his military service during World War I would make him exempt from the early anti-Semitic legislation of the Third Reich and would leave him secure in his position at the University, he realized within weeks the gravity of his mistake. He indicated to his British friends that he had changed his mind and was now ready “to accept the chair in Manchester on any conditions that are considered fair and reasonable by the University, in consideration of the changes that have occurred

³⁴ A. J. [?] Allmand to Michael Polanyi, West Hampstead, May 17, 1932, Michael Polanyi Papers, Box 2, Folder 8, Department of Special Collections, University of Chicago Library, Chicago, Ill.

³⁵ F. G. Donnan to Michael Polanyi, London, May 19, 1932; Arthur Lapworth to Michael Polanyi, Manchester, June 3 and November 27, 1932; Walter H. Moberly to Michael Polanyi, Manchester, December 15, 1932; Michael Polanyi Papers, Box 2, Folders 8 and 10, Department of Special Collections, University of Chicago Library, Chicago, Ill.—By comparison, the average professor received £1200 p.a. at the University of Cambridge, according to Nobel Laureate Paul A. M. Dirac (Physics 1933). P. A. M. Dirac to John Von Neumann, Cambridge, January 12, 1934, John Von Neumann Papers, Box 7, “1933: Some very interesting letters to J. v. N.,” Library of Congress, Washington, D.C.

³⁶ E. D. Simon to Michael Polanyi, Manchester, December 22, 1932, Michael Polanyi Papers, Box 2, Folder 10, Department of Special Collections, University of Chicago Library, Chicago, Ill.

³⁷ Michael Polanyi to Arthur Lapworth, Berlin, January 13, 1933; Michael Polanyi to F. G. Donnan, Berlin, January 17, 1933, Michael Polanyi Papers, Box 2, Folder 11, Department of Special Collections, University of Chicago Library, Chicago, Ill.

since January.”³⁸ It was almost too late: Manchester had in the meantime invited an organic chemist, and though a modest invitation was in fact extended to Polanyi as a third professor, “the University could not give a salary of more than £1250, and as they have in the meantime embarked on other projects as capital expenditure, they would not be able to embark on the proposed new laboratory for at least two or three years.”³⁹ Also, an invitation in early May 1933 to take a Research Professorship in Physical Chemistry at the Carnegie Institute of Technology in Pittsburgh, Pennsylvania, came again too late: by then Polanyi, well known in the United States from Princeton to Minnesota, had made his arrangements to go to England.⁴⁰ On April 26, 1933 the *Neues Wiener Abendblatt* reported the resignation of Professor Polanyi in Berlin; on July 14 *The Manchester Guardian* announced his invitation to the Chair of Physical Chemistry at the University of Manchester.⁴¹

It is important to observe closely Polanyi’s hesitation to relocate to Manchester in 1932-33. For people like Polanyi, deeply rooted in the ideas and ideals of 19th century liberalism, with a tolerant vision of the world and of science, it was difficult to accept the reality of the brutal and manipulative forces of interwar totalitarian systems. He belonged to a generation of scientists which, for the first time in human history, had to witness, and were consequently shocked by, the misuse of science for terrifying autocratic purposes. Polanyi first noticed these threats to freedom in the Soviet Union where he had paid well documented visits in 1930, 1932 and 1935. According to a note in his *Personal Knowledge* he met with Bukharin, who had even personally tried to convince him “that pure science, as distinct from technology, can exist only in a class society.”⁴² In due course the director of the Institute of Physical Chemistry in Leningrad, the prospective Nobel Laureate Nikolai N. Semenov, offered a department to Polanyi in his institute; Polanyi declined the job but

³⁸ Michael Polanyi to F. G. Donnan, [Berlin, n.d.] draft, Michael Polanyi Papers, Box 2, Folder 11, Department of Special Collections, University of Chicago Library, Chicago, Ill.

³⁹ F. G. Donnan to Michael Polanyi, London, April 7, 1933, Michael Polanyi Papers, Box 2, Folder 11, Department of Special Collections, University of Chicago Library, Chicago, Ill.

⁴⁰ Thomas S. Baker to Michael Polanyi, May 10 and June 1, 1933, Michael Polanyi Papers, Box 2, Folder 12, Department of Special Collections, University of Chicago Library, Chicago, Ill. Cp. William Foster, “Princeton’s New Chemical Laboratory,” *Journal of Chemical Education*, Vol. 6, No. 12, December, 1929, pp. 2094-2095.

⁴¹ Clippings, Michael Polanyi Papers, Box 45, Folder 3; Box 46, Folder 4; Department of Special Collections, University of Chicago Library, Chicago, Ill.

⁴² Michael Polanyi, *Personal Knowledge*. Towards a Post-Critical Philosophy (Chicago, Ill.: The University of Chicago Press, 1958), p. 238.

consented to come to Leningrad for regular consultations (for six weeks twice a year).⁴³ At this point, around 1932, Michael Polanyi came to accept the opinion of his brother who at that point was very critical of what went on in Stalin's country and, as Karl reported happily to their mother, they reached an understanding as to "our views of the Soviet Union that were dividing us for such a long time [and] now considerably coincide."⁴⁴

It was at this junction that Polanyi was forced to understand the potential threat of a political change in Germany as well. Almost until it was too late, he had believed in the strength and survival of all the tolerant and liberal political and social values of Weimar Germany and found a right wing takeover unlikely. Polanyi was not alone in his misjudgement: as late as January 1933 the operetta *Ball im Savoy* by Hungarian Berliner Paul Abraham was played with enormous success in Berlin and sung by Hungarian stars Gitta Alpár and Rózsi Bársony — a composer and two singers who, within a matter of a few weeks, had no place in Hitler's Germany officially turned anti-Semitic.⁴⁵ Fairly recent films like *Cabaret*, *Mephisto*, or *Julia*, or the short stories of British author Christopher Isherwood chronicled the breathtaking immediacy of change from Weimar to Nazi Germany. Living the sheltered life of a Berlin University professor, Polanyi, with many other refugee foreigners as well as Germans, was in fact both unprepared and unwilling to realize the dangers of an eventual Nazi dictatorship. He received ample warning: already in the Summer of 1932, friends urged him to give up his naiveté as to the chances of preserving the political situation in Germany. "If we lift our leg we must put it down

⁴³ N. Semenoff—M. Polanyi Correspondence, 1930-1932, Michael Polanyi Papers, Box 2, Department of Special Collections, University of Chicago Library, Chicago, Ill. Cp. *The New Encyclopaedia Britannica*, Chicago, 1990, Vol. 10, p. 629. — Other Hungarians in Berlin also received invitation to work in the Soviet Union: young musician János Kerekes, then in Berlin, was contracted in 1934 by conductor György Sebestyén [Georg Sebastian] who then served as music director of Radio Moscow, though the plan to become his assistant ultimately failed. The contract referred to a "Verpflegung wie für ausländische Spezialisten," suggesting that the invitation of foreign experts was routine (János Kerekes' contract with Radio Moscow, courtesy János Kerekes; taped interview with Budapest Opera conductor János Kerekes, 1988). Indeed, somewhat earlier, in 1928, Hungarian violinist Joseph Szigeti was also invited to the Leningrad Conservatory to be the follower of Hungarian-born violin professor Leopold Auer. (A[lexander K]. Glazounow, A. Ossowsky and A[lexander V]. Alexandrow, Conservatoire de Léningrad to Joseph Szigeti, Leningrad, 1928, Boston University, Mugar Memorial Library, Joseph Szigeti Papers, Box 1, Folder 3.)

⁴⁴ Karl Polanyi to Cecil Polányi, September 27, 1932, [German] Michael Polanyi Papers, Box 18, Folder 2, Department of Special Collections, University of Chicago Library, Chicago, Ill.

⁴⁵ Personal memories of Mrs. Éva Kerekes, August 1994.

somewhere, forwards or backwards, right or left!”⁴⁶— he was urged by a friend of the family.

Radical shifts in the German political scene seem to have represented a much more fundamental shock for Polanyi than totalitarian symptoms in the Soviet Union. For liberal, often left-wing émigré intellectuals and professionals from post-War Hungary, it was a painful and threatening experience to realize that the country which throughout the 1920s had proved to be a lasting shelter, was now about to stop serving as a political asylum: Weimar Germany was being rapidly transformed into the terrorizing Third Reich. It was almost unfathomable that the freedom of Europe he had experienced as a young man was gone.

That Polanyi’s philosophical inquiries grew out of not only his scientific investigations but, to a great extent, the political drama he witnessed in Germany as well as in the Soviet Union, was clearly indicated in his 1933 correspondence with Eugene Wigner who reflected on his friend’s concerns as to the purpose of science. It was the twin experience of Soviet-Russian and Nazi-German totalitarianism, a shock for Polanyi’s entire generation,⁴⁷ that ultimately forced him to accept asylum in England. Fully understanding in 1934 the nature of forces threatening his freedom, and the freedom of science in general, he started to make a “Copernican turn,” changing not only his country of residence but also his language and his field of research. In this sense, Polanyi chose a very special, complex form of emigration: first he left medicine, then Hungary and the Hungarian language, then he left Germany for Britain, as well as science for philosophy, and chose English rather than German as an exclusive language of publication. It was due to this enormous change that he felt compelled to define and understand the social position of knowledge and science. Throughout his long journey from the “peace” of pre-World War I Hungary through Weimar Germany and into England, Polanyi pursued democracy and a liberal scientific atmosphere, broadening at the same time his own intellectual horizon, from a narrower scientific discipline, towards a philosophy of knowledge that was to become sensitive to both ethical and political issues. “I must admit,” Wigner wrote to Polanyi from Budapest,

that the difficulties that I felt so acutely in Berlin are somewhat blurred here. It is so difficult to speak of these things — I think we are afraid that we may come to a ‘false’, i.e. unpleasant result. We have all gone through these

⁴⁶ “Márti” to Michael Polanyi, Stary Smokovec, Czechoslovakia, July 30, 1932, (Hungarian) Michael Polanyi Papers, Box 2, Folder 8, Department of Special Collections, University of Chicago Library, Chicago, Ill.

⁴⁷ Laura Fermi, “The Dictators and the Intelligentsia,” in *Illustrious Immigrants*, *op. cit.*

questions at the age of 18 and had to give them up as insoluble, and then we have forgotten them. At our age when one is no longer geared so very much towards success, it is more difficult to do so. It seems to be an undertaking of ridiculous courage to be willing to question whether or not all that we have lived for, culture, righteousness, science, has a purpose. ... I know that you have been dealing with these thoughts for a long time. ... Even if the basic problem is insoluble, when the purpose of science is concerned particularly, ... the answer must contain the basic questions.”⁴⁸

Polanyi’s combined inquiries as a scientist and a philosopher resulted ultimately in the 1951-52 Gifford Lectures at the University of Aberdeen in Scotland which served as the basis of his celebrated *Personal Knowledge*.⁴⁹ Becoming a philosopher seems to have been Polanyi’s way out of the frustrations that he faced as a scientist.

The Anatomy of Networking: American Patterns

Bonding, networking, cohorting within and, less often, between various factions of the Hungarian exile community became more intense than ever during the War years, all of which was abundantly documented by their correspondence.

Understanding the nature of networking is essential to appreciating the social structure of immigrant groups and their ties to prospective newcomers. Because the bulk of the U.S. immigration quota was earmarked by preferences for one sort of immigrant or another, and non-quota emigration was greatly dependent upon letters of recommendations, affidavits and invitations from fellow nationals who had become U. S. citizens, the social composition of the exile community was virtually self-perpetuating.⁵⁰ Because of this, there was very little chance to incorporate new

⁴⁸ Eugene Wigner to Michael Polanyi, [Budapest,] June 30, 1933, Michael Polanyi Papers, Box 2, Folder 12, Department of Special Collections, University of Chicago Library, Chicago, Ill.

⁴⁹ Michael Polanyi, *Personal Knowledge*. Towards a Post-Critical Philosophy (Chicago, Ill.: The University of Chicago Press, 1958).

⁵⁰ Patterns of networking were occasionally different in Britain, where intellectual organizations occasionally welcomed distinguished Hungarian newcomers such as Karl Mannheim and Michael Polanyi, who joined e.g. the progressive circle of ‘The Moot’ between 1937 and 1946. Cp. Éva Gábor, “Michael Polanyi in The Moot,” *Polanyiana*, Vol. II (1992), Nos. 1-2, pp. 120-127. See also Lee Congdon’s book on Hungarian exiles in Britain, *Seeing Red: Hungarian Intellectuals in Exile and the Challenge of Communism* (Dekalb, Northern Illinois University Press, 2001) xii, 223.

elements or groups. Farming areas welcomed prospective farmers, professionals attracted fellow professionals, Gentiles invited Gentiles, and Jews welcomed Jews. Thus, American immigration policies, especially during the long period between 1924 and 1965, contributed to the growth and stable characteristics of existing social patterns in the immigrant communities. Even though we have had access to a limited number and type of sources regarding this information, based on the private papers of Jewish-Hungarian scientists and other professionals, this observation seems valid. Statistical evidence regarding all U. S. immigrant visas issued, including enclosed personal material, still needs to be examined. Nonetheless, it may prove enlightening to survey some case studies which have become available.

Jewish-Hungarians were first warned of the increasing Nazi danger by the *Anschluss* of neighboring Austria by Germany. As the small Hungarian quota was entirely filled for years ahead, immigration into the U. S. seemed possible only for scientists who had received an invitation to a particular university or research institute. Thus, many scientists embarked on a desperate struggle to obtain invitations. "I beg you to give me your assistance in this difficult situation," pleaded the eminent Viennese-Hungarian mycologist József Szűcs to potential employers through his mentor, Theodore von Kármán, who was one of the most willing supporters of refugee scientists.⁵¹ Also begging for Von Kármán's support was a young aeronautical engineer, Miklós Hoff from Budapest, who himself did indeed receive his first U. S. job, as an instructor in Brooklyn, through Von Kármán.⁵² Vilmos Szilasi explained to his cousin Theodore von Kármán that the letter of affidavit should make it very clear that "you knew me since our childhood and give the explicit assurance, that my immigration would not be inimical to the interest of the United States" and "that you assume the responsibility of keeping yourself informed of my conduct in the U. S. as well as immediately reporting to the Department of Justice any irregularity in my activities."⁵³

An invitation by itself was not enough: appointments to a particular job had to be for at least two years. When Professor Gábor Szegő secured sufficient funds to invite for a year to Stanford his longtime associate and friend, the distinguished

⁵¹ Dr Josef Szűcs to Theodore von Kármán, and Enclosure, Wien, June 29, 1938, Theodore von Kármán Papers, File 29.20, California Institute of Technology Archives, Pasadena, CA.

⁵² Miklós Hoff to Theodore von Kármán, Budapest, September 19, 1938 and Palo Alto, CA, April 20, 1940, Theodore von Kármán Papers, File 13.20, California Institute of Technology Archives, Pasadena, CA.

⁵³ Wilhelm Szilasi to Theodore von Kármán, Lisboa, May 20, 1941, Theodore von Kármán Papers, File 29.20, California Institute of Technology Archives, Pasadena, CA.

mathematician George Pólya from Switzerland, “the American Consul in Zurich refused to admit him on non-quota basis because of the temporary character of the appointment.”⁵⁴ In a desperate attempt to get his friend out of Europe, Szegő turned to Von Kármán to secure an additional invitation for Pólya from CalTech. “You understand that although Pólya is not in a concentration camp and not yet dismissed, his situation is very dangerous and he tries desperately to get out before it is too late,” Szegő wrote to Von Kármán.⁵⁵ “It is not necessary to stress how urgent the case is. Every day may bring new restrictions and difficulties.”⁵⁶ The Pólyas left Zurich via Portugal for the U. S. in 1940 where Pólya ultimately succeeded in obtaining a two year teaching position at Brown University and Smith College before joining the Stanford Faculty in 1942, to remain there until the end of his very long life.⁵⁷

The noted Budapest lung and TB specialist Gyula Holló, a member of the Polányi family and a personal physician of Béla Bartók, Dezső Kosztolányi, Frigyes Karinthy and Joseph Szigeti, turned to his former patient John Von Neumann to support him

by drawing the attention of some influential person who could help me to get a job or an invitation or give instructions through the State Department to the Consulate in Budapest so that I get a non-quota place (which is not unprecedented) or, and this seems to be the most realistic idea, prepares the way and helps me if I come as a visitor searching for a job personally.⁵⁸

Dr. Holló succeeded in getting out of Hungary and accepted a position at

⁵⁴ Gábor Szegő to Theodore von Kármán, Stanford, July 24, 1940, Theodore von Kármán Papers, File 23.35, California Institute of Technology Archives, Pasadena, CA.

⁵⁵ *Ibid.*

⁵⁶ *Ibid.*

⁵⁷ G[abor] Szegő to George Pólya, Stanford, June 11, 1940; President Henry M. Wriston to Georg Polya [sic], Brown University, Providence R.I., July 31, 1940; George Polya Papers, SC 337, 86-036, Department of Special Collections and University Archives, Stanford University Libraries, Stanford, *The Life of Mathematician George Pólya, 1887-1985*, Department of Special Collections and University Archives, Cecil H. Green Library, Stanford University Libraries, December 13, 1987-June 1988 (Exhibit Guide)

⁵⁸ Gyula Holló to John von Neumann, n.d. [1939?], John von Neumann Papers, Box 6, Library of Congress, Washington, D.C.

Goldwater Memorial Hospital and died in New York City in 1973.⁵⁹

As the War came nearer to Hungary, the non-quota contingent became filled for years ahead, mostly by pure and applied scientists, medical doctors and mathematicians. Yet, many did not succeed in getting an invitation. The celebrated Budapest surgeon, Professor Lajos Ádám was told that the Mayo Clinic in Rochester, Minnesota would not extend an invitation although Dr. C. W. Mayo counted him “as one of my very good friends.” Ádám’s well-known and well-connected Hungarian-American protector, the journalist and author Emil Lengyel, was told that “we are up against conditions here at present which make it impossible for us to guarantee bringing him here as a Professor or to guarantee any salary.”⁶⁰ Ádám stayed in Budapest and fortunately survived the War.

In the meantime, many non-scientists managed to get out. Refugees included many people from the world of film and theater, entertainers, literary people, actors, directors and musicians. In early 1940, Von Kármán had the distinct impression that “New York and Los Angeles are full of newcomers from Budapest, but almost exclusively artists, actors, and writers. Certainly more than half of the music and literature is now in the United States,” he commented to a friend in Hungary.⁶¹ Much later, in the 1950s, Michael Polanyi himself sought to move to the University of Chicago, but because of his brother’s leftist political entanglement in pre-World War I Hungary, he was refused entrance to the United States.

For people naturally dependent upon their native language and culture, immigration was merely the lesser of two evils. It may have saved their life but, in many cases, emigration nonetheless turned out tragically.

Conclusion

The close cooperation of Hungarian émigré scientists and scholars at times of trouble and need brought about a rather strong and durable exile community, international in nature and very personal in character. The remarkable presence of Hungarian scientists and scholars, artists and authors, musicians and film people on the international intellectual and professional scene at large is partly an outgrowth of what I’d prefer to call the chain reaction of support that ran across generations,

⁵⁹ *Magyar Életrajzi Lexikon*, Vol. III (Budapest: Akadémiai Kiadó, 1981), p. 311.

⁶⁰ Dr. C. W. Mayo to Emil Lengyel, May 19, 1941, Emil Lengyel Collection, Bakhmeteff Archives, Butler Library, Columbia University Library, New York, N.Y.

⁶¹ Theodore von Kálmán to Lajos Bencze, February 19, 1940, Theodore von Kálmán Papers, File2.24, California Institute of Technology Archives, Pasadena, CA.

professions, race and, at times, gender. The intimate bonds of the home community were imported to and reestablished on the broader stage of the world. In a strange new sense, the personal ties with the fellow-Hungarians contributed to the strong international presence and success of Hungarian professionals as a virtual community abroad. Building this virtual community created a strong representation of scientific and scholarly Hungary in exile.

Only a thorough comparative research can determine how far the Hungarian case differed from other international examples. But it is safe to say in conclusion that networking, cohorting, and personal friendship did certainly contribute to what Laura Fermi and others in her footsteps called “The Mystery of Hungarian talent,”⁶² the enormous intellectual contribution and success of Hungarians worldwide. Certainly it is worth giving more attention to this relatively neglected dimension of the social condition of science and scholarship.⁶³

⁶² Laura Fermi, *op. cit.*, p. 53-59.

⁶³ Cf. Jean Medawar & David Pyke, *Hitler's Gift. The True Story of the Scientists Expelled by the Nazi Regime* (Arcade, 2001).